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The Lens of Contract: Private Ordering

By OLIVER E. WILLIAMSON*

James Buchanan (2001 p. 29) avers that “mutuality of advantage from voluntary exchange is ... the most fundamental of all understandings in economics.” He further contends that this fundamental understanding is better realized by examining economics through the lens of contract rather than the lens of choice (Buchanan, 1975). Because the latter has been the reigning paradigm in economics during the 20th century (Lionel Robbins, 1932; Melvin W. Reder, 1999), the lens of contract is (understandably) less fully developed. Interest in contractual approaches has nevertheless been building up, whence the gap between these two has been closing. This paper sketches some of these developments, with emphasis on private ordering.

I. The Lenses of Choice and Contract

The science of choice is what Lionel Robbins (1932) had reference to in his famous book, *The Nature and Significance of Economic Science*. As therein prescribed, “Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses” (1932 p. 16), or as recently restated by Reder (1999 p. 43), economics is the science that deals with the “allocation of scarce resources among alternative uses for the maximization of want satisfactions.” The theory of consumer behavior and the theory of the firm-as-production-function are the main constructions, where utility maximization and profit maximization are the objectives ascribed to each, respectively. Economists who work out of such setups give emphasis to quantities as influenced by changes in relative prices and available resources (Reder, 1999 p. 48), which became the “dominant paradigm” for economics throughout the 20th century.

Albeit instructive, efforts to interpret everything through the lens of choice have resulted in strange and even wrong-headed constructions. Thinking contractually, especially comparative contractually, about economic organization invites attention to hitherto neglected issues of public and private ordering. The first of these is concerned with the rules of the game and views politics as “a structure of complex exchange among individuals, a structure within which persons seek to secure collectively their own privately defined objectives that cannot be efficiently secured through simple market exchanges” (Buchanan, 1987 p. 298). Private ordering, by contrast, is concerned with the play of the game. Action moves from the level of the polity to that of groups (Avner Greif, 1993) or bilateral traders as they attempt to perfect their trading relations in a self-help way.

Thus even if the polity has fashioned good rules of the game, transactions of an idiosyncratic kind where the immediate parties have deep and nonverifiable knowledge and for which continuity of the exchange is important are ones for which simple market exchange is poorly suited.¹ Private ordering efforts by the parties, to realign incentives and embed transactions in more protective governance structures, have the purpose and effect of mitigating the contractual problems that would otherwise arise.

This paper examines economic organization through the lens of contract, with special emphasis on the governance of contractual relations, broadly in the spirit of John R. Commons’s (1932 p. 4) prescient statement of the economic problem: “the ultimate unit of activity ... must contain in itself the three principles

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¹ Differences among mechanism design, agency theory, and incomplete contracting notwithstanding, all take exception with the assumption of the “standard model” that parties to an exchange are price-takers. Upon making provision for opportunism (self-interest-seeking with guile [Louis Makowski and Joseph M. Ostroy, 2001 p. 491]), strategic issues that had been ignored by neoclassical economists from 1870 to 1970 make their appearance (Makowski and Ostroy, 2001 pp. 482–83, 490–91).

of conflict, mutuality, and order. This unit is the transaction.” Not only does transaction-cost economics name the transaction as the basic unit of analysis, but governance is the means by which to infuse *order*, thereby to relieve *conflict* and realize *mutual gain*. Nonstandard and unfamiliar forms of contract and organization that had been condemned when examined through the lens of choice often take on more constructive meaning when the lens of contract is brought to bear; and altogether new phenomena are brought within the ambit.

II. Growing Unease

A. General

Growing unease within orthodoxy is evident from Frank Hahn’s (1991 p. 47) projection that pure theory, “the activity of deducing implications from a small number of fundamental axioms,” is giving way to a more veridical description of human actors and their activities: “instead of simple transparent axioms there looms the likelihood of psychological, sociological and historical postulates.” Less attention to generalities and more to particularities of information, organization, path dependency, and the like are thus projected (Hahn, 1991 p. 50).

