

**The Coasean and Williamsonian Transaction Cost Theories of Organization:
a Critical Analysis From a Specialization Perspective**

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Introduction

Objectives

- To identify assumptions in and compare/contrast Coasean and Williamsonian transaction cost approaches;
- To identify and estimate the role of specialization in transaction cost analysis of economic organization.

Conceptual Framework

Specialization, in the form of division of labor and capital, is a fundamental prerequisite for and characteristic of the market/exchange economy, the extent of which is limited by the extent of the market—its density of resources (Smith; Durkheim; Stigler). Specialization in the market place is characterized by and leads to *resource heterogeneity* (Barney), primarily measured or operationalized as a resource's degree of *complementarity* and *substitutability* (Lachmann). The specialized market economy is characterized by increasing heterogeneity and more roundabout production structures.

Limitations in previous research

- Lack of analysis of specialization's impact on economic organization—despite Coase explicitly assuming a specialized market economy and Williamson focusing on asset specificity;
- Few and limited attempts to identify core assumptions in and compare Coase's and Williamson's respective transaction cost approaches;
- General but seemingly unsubstantiated presumption of a commensurable, joint Coase-Williamson transaction cost approach (however with differing emphases).

Main Contributions

- Identification and explication of significant role of specialization in both Coase and Williamson;
- Identification and explication of potentially conflicting assumptions in and implications for Coase's and Williamson's respective approaches;
- Drafting a potential solution based on the conception of specialization as resource heterogeneity and the firm as islands of comparatively extreme density.

Coase's View

Transaction Costs

The "costs of using the price mechanism," "of discovering what the relevant prices are," the "marketing costs" necessary to coordinate production processes under "atomistic competition."

The Coasean Analysis

- Market organizing is characterized by efficient allocation of resources through the price mechanism, but laden with transaction costs;
- Firms are "islands of conscious power" where an entrepreneur-coordinator directs factors of production to, as far as possible, reproduce the market's allocative efficiency, thereby saving transaction costs;
- The magnitude of market transaction costs depends on the individual entrepreneur's location, while the firm's internal transaction costs depend on the same entrepreneur's managerial ability; firms therefore differ in both external and internal transaction costs;
- Firms are superior means of organizing where excess market transaction costs TC are greater than the value of the relative allocative inefficiency of direction-based organizing, $A_e - A_s$, i.e. where $TC - (A_e - A_s) > 0$;
- A single firm is superior in the organizing of a transaction where it is at least as good as existing and potential competitors integrating similar transactions, i.e. a firm's profitability requires that $TC_f - (A_e - A_{s_i}) \geq \max\{TC_m - (A_e - A_{s_m})\} > 0$.

Structure of the Firm

By assumption, the Coasean firm cannot outdo the market's allocative efficiency, but can potentially compensate by lower internal TC and/or higher technical efficiency.

Firm structure is similar to market allocation of resources to the extent the entrepreneur is able to reproduce market allocation using external prices.

Consequently, Coase's firm "need imply no specialization" and likely cannot be created primarily around highly specific resources.

Williamson's TCE

Transaction Costs

Exist primarily as maladaptation costs arising due to misaligned incentives, especially attributable to the risk for a contractual party's opportunistic (mis)appropriation of quasi-rents from transaction-specific investments.

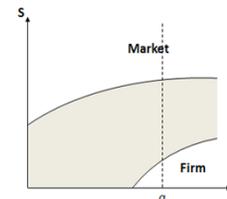
The Williamsonian Analysis

- Economic organizing is a "problem of contracting" and the problem is to align transactions with transaction cost economizing governance structures;
- Transaction costs arise along the magnitudes of the "critical dimensions" of transactions: uncertainty, frequency, and asset specificity;
- Asset specificity is "by far" the most important predictor of hierarchy (authority-based/firm organizing) and high degrees of asset specificity (high complementarity, low substitutability) implies extractable quasi-rents due to much lower value of an asset's secondary use.

Structure of the Firm

In equilibrium, all transactions are aligned with their optimal governance structures, which means that transactions utilizing resources with high asset specificity are expected primarily as integrated in hierarchies.

It follows that integrated transactions involve comparatively highly complementary (c) and limitedly substitutable (s) resources, i.e. transactions within firms are more highly specialized ($>g$) in terms of relative complementarity than market-organized transactions.



Findings

View of the Market

Coase assumes a static market that is specialized but does not allow for increased specialization unless somehow spontaneously organized through the price mechanism.

Williamson's firm is created around profoundly specialized resources that cannot be traded in the market, which allows for a dynamic adoption of increased specialization and more roundabout production processes.

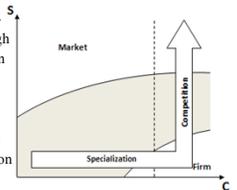
Firm Structure

Coase's firm fundamentally resembles market coordination both in terms of allocation and specialization degree, which means it is different only in means of coordination.

Williamson's firm is structurally different from market coordination. Characterized by extra-market specialization, it can utilize innovations and novel production structures.

Implications for Research

The progress of the market can be explained using the implications of specialization and insights into roles and functions of governance structures from transaction cost analysis. Highly complementary resources are integrated in and adopted within firms. Resource substitutability is increased through imitation by other firms in the competitive market, generating high resource heterogeneity in a market setting and higher growth through the further division of labor and capital.



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