

OLIVER E. WILLIAMSON (1932-2020):
AN INSTITUTIONALIST RESEARCHER

GEOFFREY M. HODGSON

Loughborough University London

and

MASSIMILIANO VATIERO^{*}

*University of Trento,
and University of Italian Switzerland*

OLIVER EATON WILLIAMSON, the Edgar F. Kaiser Professor Emeritus of Business at Haas and Professor Emeritus of Economics and Law at University of California, Berkeley, died May 21, 2020. He was a pioneer in the multi- and inter-disciplinary field of transaction cost economics¹ and one of the world's most cited social scientists.² He was awarded³ the 2009 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel «for his analysis of economic governance, especially the boundaries of the firm». The Royal Swedish Academy of Sciences specified in its citation that Professor Williamson «provided a theory of why some economic transactions take place within firms and other similar transactions take place between firms, that is, in the marketplace».

* Addresses for correspondence: geoff@vivarais.co.uk, Devon, UK; massimiliano.vatiero@unitn.it, Trento, Italy.

¹ The concept of transaction cost represents «a theoretical innovation – a new way of thinking about economic phenomena» (BACKHOUSE 2004). In a well-wishing message that Oliver Williamson prepared in 2013 to an annual conference of the Italian Society of Law and Economics, organized by one of us (MV), and that we attach at the end of this obituary, Williamson reported that Coase wrote him: «Indeed, Transaction Cost Economics is to a large extent your creation».

² For instance, quite surprisingly because he is with very few publications in strategic management related journals, Oliver Williamson ranks second, after Michael Porter, on the list of Top 15 cited authors in *Strategic Management Journal* (1980-2009) with two his books (*Markets and Hierarchies: Analysis and Antitrust Implication*, 1975, and *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, 1985) among the top 15 publications in this Journal (see NICKERSON 2010).

³ For their separate but complementary works on economic governance, Williamson shared the 2009 prize with Elinor Ostrom, a professor of political science and of public and environmental affairs at Indiana University in Bloomington, and the first woman to receive the Nobel memorial prize in economic sciences.

Williamson was born in Superior, Wisconsin, USA, on September 27, 1932, to Scott and Lucille Williamson – both teachers. He studied business and received his B.S. in management in 1955 from Massachusetts Institute of Technology. He worked as a project engineer for General Electric Co. and then earned an M.B.A. degree from Stanford University in 1960 and a Ph.D. in economics from Carnegie Mellon University in Pittsburgh in 1963.

For a time, he worked for the Central Intelligence Agency in Washington where he met Dolores Celini. They married in 1957 and had five children. Williamson began his teaching career at Berkeley where he was an assistant professor in economics. In 1965, he moved to the University of Pennsylvania. During his time at Pennsylvania, he was also a special economic assistant to the head of division in the antitrust division of the US Department of Justice Department in 1966-67. He joined the Yale faculty in 1983, but in 1988, Berkeley lured Williamson back by appealing to his interdisciplinary interests and offering him appointments in not only business and economics but also the law. He taught economics and law there until he retired in 2004.

His work combined law, economics, and organization, and he has had an influence even in political science, management, and sociology. In a telephone interview immediately following the announcement of the 2009 Nobel memorial prize, he explained his work by saying, «it's an interdisciplinary effort to draw economics and organization theory together, to try to understand the boundaries of the firm and a whole set of practices that firms engage in, and more generally to understand complex economic organizations, of both the private and public sector kinds [...] it also appeals to aspects of the law, mainly contract law, and tries to draw these together and demonstrate the, well, a new way of trying to interpret complex economic organization» (Smith 2009).

While traditional economic approaches of the early 1970s did not allow for analysis of governance within organizations, Williamson proved that transaction cost economics could illuminate the trade-offs that parties make in transactions: «all feasible forms of organization are flawed, [...] we need to understand the trade-offs that are going on, the factors that are responsible for using one form of governance rather than another, the strengths and weaknesses that are associated with each of them» (Smith 2009).

In his 1937, *The Nature of the Firm*, a young Ronald Coase – later the 1991 recipient of the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel – observed that the established theory of his time did not recognize a role for firms, and yet anyone could look out on the world and see that economies were populated with hierarchical, non-market entities. Williamson's theories (elaborated without math-

ematical models and theorems) were inspired by the work of Coase. Using the lens of transaction cost reasoning, Williamson compared *markets and hierarchies* (the title of one of his most influential books),¹ and studied *the economic institutions of capitalism* (to quote another influential book). For instance, what defines a firm? What defines a market? In an interview that he gave to one of us (GH, with David Gindis), Williamson responded: «I take the defining characteristics of governance structures to be incentive intensity, administrative control, and the contract law regime. Firms combine relatively low powered incentives with a lot of control instruments and use hierarchy rather than courts to settle disputes. Markets are polar opposites, and hybrids are located in between» (Gindis and Hodgson 2007, 376).