Assar Lindbeck raises public-policy concerns. Because young economists lack a feeling for real-world problems, the “role abandoned by economists tends to be taken up by ... other social scientists, including sociologists, political scientists, and economic historians” (Lindbeck, 2001 p. 32). One reaction would be to shrug: If economists are not attending to these issues but other social scientists are, so what? Lindbeck plainly believes, however, that economists have something distinctive to offer and advises that university teachers and researchers of economics should “assume a greater responsibility for transmitting knowledge and understanding of real-world problems, including common sense” rather than dwell on “simple classroom exercises, with oversimplified and often unrealistic assumptions” (2001 p. 32).

Robert Solow’s prescription for doing good economics is set out in three injunctions: keep it simple; get it right; make it plausible (Solow, 2001 p. 111). He observes with reference to the first that “The very complexity of real life ... [is

what] makes simple models so necessary” (Solow, 2001 p. 111). Getting it right “includes translating economic concepts into accurate mathematics (or diagrams, or words) and making sure that further logical operations are correctly performed and verified” (Solow, 2001 p. 112). But there is more: a model can be right mechanically yet be unenlightening because it is “imperfectly suited to the subject matter. It can obscure the key interactions, instead of spotlighting them” (Solow, 2001 p. 112). Maintaining plausible contact with the phenomena of interest (contractual or otherwise) is thus essential.

B. Public-Policy Concerns

Ronald Coase’s (1964 p. 195) trenchant critique of the once prevailing (and still lingering) propensity to compare actual with ideal modes of organization in the regulatory arena is pertinent:

Contemplation of an optimal system may provide techniques of analysis that would otherwise have been missed and, in certain special cases, it may go far to providing a solution. But in general its influence has been pernicious. It has directed economists’ attention away from the main question, which is how *alternative arrangements will actually work in practice*. It has led economists to derive conclusions for economic policy from a study of an abstract of a market situation. It is no accident that in the literature ... we find a category “market failure” but no category “government failure.” Until we realize that we are choosing between social arrangements which are all more or less failures, we are not likely to make much headway [emphasis added].

Coase also took issue with the uncritical propensity of antitrust specialists using the lens of choice to invoke monopoly to explain deviations from simple market exchange: “If an economist finds something—a business practice of one sort or another—that he does not understand, he looks for a monopoly explanation” (1972 p. 67). But that does not exhaust the possibilities. Upon bringing the lens of contract to bear, such practices and structures are often better understood as private ordering efforts to

accomplish economizing purpose and to realize mutual gain.

C. Taken Together

The lens of contract is less a substitute for than a complement to the orthodox lens of choice. Uneasiness with orthodoxy of both general and public-policy kinds is relieved. Previously neglected particularities of information and organization (Hahn) are swept in in the process. Real-world problems are addressed in more veridical ways (Lindbeck). A contractual logic of organization that is both simple and plausible (Solow) and, moreover, yields numerous refutable implications that are corroborated by the data is the object.

III. The Lens of Contract/Private Ordering

The overarching argument is that, whatever the rules of the game,² be they well developed (as in the United States) or poorly developed (as in Vietnam [John McMillan and Christopher Woodruff, 1999]), the play of the game is usefully interpreted as private ordering efforts to infuse order, thereby to mitigate conflict and better realize the “mutuality of advantage from voluntary exchange” to which Buchanan referred. Transaction-cost economics is a lens of contract construction that makes additional departures from orthodoxy in the following ways:

- (i) The human actors who populate the world of contract differ from those of the world of choice in both cognitive and self-interestedness respects. As described above, strategic behavior that had previously been ignored or denied becomes central upon making express

allowance for opportunism.³ Bounded rationality (behavior that is intendedly rational but only limitedly so) is the cognitive assumption. Viewed from the lens of choice, the chief ramification of bounded rationality is that maximizing should give way to satisficing (Herbert A. Simon, 1957 p. 204). Viewed instead from the lens of contract, the chief lesson is that all complex contracts are unavoidably incomplete. But there is more. Not only are contracts incomplete by reason of bounded rationality, but the readiness with which common knowledge of payoffs is invoked is deeply problematic. Relatedly, the combination of bounded rationality and opportunism is responsible for nonverifiability (Williamson, 1975 pp. 31–33). The upshot is that the manner in which private ordering is implemented turns crucially on the attributes ascribed to human actors.

