Transaction Cost Economics: The Natural Progression

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1. An Overview

The research program on which I and others have been working has been variously described as the "economics of governance," the "economics of organization," and "transaction cost economics." Whereas governance is the overarching concept, appeal to organization theory provides vital support, and transaction cost economics is the means by which to breathe operational content into governance and organization. For economists, organization is important if and as it is made susceptible to analysis.

1.1 Governance

Commons Triple (1932):

"The ultimate unit of activity … must contain in itself the three principles of conflict, mutuality, and order. This unit is a transaction" (Commons, 1932). Governance, as herein employed, is the means by which to infuse order, thereby to mitigate conflict and realize mutual gain. (This is a hard-headed and user-friendly message.) Furthermore, the transaction is made the basic unit of analysis.

Buchanan (1975):

James Buchanan subsequently distinguished between lens of choice and lens of contract approaches to economic organization and argued that economics as discipline went "wrong" in its preoccupation with the science of choice and the optimization apparatus associated therewith (1975). If "mutuality of advantage from voluntary exchange is … the most fundamental of all understandings in economics" (Buchanan, 2001), then the lens of contract approach is an under-used perspective.

Remarks

1. Transaction cost economics was well underway before I came across Commons and Buchanan's views on economics.
2. I interpreted both as ratification for the TCE project.
3. The commonality in each: mutual gains from trade.
4. Although gains from trade can be inferred from the exchange of nuts for berries on the edge of the forest, TCE is concerned more with complex contract and economic organization.

   - transactions differ
   - governance structures differ

   How? And why? And with what ramifications?

1.2 Organization

The neoclassical theory of the firm treated the firm as a black box for transforming inputs into outputs according to the laws of technology. Albeit a useful construction, it was not, as Harold Demsetz observed, an all-purpose construction. It is a "mistake to confuse the firm of [neoclassical] 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" (1983).

The research need and opportunity as I perceived it – in no small measure because of my interdisciplinary training (1960-63) in the PhD program at Graduate School of Industrial Administration, Carnegie Mellon University – was that organization theory should both inform and be informed by economics. (Herbert Simon, James March, and Richard Cyert played especially important roles in putting this across.)

The neglect of organization was also a concern of others. As Kenneth Arrow observed, "Truly among man's innovations, the use of organization to accomplish his ends is among both his greatest and his earliest" (1971).

(Students in the audience: Sometimes your teachers get it right!)

1.3 Transaction Costs

In his 1937 paper on "The Nature of the Firm" the youthful Coase (then 27 years old) uncovered a serious lapse in the accepted textbook theory of firm and market organization. Upon viewing firm and market as "alternative methods of coordinating production," Coase advised his elders that the decision to use one mode rather than the other should not be taken as given (as was the prevailing practice) but should be derived.

The lapse to which Coase referred was mainly ignored over the next 20 years, during which period the implicit assumption that transaction costs could be assumed to be zero went unchallenged. Two important articles in the 1960s would upset this state of affairs. Upon pushing the logic of zero transaction costs to completion, the unforeseen and unsettling implications of this standard assumption were displayed for all to see.

The first was Coase's 1960 article on "The Problem of Social Costs," which focused on externalities. The second was Arrow's 1969 examination of "The Organization of Economic Activity." Both concluded similarly: under the standard assumption of zero transaction costs, externalities would vanish, because the parties would costlessly bargain to an efficient result, and there would never be an occasion for vertical integration, because contracts would be costlessly complete. Costlessness abounded, which is bad news for economics.

Pushing the logic of zero transaction costs to completion would reveal the need to make provision for positive transaction costs, but there were three problems:

1. Opening the black box of the firm revealed that it was Pandora's Box: positive transaction costs were everywhere. Rationalizations were easy and TC got a bad name. Needed: focus on basics.
2. It did not suffice to show that transaction costs were "large." What mattered were TC differences across alternative modes (markets and hierarchies).
3. More generally, needed an analytical framework from which predictions can be derived and empirical tests conducted. Ambitious.