In particular, Williamson focussed on how different attributes of transactions were better suited to different types of governance and brought governance of transactions into economic theory. According to Williamson (e.g., 1981, 55), asset specificity is the most important and distinctive attribute of a transaction. A familiar illustration is the relocation of a supplier's factory closer to its client (cf. the well-known Fisher Body - General Motors case). Because specific investments in a transaction cannot be redeployed in other transactions except with a significant loss of revenue, the *trans-actor* who made transaction-specific investments moves from having many potential partners to being locked in.²

On the down side, this exposes the investor to the adverse renegotiation of the counterparty of the original agreed-on terms. Namely, there is a risk of ex post opportunistic renegotiation (i.e., holdup) that diminishes incentives for specific investments. Because of the hold-up risk, there is a problem of a sub-optimal incentives for investing in asset-specificity and the parties are pushed to abandon the contractual form and manage transactions within a single firm. Indeed, to avoid ineffic-

¹ Note that Williamson in his book *Markets and Hierarchies* stated a famous phrase with a Biblical ring: «I assume, for expositional convenience, that 'in the beginning there was the market'» (WILLIAMSON 1975, 20; for reasons of this phrase see GINDIS and HODGSON 2007). Indeed, a recurrent condition for transaction cost economics is that the market is assumed to pre-exist other institutional substitutes (cf. HODGSON 1988, 177-182; see also DUGGER 1992). However, this assumption that in the beginning there was the market limits the (Coasian) analysis of costly markets and, in general, of non-free-lunch institutions (see PAGANO and VATIERO 2015).

² In an ideal world, the parties would write a state-contingent contract and rely on an external third party, i.e., a judicial system whose power comes from the political monopoly of power, to settle their conflicts ex post. To ensure an ex ante contracted outcome, the external third party will observe contracting parties' conduct and eventually impose penalties or other requirements if contracted obligations are not met. However, according to incomplete contract theory (e.g., TIROLE 1999; HART 2017), this external enforcement is costly. In the parlance of incomplete contract theory, the exact nature of the investment in asset-specificity – though it is potentially observable by parties – is not verifiable by the external legal enforcer.

ient haggling under non-integration, it may be more efficient to *transact* by fiat. As Williamson (1971, 114) argued, «fiat is frequently a more efficient way to settle minor conflicts ... than is haggling or litigation».¹

On the up side, when the lock-in deriving from transaction-specific investments is *credible*, each party may be *more* willing to invest. In this respect, Williamson used the so-called «hostage model» of Schelling (1960, 300) as a means to create a credible commitment and then support transactions (see for instance, Williamson 1983). In his view, transactions – albeit in a context with incomplete contracts – can be enhanced if the one party pledges a «hostage», *i.e.*, something that is sacrificed in the event of the premature termination of the transaction. By posting a hostage, a trans-actor creates a commitment that serves as a safeguard for the partner's cooperation. The hostage is ultimately a specific investment because the hostage is sacrificed in the termination of the relationship (namely, this hostage has no value outside the relationship). Exploiting the hostage model, Williamson states that the other party should invest in the specific relationship in order to foster the specific investments of one party.

However, the commitment stemming from specific investments tends to create rigidity and stability in a transaction (*i.e.*, trans-actors are mutually locked-in a transaction); instead, following the insights of Chester Barnard (1938), Williamson observed that «inasmuch as a full set of contingent claim markets is infeasible (by reason of bounded rationality), *adaptive* and sequential decision-making procedures need be devised» (Williamson 1973, 318, italics added). One of main concerns of a transaction is indeed its adaptation to changing rules and «[i]ntertemporal efficiency ... this requires that *adaptations* to changing market circumstances be made» (Williamson 1979, 241, italics added). Hence, an efficient institutional arrangement must be such that it facilitates adaptation in the face of mutable and unpredictable *ex post* occurrences. Transaction cost economics, Williamson (2010, 9, italics added) writes, «has been an exercise in *adaptive*, intertemporal economic organization from the outset».