- (ii) The firm for this purpose is described not as a black box, but as an alternative mode of governance. As Harold Demsetz (1983 p. 377) observes, it is “a mistake to confuse the firm of [orthodox] economic theory with its real-world namesake. The *chief mission* of neoclassical economics is to understand how the price system coordinates the use of resources, not the inner workings of real firms” [emphasis added]. Orthodox theory is thus focused on supply and demand and on prices and output. It is well suited to the needs of the resource-allocation paradigm but is poorly suited to work out the comparative contractual differences (in incentive, control, and dispute settlement respects) among alternative modes of governance (markets, hybrids, firms, bureaus).
- (iii) Pertinent in this connection is that adaptation is now taken to be the chief mission of economic organization, of which two kinds are distinguished: autonomous adaptation in response to changes in relative prices for which neoclassical market modes enjoy the advantage (Friedrich

² Among the reasons why the rules of the game matter is that recourse to reliable courts for purposes of ultimate appeal, should private ordering efforts to resolve conflicts break down, serves to delimit threat positions (hence reduces contractual risks that would otherwise deter exchange). Economies with better rules of the game will thus be able to support more complex and potentially hazardous interfirm transactions than will economies with less-developed rules and/or less-reliable enforcement, *ceteris paribus*.

³ Self-interestedness is actually described in a two-part way: whereas a presumption of cooperation applies to small disturbances, larger disturbances (exceptions) pose strategic hazards to which opportunism applies, whence the presumption of cooperation is put at risk.

Hayek, 1945), and cooperative adaptation of a "conscious, deliberate, purposeful" kind (Chester I. Barnard, 1938 p. 4), for which more complex contractual modes (to include hierarchy) enjoy the advantage. There being a need for both spontaneous order and intentional order in a high-performance economy, provision is made for both.

- (iv) Private ordering is accomplished through discriminating alignment, whereby transactions (which differ in their attributes) are aligned with governance structures (which differ in discrete structural ways and display different adaptive capacities) so as to effect an economizing result. Gains from trade are conditional on getting the governance structures right.
- (v) Operationalization entails naming and explicating the critical dimensions with respect to which transactions differ, naming and explicating the critical attributes with respect to which governance structures differ, and working out the logic of efficient alignment. The general argument is this: more complex modes of governance are reserved for more hazardous transactions. Successive moves from neoclassical markets (the textbook ideal) to hybrid modes (into which private-ordering credible commitments have been crafted) to hierarchy (unified ownership) as contractual hazards build up is thus predicted. These (and related predictions that accrue upon studying economic organization through the lens of contract, with emphasis on private ordering) are largely borne out by the data. (Over 600 empirical papers on transaction-cost economics have been published and are broadly corroborative [Christopher Boerner and J. Macher, 2001].)
- (vi) Examining economic organization through the lens of contract invites the student of economic organization to entertain the possibility of contract laws (plural) rather than in terms of a single, all-purpose law of contract (as with orthodoxy). Specifically, transaction-cost economics holds that the contract law of internal organization is that of *forbearance* (Williamson, 1991 pp. 97–100). Because the courts for-

bear (refuse jurisdiction over internal disputes except as "fraud, illegality, or conflict of interest" are shown), the firm, in effect, becomes its own court of ultimate appeal. Firms therefore have access to fiat, and the coordination benefits that accrue thereto, that markets do not.

- (vii) Additional issues, which any would-be theory of firm and market organization should be expected to address, include the following⁴: (a) Does successive application of the basic logic (in this case, of bilateral trade) scale up to describe the boundaries of the firm in the large corporation? (b) Why can a large firm not do everything that a collection of small firms can do and more? (c) Wherein, if at all, do intrafirm and interfirm contracting differ in accounting and auditing respects (and what are the ramifications)? (d) Does the logic that informs intermediate product market transactions (vertical integration being the paradigm problem) apply to other transactions as variations on a theme? And (e) Do instructive public-policy ramifications accrue?

