Transaction Costs and Institutions

Review Essay of Oliver Williamson's
The Economic Institutions of Capitalism
(New York: The Free Press, 1985, 450 pg)

by Don Boudreaux*

This book is a fascinating application of subjectivism to issues of industrial organization. Williamson's explanations of the economic institutions of capitalism are based squarely on the understanding that tradeoffs in the real world take place on innumerable different margins, many of which have been neglected in orthodox microeconomic theory. Williamson's brand of subjectivism is simply a call to recognize these neglected margins in theory so that policy will be better informed.

Williamson's lesson is that quantities and money prices are not the only terms of exchange that matter. To make the assumption that *technical* costs of production—and, hence, selling prices—are all that matter is to assume that the type and amount of capital used in production processes is given and fixed. However, in a world that uses capital goods in production, the security of exchange relationships is an important consideration. Secure exchange relationships encourage commitments of wealth in the form of specific capital. A framework of respected rules among transactors is useful for enhancing the "integrity" (p. 41) of exchange relationships. Contracts among transactors thus come into prominence, for contracting is a mutually beneficial way to explicate the rules by which partners to an exchange are to guide their behavior in the absence of complete knowledge of the future. Contracting, however, is not costless; tradeoffs typically must be made on margins other than those of prices and quantities. Williamson's fundamental message is that "the object is not to economize on transaction costs but to economize in both transaction and neoclassical production cost respects" (p. 61).

Williamson's Transaction-Costs Analysis

Williamson believes that orthodox economics overlooks most of the tradeoffs faced by "contractual man".[1] Contracts usually involve more than simple agreements among traders to exchange bundles of well-defined commodities for certain sums of money. Many actual trading situations involve "asset specificity". Assets are specific to a particular exchange relationship if rents are any part of its return (p. 55). Specific investments are made in order to realize lower technical costs of production; however, such investments are potentially hazardous to a party whose wealth is tied up in these investments should he unexpectedly lose his trading partner. These potential hazards become a reality whenever asset specificity is combined with "bounded rationality" *and* "opportunism".

Williamson's use of the concept of bounded rationality is adopted from the work of Herbert Simon (p. 30). The emphasis is on man's cognitive limits. It is presumed that there is one objectively best course of action for man to take in any given situation, but that man is unable to deduce fully the details of this optimal course. Further, what holds true for one person holds true for society. Simple economic principles thus dictate that scarce cognitive ability be economized upon.

Opportunism is "self-interest seeking with guile" (p. 30). Although there are some ambiguities in Williamson's definition and discussion of opportunism (which we must here overlook), it is sufficient for the purpose at hand to understand opportunism as the absence of *ethical* constraints upon parties to adhere to the spirit of their contracts. Opportunism thus requires that contracts provide an *economic* incentive for people to willingly carry out their end of the bargain.

The exchange problem is now clear. Cost-improving investments that have no good alternative uses will not be undertaken unless investors can be assured that they will be able to realize the full value of the wealth they commit in the form of specific assets. In a world of unbounded rationality people distinguish between profitable and unprofitable uses of their resources before any commitments are made. No trading problems exist in a world of complete knowledge. Likewise, no trading problems exist in the absence of opportunism. Even with bounds on rationality, Williamson believes, the absence

of opportunism allows exchange partners to make believable promises not to take advantage of each other (pp. 48 and 57). Consequently, there will be no hesitation to commit wealth to "transaction-specific assets" that reduce production costs. In a world in which asset specificity, bounded rationality, and opportunism are all prevalent, contracts must include provisions to safeguard the value of transaction-specific assets. Without such provisions, many efficient uses of resources will remain unexploited. These contractual provisions, however, are not costless. The costs of promoting efficient exchange are what Williamson calls "transaction costs". The "economic institutions of capitalism" serve to economize on transaction costs. Operation of the market system within these institutional constraints assures that the sum of technical production costs and transaction costs are as low as possible in our world of bounded rationality and opportunism.