Hence, a trade-off can emerge between commitment stemming from specific investments (and related stability in a transaction) and efficiency-enhancing adaptations of a transaction. Williamson, however, shows that commitment and adaptation can work together, not in con-

¹ For Williamson, the period that he spent with the Antitrust Division was instructive. Indeed, while the conventional wisdom among antitrust enforcers was that vertical integration could be explained only as an effort to reduce competition, he found the question more complicated and argued that the main motive might be to reduce transaction costs and the resulting increase in efficiency could benefit consumers (*e.g.*, WILLIAMSON 1968).

flict, to improve a transaction. This is the case for the fundamental transformation (e.g., Williamson 1975, 1979, 1981, 1985, 1989, 2002a, 2005), which is the most important contribution of Williamson according to Oliver Hart (2020), the 2016 Nobel Laureate in economic sciences. The fundamental transformation is the process wherein investments in asset specificity may *transform* the transactional environment from an ex ante competitive market to a bilateral monopoly.¹ This adaptation is based on specific investments that, as hostages à la Schelling, create credible commitment. Williamson writes,

[t]he Fundamental Transformation applies to that subset of transactions for which large numbers of qualified suppliers at the outset are transformed into what, in effect, is a bilateral exchange relation during contract execution and at the contract renewal interval. ... The key factor in determining whether a large numbers supply condition will evolve into a bilateral exchange relation is the degree to which the transaction in question is supported by durable investments in *transaction-specific assets*.

Oliver Williamson (2005, 8, italics added)

In other words, the process of fundamental transformation is an adaptive process based on investments in asset specificity that can reconfigure an ex ante market situation where opportunism is credible (because parties have available alternatives) towards an ex post bilateral monopoly that creates a credible commitment between transactors.²

Hence, specific investments play a double role in a transaction: On the one hand, they are the origin of the problem of holdup as suggested in the standard literature. On the other hand, they (may) create a credible commitment that mitigates the problem of holdup. This double role for specific investments is also noted by Williamson:

[c]redible commitments and credible threats share this common attribute: Both appear in conjunction with irreversible, specialized investments. But whereas credible commitments are undertaken in support of alliance and to promote exchange, credible threats appear in the context of conflict and rivalry.

Oliver Williamson (1985, 167)

A further central tenet of Williamson's theory is that complex transactions require ongoing collaborations (or «relational contracts») in

¹ In process of fundamental transformation, Williamson applies the idea of transaction from JOHN COMMONS (1924) (see also VATIERO 2020): A transaction involves not only the actions of two actual trans-actors but also the actions expected by potential transactors (e.g., alternatives to two actual transactors) and the power of the public official actor. Williamson's praise of John Commons as a great forerunner of transaction cost economics (e.g., WILLIAMSON 1981, 549-550; 1985, 3, 6; 1988, 571; 1996a, 50; 1996b, 152; 1999, 5; 2000, 599; 2002b, 438) is well known among interpreters of institutionalist thought and methodology.

² The Williamsonian fundamental transformation might be related to the literature on the deterrence entry that is originated by works of SYLOS-LABINI (1969) and DIXIT (1980), among other (cf. also NICITA and VATIERO 2014; and VATIERO 2017).

which adaptation is achieved and disputes are resolved without recourse to court litigation. Namely, they need a *private ordering*: Parties in a transaction would benefit from an altogether ruling out of judicial intervention (see Williamson 1979, 2002b). «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» (Williamson 2002b, 438). The fundamental transformation represents a case of private ordering: Thanks to commitment stemmed from their specific investments, trans-actors adapt and enhances their transactions when faced with the problem of holdup risk without public and external enforcement. More generally, the parties may prefer to *privately* enforce their transactions because, even if the law has developed over time its own flexible rules to interpret contracts (e.g., the excuse doctrine), litigation costs are higher and/or the risk of judicial misunderstanding and overreach may encourage opportunism and hence undermine relational contracting between firms.

Coase showed the boundaries of the firm and market. Williamson examined the boundaries (of the theory) of firm and market by also considering bounded rationality, asset specificity, and opportunism. However, the work is still incomplete. Williamson recommended for the future: «I think that the new generation of scholars can recognize that their predecessors have made headway. But there are also limitations and big challenges ahead. So let's push the boundaries» (Gindis and Hodgson 2007, 384-385).