2. The Vertical Integration of Production

For applied economists like myself, the natural way to press ahead in positive transaction cost economics terms is to identify a puzzling economic condition and break it down into its constituent parts. The vertical integration issue (Coase, 1937; Arrow, 1969) was an obvious candidate – to include an examination of the implications of TC for antitrust enforcement. Indeed, the story begins with antitrust. But first, a digression on Carnegie.

2.1 My Advantage: Carnegie

What I have referred to as the "Carnegie Triple" is this: be disciplined; be interdisciplinary; have an active mind. Being disciplined meant to take your core discipline seriously and work at it on its own terms. Being interdisciplinary meant to appeal to the contiguous social sciences – if and as the phenomena under study crossed disciplinary lines. Having an active mind entailed asking the question, *"What is going on here?"* rather than pronouncing, *"This is the law here!"*

2.2 Antitrust Practice in the 1960s

Special Economic Assistant (1966-67): Most of the best antitrust analysts and practitioners subscribed to the "then prevailing" IO thinking – based on applied price theory, nonstandard and unfamiliar forms of contract and organization were presumed to be anticompetitive.

Illustration: So Schwinn case on franchise restrictions: presumptively anticompetitive.

My position: I knew better. Viewing the firm as a governance structure, rather than a production function, the presumption of anti- competitiveness was flawed. Yet the law has a life of its own.

2.3 The Penn Seminar

The class and I went through the existing literature on vertical integration/vertical market restrictions – on the merits and to ascertain whether there were preexisting treatments that "organization matters."

(**Note:** if teaching is learning, especially if the class buys in, then teaching several different classes, rather than one preparation with several sections, is not all bad.)

2.4 Research Project: "The Vertical Integration of Production: Market Failure Considerations" (1971)

Novel Features

- Adopt a lens of contract approach
- Introduce incomplete contracting through bounded rationality (Simon)
- Introduce strategic behavior (breakdown of contract) when the contractual stakes are great.
- Take adaptation (of autonomous and coordinated kinds) to be the central problem of economic organization in both markets and hierarchies.

- **Big locomotive:** asset specificity (nonredeployable investments) together with unprogrammed disturbances. The hazard of Bilateral Dependency is the heretofore missing concept.

Result: If the requisite preconditions are satisfied, then there is an efficiency basis for vertical integration and vertical market restrictions.

The analysis thus rests on the attributes of transactions (and their adaptive needs) and the strengths and weaknesses of markets and hierarchies (in adaptive respects). Needed: work up the efficiency logic.

3. TCE: The Rudiments

Vertical integration (the boundary of the firm) is a special case that needs to be embedded in a broader framework.