Williamson's "transaction-cost approach"—because it recognizes that complete adherence to the spirit of many contracts is not a free good—provides plausible explanations and justifications for several everyday business practices that orthodox theory cannot explain beyond the presumption that these practices are of monopolistic origin or intent. Williamson offers a transaction-cost-economizing rationale for vertical integration, the emergence of conglomerates, franchise contracts, and practices such as reciprocal-trading agreements, resale-price maintenance, hierarchical modes of command in the workplace, and the overview of corporate managers by boards of directors. These everyday features of reality reduce the costs of enforcing contracts. When viewed in the light cast by Williamson's analysis, such "nonstandard" forms of contracting are seen as productive rather than monopolistic.

Williamson also provides evidence that bad theory leads to bad public policy. The book is full of well-documented examples of legal prohibitions of many efficient business practices. For example, consider the Robinson-Patman Act's prohibition of all but quantity discounts by a seller. This prohibition is based on the assumption that the cost of producing and selling a commodity is a function only of the quantity of output and of the prices of material inputs. But what if different buyers each have different degrees of commitment to maintaining a long-term contractual relationship with a seller? A seller who uses "transaction specific assets" in production will value the patronage of the more committed buyers more than he values the opportunity to sell to less committed buyers. It is simply less costly for the seller to deal with loyal customers than with customers who have not yet demonstrated their commitment to the exchange relationship.

But such costs of transacting are excluded from orthodox microeconomic models. Consequently, applied work does not take these costs into account in its estimates of unit costs. Unable to understand discounts that are not justified by lower technical costs of production, advocates and enforcers of Robinson-Patman are left to assume that such discounts are monopolistic (p. 180).[2] The possibility that sellers can incur different costs of transacting with different buyers is ruled out in standard theory by the assumption that transaction costs are negligible. Clearly, analyses such as Williamson's that uncover a subset of genuine costs that have traditionally been overlooked, and explain in great detail how these costs are reduced by economic institutions, are to be welcomed.

An Assessment of Transaction Costs

Williamson believes that orthodox theorists ignore the importance of transaction costs because of their assumption that men possess unlimited cognitive abilities. This assumption leaves the analyst free to model all states of the world as results of optimizing behavior. This "production function framework" (p. 393) thus cannot adequately explain institutions, for, in Williamson's view, institutions survive only because they reduce transaction costs. And transaction costs of the kind emphasized by Williamson are prevalent because man's cognitive abilities are scarce.

Williamson treats rationality like any other resource: It's useful and it's scarce. These characteristics of rationality imply that optimal patterns of allocation should allow for the scarcity of man's mental abilities, just as they allow for the scarcity of man's physical abilities. It is in this context that Williamson explains institutions as transaction-cost-minimizing devices.

But just what are transaction costs? Genuine transaction costs exist when there are barriers to efficient exchange. But the efficiency of exchange must be defined with respect to given tastes, technology, and resources. Transaction costs are constraints upon exchanges that would take place if only technical costs of production are considered. These transaction costs are skillfully identified by Williamson. Undoubtedly, many institutions can best be understood as social devices that serve to minimize these costs. That orthodox economics has overlooked these costs and institutions can only be explained by the Positivist bent of most economists: Quantifiable prices and outputs are alone considered relevant. Williamson's accomplishment is to show that the constraints taken as given must include cognitive limitations. Theory is incomplete if these limitations are not accounted for.

We can go beyond Williamson, however, and recognize that transaction costs are not the only reason for the existence of institutions. In particular, transaction costs cannot be held responsible for the fact that we do not live in an Arrow-Debreu world. To use transaction costs willy-nilly to explain every deviation of reality from general-equilibrium perfection is to hold transaction costs responsible for the fact that economists' assumption of fixed tastes, technology, and resources are not descriptive of reality. However, absence of a complete array of Arrow-Debreu forward markets is not attributable to transaction costs alone, as Williamson seems to suggest (pp. 44-45). A more important reason for the absence of these markets is that

technology, resources, and, especially, tastes are in fact *not* fixed. Williamson explains institutions only as devices to minimize transaction costs. This explanation is unobjectionable as far as it goes, because his model is of a world of fixed tastes, technology, and resources. Although Williamson takes us on a necessary step down the road to understanding institutions, a next step is to better explain institutions in the context of *changing* tastes, technology, and resources, for that is the context in which real-world institutions emerge and survive.