REFERENCES

- BACKHOUSE R. E. 2004, *The Ordinary Business of Life*, Princeton, Princeton University Press.
- BARNARD C. I. 1938, *The Functions of the Executive*, Cambridge, Harvard University Press.
- COASE R. H. 1937, «The Nature of the Firm», *Economica*, 4, 386-406.
- COMMONS J. R. 1924, *Legal Foundations of Capitalism*, Clifton, Augustus M. Kelley Publishers.
- DIXIT A. K. 1980, «The Role of Investment in Entry-Deterrence», *Economic Journal*, 90, 95-106.
- DUGGER W. 1992, «An Evolutionary Theory of the State and the Market», in W. Dugger and W. Waller (eds) 1992, *The Stratified State, Radical Institutional Theories of Participation and Duality*, London, M. E. Sharp.
- GINDIS D. and G. HODGSON 2007, «An Interview with Oliver Williamson», *Journal of Institutional Economics*, 3, 373-386.
- HART O. 2017, «Incomplete Contracts and Control», *American Economic Review*, 107, 7, 1731-1752.
- HART O. 2020, «Building the Theory of the Firm,» StOE Blog (<https://www.sioe.org/news/building-theory-firm>).

- HODGSON G. M. 1988, *Economics and Institutions: A Manifesto for a Modern Institutional Economics*, Cambridge, Polity Press.
- NICITA A. and M. VATIERO 2014, «Dixit versus Williamson: The 'Fundamental Transformation' Reconsidered», *European Journal of Law and Economics*, 37, 3, 439-453.
- NICKERSON J. 2010, «Oliver Williamson and his Impact on the Field of Strategic Management», *Journal of Retailing*, 86, 270-276.
- PAGANO U. and M. VATIERO 2015, «Costly Institutions and Substitutes: Novelty and Limits of the Coasian Approach», *Journal of Institutional Economics*, 11, 2, 265-281.
- SCHELLING T. 1960, *The Strategy of Conflict*, Oxford, Oxford University Press.
- SMITH A. 2009, «Interview with Oliver E. Williamson – Facts», NobelPrize.org (<https://www.nobelprize.org/prizes/economic-sciences/2009/williamson/facts/>).
- SYLOS-LABINI P. 1969, *Oligopoly and Technical Progress*, Cambridge, Harvard University Press.
- TIROLE J. 1999, «Incomplete Contracts: Where do we Stand?», *Econometrica*, 67, 4, 741-781.
- VATIERO M. 2017, «Specific Investments and Residual Control Rights: A Reassessment», in L. Fanti (ed.) 2017, *Oligopoly, Institutions and Firms' Performance*, Pisa, Pisa University Press, pp. 223-233.
- VATIERO M. 2020, *The Theory of Transaction in Institutional Economics*, London, Routledge.
- WILLIAMSON O. E. 1968, «Economies as an Antitrust Defense: The Welfare Trade-offs», *American Economic Review*, 58, 18-36.
- WILLIAMSON O. E. 1971, «The Vertical Integration of Production: Market Failure Considerations», *American Economic Review*, 61, 2, Papers and Proceedings of the Eighty-Third Annual Meeting of the American Economic Association, 112-123.
- WILLIAMSON O. E. 1975, *Markets and Hierarchies: Analysis and Antitrust Implications*, New York, Free Press.
- WILLIAMSON O. E. 1979, «Transaction-cost Economics: The Governance of Contractual Relations», *Journal of Law and Economics*, 22, 2, 233-261.
- WILLIAMSON O. E. 1981, «The Economics of Organization: The Transaction Cost Approach», *American Journal of Sociology*, 87, 3, 548-577.
- WILLIAMSON O. E. 1983, «Credible Commitments: Using Hostages to Support Exchange», *American Economic Review*, 73, 4, 519-540.
- WILLIAMSON O. E. 1985, *The Economic Institutions of Capitalism*, New York, Free Press.
- WILLIAMSON O. E. 1988, «Corporate Finance and Corporate Governance», *Journal of Finance*, 43, 3, 567-591.
- WILLIAMSON O. E. 1989, «Transaction Cost Economics», in R. Schmalensee and R. Willig (eds) 1989, *Handbook of Industrial Organization*, vol. 1, North Holland, Elsevier, 136-182.
- WILLIAMSON O. E. 1996a, «Economic Organization: The Case for Candor», *Academy of Management Review*, 21, 1, 48-57.
- WILLIAMSON O. E. 1996b, «Transaction Cost Economics and the Carnegie Connection», *Journal of Economic Behavior and Organization*, 31, 2, 149-155.
- WILLIAMSON O. E. 1999, «Human Actors and Economic Organization», *Quaderni del dipartimento di economia politica*, 247, Siena, Università degli Studi di Siena.
- WILLIAMSON O. E. 2000, «The New Institutional Economics: Taking Stock, Looking Ahead», *Journal of Economic Literature*, 38, 595-613.
- WILLIAMSON O. E. 2002a, «The Theory of the Firm as Governance Structure: From Choice to Contract», *Journal of Economic Perspectives*, 16, 3, 171-195.