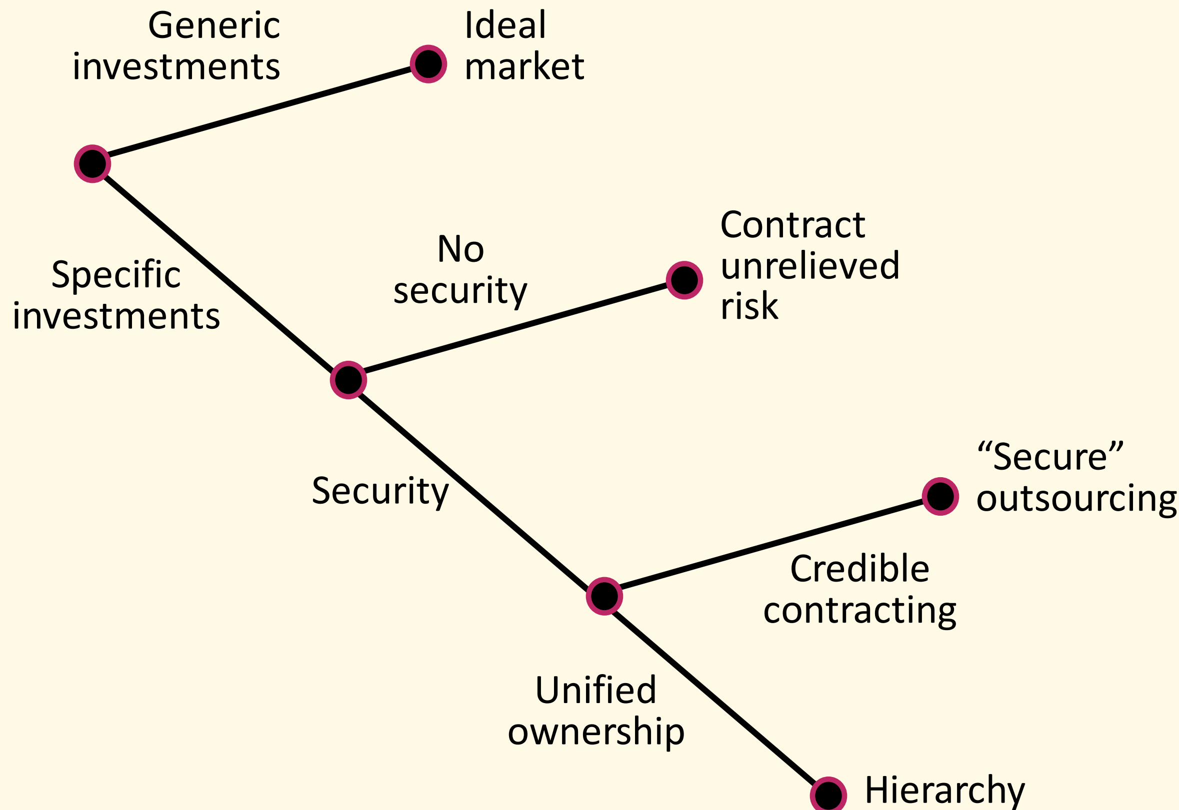
The basic steps for operationalizing transaction cost economics are:

3.1 Basic Conceptual Moves

- Describe human actors in cognitive and self-interestedness respects
- Recognize adaptation of both autonomous and coordinated kinds -- so there is a need to move beyond the marvel of market (Hayek) to include the marvel of hierarchy (Barnard) and discard the old ideological divide of markets or hierarchies to deal symmetrically with markets and hierarchies
- Contract laws (plural) rather than one all-purpose law.

3.2 Basic Operational Moves

- Transaction as unit of analysis: dimensionalize
- Alternative modes of governance
  - attributes named
  - viable clusters described
- Efficient alignment hypothesis: predictive schema



3.3 Applications

- Empirical testing
- Variations on a theme
  - within the field of industrial organization
  - other applied economics fields (e.g., labor; public fin.)
  - business (e.g., marketing; finance)
  - contiguous social sciences (esp. political science; sociology)
- Public policy
  business (antitrust, regulation, corporate governance)
  design and use of public bureaus: is now a
  highly politicized process for which an assessment on
  the merits as needed

(Note with respect to all of the above that the strategy is to observe phenomena at a higher level of resolution and to secure new kinds of data at the micro level (Simon, 1984).)

4. Pushing the Logic to Completion

Combine two research precepts from Robert Solow:

- get it right
- make it plausible

Recall Coase and Arrow on pushing the logic of zero transaction costs to completion.

TCE pushes the logic of positive transaction costs to completion with respect to the impossibility of selective intervention, remediableness, credibility, scaling up

1. Contrary views notwithstanding, because of the impossibility of combining replication with selective intervention, hierarchy cannot replicate the market. Upshot: each has its own strengths and weaknesses, which has boundary of the firm ramifications.

2. The remediableness criterion
   Because all feasible modes of organization are flawed, the observation of a "market failure" does not, without more, warrant regulation (which is also experiences failures). Symmetrical examination of all.
3. Credible commitments
   The contract law of "legal rules" in ideal markets needs to be broadened to make provision for "contract as framework" (long-term contracts) and "forbearance law" (internal organization)
4. Scaling up
   From toy models to the "real world" phenomenon of interest
5. The Natural Progression
   the normal "regularities" of theory development: informal to pre-formal to semi-formal to fully-formal.
   (Be mindful of value added and tradeoffs at each step)

Conclusion

Transaction cost economics

- has distinguished precursors
- has a record of accomplishment
- looks ahead to an interesting and challenging future – in conceptual and theoretical and empirical and public policy and outreach respects.