When it is recognized that an optimal pattern of resource allocation does not exist independent of the process that generates resource-allocation patterns, the problem is no longer confined to using given resources in the best way possible as implied by independently given technology and tastes; no longer is there a single objectively best pattern of resource allocation implied in the data. It follows that Knightian uncertainty is a feature of the real world.[3] To mistake the legitimate assumption of fixed tastes, technology, and resources for a description of reality is to commit the fallacy of what Fritz Machlup called "misplaced concreteness". Thus, there is the necessity to explain the forces at work determining the particular framework of tastes, technology, and resources upon which the price system performs the well-understood "marvel" of economizing. Although it requires a broader perspective than that which economists have normally taken since the marginalist revolution, it is not an abrogation of one's theoretical duty to address these issues.

For example, as economists we know that *if* the market price of a particular good is higher than the cost of producing and marketing this good, more of this good will be produced. But by what mechanism does this good come into being in the first place? It is common practice to assume the good to exist in well-defined form so that it is included in the standard 'givens' of economic analysis. And this assumption is indispensable for many legitimate purposes of economic theory. In the real world, however, a commitment of resources must be made on a basis other than a simple comparison of prices to costs whenever (especially new) goods and services are produced for market. Without such entrepreneurial decisions, or "judgments" as Knight called them, the assumption of given tastes is empty.

Here we find a rationale for the institution of the firm. If resource commitments are often made without an objective probability estimate of the demand price of the output, then the value of the inputs used in such production processes are not known—or "implied"—at the time such commitments are made. Unless the owners of each input to a production process agree that their compensation will be a certain percentage of the actual price of the output, someone must act as a guarantor of the returns to those input owners who will profitably contribute to the production effort only for secure payments. The resulting contractual arrangement is a firm. In a fully determinate world there would be no need for such arrangements.

Undoubtedly, one role of institutions is to help man optimize with respect to given tastes, technology, and resources. This is the role explained by Williamson. But an equally important role of institutions is to assist in the orderly development and refinement of these parameters with respect to which the standard economic problem is defined. That is, institutions help us not only to economize within the constraints of fixed tastes, technology, and resources, but institutions also are a key to the determination and specification of these 'givens'.

Franchise Bidding Versus Regulation

The only major disappointment of the book is Williamson's criticism of Harold Demsetz's franchise-bidding proposal. This well-known proposal is to give potential suppliers of a natural-monopoly good the right to bid against each other for the job of supplying the good. Under Demsetz's plan, the producer offering the lowest sale price is granted the right to supply the market for X number of years. Competition for the market guarantees that the selling price will be equal to average per-unit cost, monopoly profits are zero, and wasteful commitments of capital are prevented.

Williamson's goal is to resurrect the case for government regulation of natural monopolies. But he succeeds only because he compares actual franchise-bidding practice with ideal government regulation. Because Williamson consciously and otherwise so successfully adopts a comparative-institutions perspective, his treatment of regulation is disappointing.

Williamson has no quarrel with the logic of Demsetz's theory, but regards it as not being generally practicable as a substitute for government regulation. He lists three real-world problems that argue against franchise bidding: 1) "obscurity of the initial award criterion"; 2) "execution problems in price-cost, other performance, and political respects"; and 3)"absence of bidding parity at the contract renewal interval" (p. 360). These problems arise in a world of asset specificity with bounded rationality and/or opportunism.

Problem #1 "is that, although franchise awards can be reduced to a lowest bid price criterion, that is apt to be artificial if the future is uncertain and the service in question is at all complex" (p. 335). No doubt Williamson here has a point, but clearly regulation does not avoid this problem.