- WILLIAMSON O. E. 2002b, «The Lens of Contracts: Private Ordering», *American Economic Review*, 92, 2, Papers and Proceedings of the One Hundred Fourteenth Annual Meeting of the American Economic Association, 438-443.
- WILLIAMSON O. E. 2005, «The Economics of Governance», *American Economic Review*, 95, 2, 1-18.
- WILLIAMSON O. E. 2010, «Transaction Cost Economics: An Overview», in P. G. Klein and M. E. Sykuta (eds) 2010, *The Elgar Companion to Transaction Cost Economics*, Aldershot, Edward Elgar, pp. 8-26.

APPENDIX

I thank the editors of this journal for the opportunity to explain to readers Professor Oliver Williamson's well-wishing message that is published below. Since 2011, I have been a member of the board of the Italian Society of Law and Economics (www.side-isle.it) and, in 2013, we invited professor Williamson as keynote speaker to our annual conference that was organized at the Università della Svizzera italiana (Lugano).

The Italian Society of Law and Economics aims to provide a forum for the development, discussion and dissemination of studies on any topic regarding the Economic Analysis of Law (JEL Code: K). The set-up of our conferences is highly interdisciplinary and open to all rigorous scientific methodologies. Moreover, we encourage the contribution of young scholars and want to consolidate relationships among European centers of Law and Economics.

Unfortunately, for personal reasons Professor Williamson was not able to attend our 2013 annual conference but he prepared with pleasure a well-wishing message to all participants.

Let me underline a couple of aspects of this well-wishing message that motivate the publication on this journal and that are, I believe, particularly appropriate to understand the great figure of Oliver Williamson. First, Williamson 'created' the analysis of transaction costs that play a key role in Law and Economics field. As Williamson reports, Coase himself writes him: «Indeed, Transaction Cost Economics is to a large extent your creation». Second, Williamson was a great supporter of an interdisciplinary and pluralist approach to the analysis of institutions and organizations. We try, as community and association of Law and Economics, to follow his message.

LORENZO SACCONI

President, SIDE - Italian Society of Law and Economics

Università
della
Svizzera
Italiana

Facoltà
di scienze
economiche

Istituto
di diritto
IDUSI

Brenno Galli
Chair of Law and Economics



Società Italiana di Diritto ed Economia
Italian Society of Law and Economics

www.side-isle.it

ITALIAN SOCIETY OF LAW AND ECONOMICS IX ANNUAL CONFERENCE

Università della Svizzera italiana
Lugano, Switzerland
December 12-13, 2013



To the Italian Society of Law and Economics, 2013:

Please accept my regrets for failure to attend the 2013 Conference of Italian Society of Law and Economics. My best wishes for a successful and memorable event.

As you all know, Law and Economics is an incredible success story -- starting especially with Ronald Coase's observation in 1960 that transaction costs were not, as customarily assumed, zero. To the contrary, they were in varying degrees positive. Express provision for this needed to be made lest public policy errors proliferate.

Both the "rules of the game" and the "play of the game" would now come under scrutiny -- where Douglass North and his colleagues emphasized the former and Transaction Cost Economics worked up the ramifications for markets, hybrids, and hierarchies (conditional on the rules of the game). Speaking for myself, my work on TCE would never have gotten underway but for Coase's pathbreaking paper. In his generous manner, Coase on my 70th birthday sent me the following: "Indeed, Transaction Cost Economics is to a large extent your creation."

A variant of Law and Economics that I have found to be especially instructive (and due in no small part to my interdisciplinary training at Carnegie in the early 1960s) is what I refer to as Law, Economics, and Organization, where this last brings human actors and organization theory more prominently to the fore.

More generally, however, what I favor is not one all-purpose theory of Law and Economics but theories plural -- of which the contributions from Institutional Economics, Transaction Cost Economics, and textbook economics are each brought to bear and judged by their value added.

Relevant in this connection is that each would-be theory should be asked to derive refutable implications and submit these to empirical testing. An email exchange that I had with Milton Friedman in February 2006 is relevant. As Friedman looked back upon his career he concluded as follows: "I believe in every area where I feel I have had some influence it has occurred less because of the pure analysis than it has because of the empirical evidence that I have been able to organize." There is no question that Transaction Cost Economics is an empirical success story -- to which my students and other young scholars are largely responsible.

Good Luck,

Oliver E. Williamson

Edgar F. Kaiser Professor Emeritus of
Business, Economics, and Law
Walter A. Haas School of Business
545 Student Services Building # 1900
University of California, Berkeley
Berkeley, CA 94720-1900