IV. Formal Theories of Contract

Whereas the very idea of incomplete contracts, much less the formal modeling of incomplete contracts, was once apostasy, Sanford Grossman and Oliver Hart (1986) introduced what has since become the "main formal model" of incomplete contracting (see also Hart and John Moore, 1990). Albeit partly consistent with prior work in transaction-cost economics (according to which contracts are incomplete [by reason of bounded rationality], contract as mere promise is not self-enforcing [by reason of opportunism], court ordering is limited [by reason of nonverifiability], and the parties are

⁴ I do not mean to suggest that failure of a would-be theory of economic organization to address these queries is disqualifying. Neither do I mean to suggest that the list of questions posed is exhaustive. I nevertheless regard it a merit of the transaction-cost approach to economic organization that it does pose and address (with varying degrees of success) each of these queries. For a brief treatment, see Williamson (1991). For a more encompassing treatment of transaction-cost economics, see the articles reprinted in Williamson and Scott Masten (1995).

bilaterally dependent [by reason of transaction-specific investments]), there is also a serious disjunction. Specifically, whereas transaction-cost economics locates the main analytical action in the *ex post* implementation stage of contract (where inefficiencies due to maladaptation arise), Grossman-Hart-Moore assume away *ex post* maladaptation (by invoking common knowledge of payoffs and costless bargaining), thereby to focus instead on how different configurations of physical asset ownership (to which residual rights of control accrue) are responsible for efficiency differences at the *ex ante* stage of contract.

My concern with this setup is not that it is wrong in a "mechanical sense," but rather that it is "imperfectly suited to the subject matter ... [because it obscures] the key interactions instead of spotlighting them" (Solow, 2001 p. 112). As I have discussed elsewhere (Williamson, 2000 pp. 605–07), it makes strange predictions (in that integration does not imply the unified ownership and management of two stages, A and B, but instead integration is "directional": it matters whether A acquires B or B acquires A because unified [coordinated] decision-making is not attempted) and is very nearly untestable (Michael Whinston, 2001). Be that as it may, those who have pioneered this effort to model incomplete contracts deserve great credit; among other things, their work has invited others to follow.

The recent paper by Patrick Bajari and Steven Tadelis (2001) on "Incentives versus Transaction Costs: A Theory of Procurement Contracts" is particularly noteworthy. It starts with the empirical observation that procurement contracts are not menus but take one of two polar forms: fixed-price or cost-plus. They view the basic trade-off as between high-powered incentives (where fixed-price enjoys the advantage) and *ex post* adaptation (where the advantage accrues to cost-plus). Although the resulting full formalization also requires some strong assumptions, costless bargaining is not one of them.

To be sure, Bajari and Tadelis do not reach the vertical-integration question and therefore do not address the governance structure differences that distinguish markets and hierarchies. Their treatment of outside procurement in terms of fixed-price or cost-plus contracts nevertheless features (spotlights), rather than suppresses,

ex post maladaptation (key interactions). The paper is not only important as it stands, but it invites follow-on work, both theoretical and empirical, to include vertical integration.

V. Conclusions

Despite the progressive development of a science of contract over the past 30 years, textbook economics remains predominantly a science of choice-undertaking. One reason is inertia. A second reason is that the science of contract is not a unified subject, but has been progressing in a number of (partly rival) research directions. Be that as it may, it is noteworthy that the lens of contract/private ordering yields many refutable implications and has public-policy lessons that go beyond industrial organization to include the making of public policy more broadly (Avinash Dixit, 1996). Transition economics is an example of a field where recent errors could have been avoided had the lens of contract been more assiduously applied (Gerard Roland, 2001).

More generally, as Agnar Sandmo (2000 p. 21) has said, "the economics profession as a whole has been moving towards more attention to institutions and away from the more mechanistic view ... of general equilibrium theory." Continuing headway, rather than a revolution, is what Sandmo projects. That is what I expect as well.

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