The same thing can be said about problem #2. There is an extensive literature explaining why regulatory agents are unable to identify accurately true costs of production. Nothing Williamson says dispels the reader's intuition that franchise bidders are more likely to be compelled to reveal their true costs than are regulated firms.

Williamson also fears that political skills may influence the franchise-bidding process, and these fears cannot be dismissed out of hand. Nevertheless, his conclusion that government regulation is therefore superior to franchise bidding does not follow. Williamson displays a naivete regarding the institutions within which the regulatory process is carried out: "To the extent that political skills override objective economic skills, the

advantages of franchising over regulation are placed in question" (p. 337). Surely, whatever role there may be for political skills in influencing bids for franchises, the role for such skills under a regulatory regime are several times greater. Williamson reaches his conclusion only by comparing actual franchise bidding with ideal regulation. His "comparative" assessment of these two alternative forms of dealing with the natural-monopoly problem would have been stronger had he challenged the "capture theory" of regulation. But no such challenge appears in the book. In fact, the seminal works on regulation by Stigler, Peltzman, and Kolko are not even listed in the bibliography.[4]

Problem #3 is not really a problem from the perspective of consumers. Williamson believes that franchise bidding loses its appeal if incumbents are able to bid lower prices than rivals. But why should such advantages be a cause for concern? The only way an incumbent can bid a lower price than rivals is if the incumbent's costs are lower. The reason *why* a producer's costs are what they are is irrelevant to consumers. If the incumbent possesses industry-specific capital by virtue of having been the supplier for some time, there is nothing wrong with his being able to win the contract in the second round. This is true despite the fact that the winning price bid by the incumbent at the contract-renewal stage is higher than the average cost to the incumbent of providing the output. What matters to consumers is that the incumbent is the lowest-cost producer. Only if it is assumed that regulation can ensure 1) that the incumbent is the lowest-cost producer, and 2) that the price charged will always be equal to average costs, will regulation appear to be superior to franchise bidding.[5] But the very fact that there is *never* competition under regulation means that real-world franchise bidding, imperfect as it may be, compares favorably with real-world government regulation.

Conclusion

It would be misleading to end on a negative note: I emphasize that Williamson's book is a major achievement. The exploratory range of Williamson's mind makes every chapter meaty and thought provoking. This work is a welcome relief to those of us eager to see keen theoretical understanding combined with in-depth historical and institutional knowledge, all in an attempt to make relevant points. For those who take theory too literally, this book is humbling; for those who believe that theory is useless or inapplicable, this book is a purgative; and to Austrians, this book is solid evidence that 'mainstream' economists are not always as far from Austrian interests, concerns, and conclusions as might be sometimes thought. ■

Footnotes

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1. Williamson favorably cites Buchanan's [1975] argument that "economics comes closer to being a 'science of contract' than a 'science of choice'" [p. 29].

2. Williamson does not consider the possibility that Robinson-Patman was designed to shield less-efficient producers from competition.

3. As Buchanan [1982] points out, "Individuals do not act so as to maximize utilities described in *independently-existing functions* . . . The Potential participants *do not know until they enter the process* what their own choices will be. From this it follows that it is *logically impossible* for an omniscient designer to know . . . " [original emphasis].

4. More generally, Williamson never gives evidence that he is aware of the issues raised by public-choice analyses. Williamson merely "assumes that regulation is not a farce and that management engrossing is strictly limited under regulation" [p. 338, n. 12].

5. Even though the price bid by the incumbent is higher than the average unit costs it must incur to provide the output *in the second contract stage*, this difference can be interpreted as the cost of the capital acquired during the initial contract stage. This is the case if rival bidders have access to the same capital, on the same terms, that the incumbent faced when he first began setting up shop as the producer.

References

James M. Buchanan, [1975] "A Contractarian Paradigm for Applying Economic Theory," *American Economic Review* (May) Vol. 65, p. 225-230.

James M. Buchanan, [1982] "Order Defined in the Process of its Emergence," *Literature of Liberty* (Winter) Vol. 5, p. 5.

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