Transaction Cost Economics

Peter G. Klein

Contracting and Organizations
Research Institute
University of Missouri

Center for Strategic Management and Globalization
Copenhagen Business School

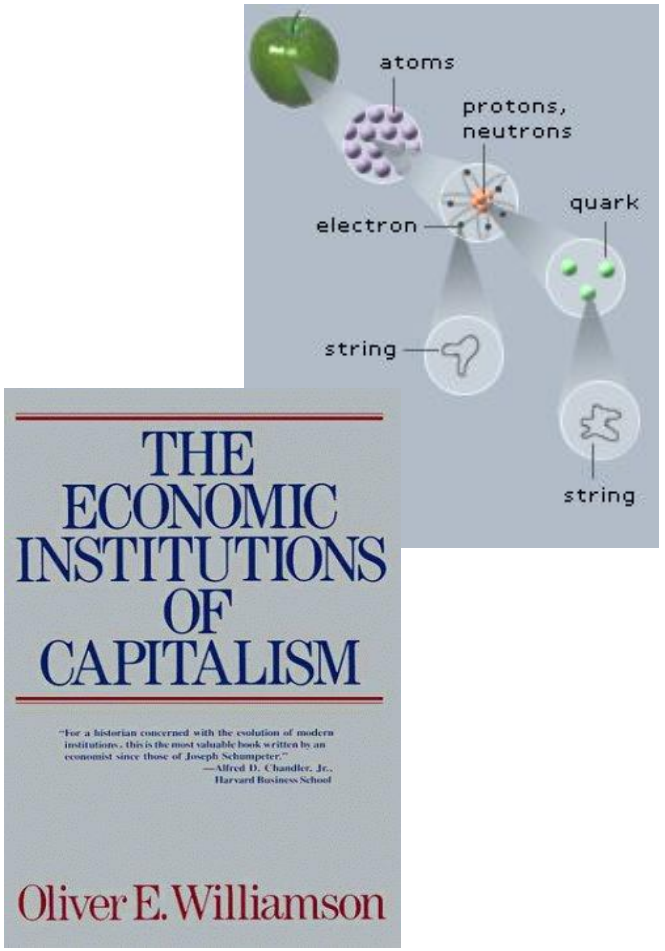
Copenhagen
Business School
HANDELSHØJSKOLEN

Transaction cost economics: background

- "Transaction costs" and "transaction cost economics" (TCE)
- Operationalizing Coase
  - Existence: team production, moral hazard, monitoring costs (Alchian and Demsetz, 1972)
  - Internal organization: agency costs and incentive contracts (Jensen and Meckling, 1976; Holmstrom, 1979)
  - Boundaries: economizing on transaction costs (Williamson, 1975, 1979, 1985; Klein, Crawford, and Alchian, 1978)
- What exactly is TCE?
  - Narrow view: asset-specificity explanation for vertical integration (distinctions between KCA, Williamson, and GHM relatively insignificant)
  - Broad view: grand, unified theory of economic organization

A theory of everything?

"Any problem that can be posed directly or indirectly as a contracting problem is usefully investigated in transaction cost economizing terms" (Williamson, 1985, p. 41).



Williamson's unique brand of TCE

- TCE's founder and best-known representative
- Charismatic and influential leader
- Influential book-length treatments
  - *Markets and Hierarchies,* 1975
  - *The Economic Institutions of Capitalism,* 1985
  - *The Mechanisms of Governance,* 1996
- Idiosyncratic terminology
- Loyal and devoted students
- Odd position in the scholarly community
  - Describes his work as "a melding of the extremes of abstract economic theory and soft social science."
  - Frequent target of Pfeffer, Ghoshal, and other critics

Oliver E. Williamson (1932–)

Key Williamsonian terms and concepts

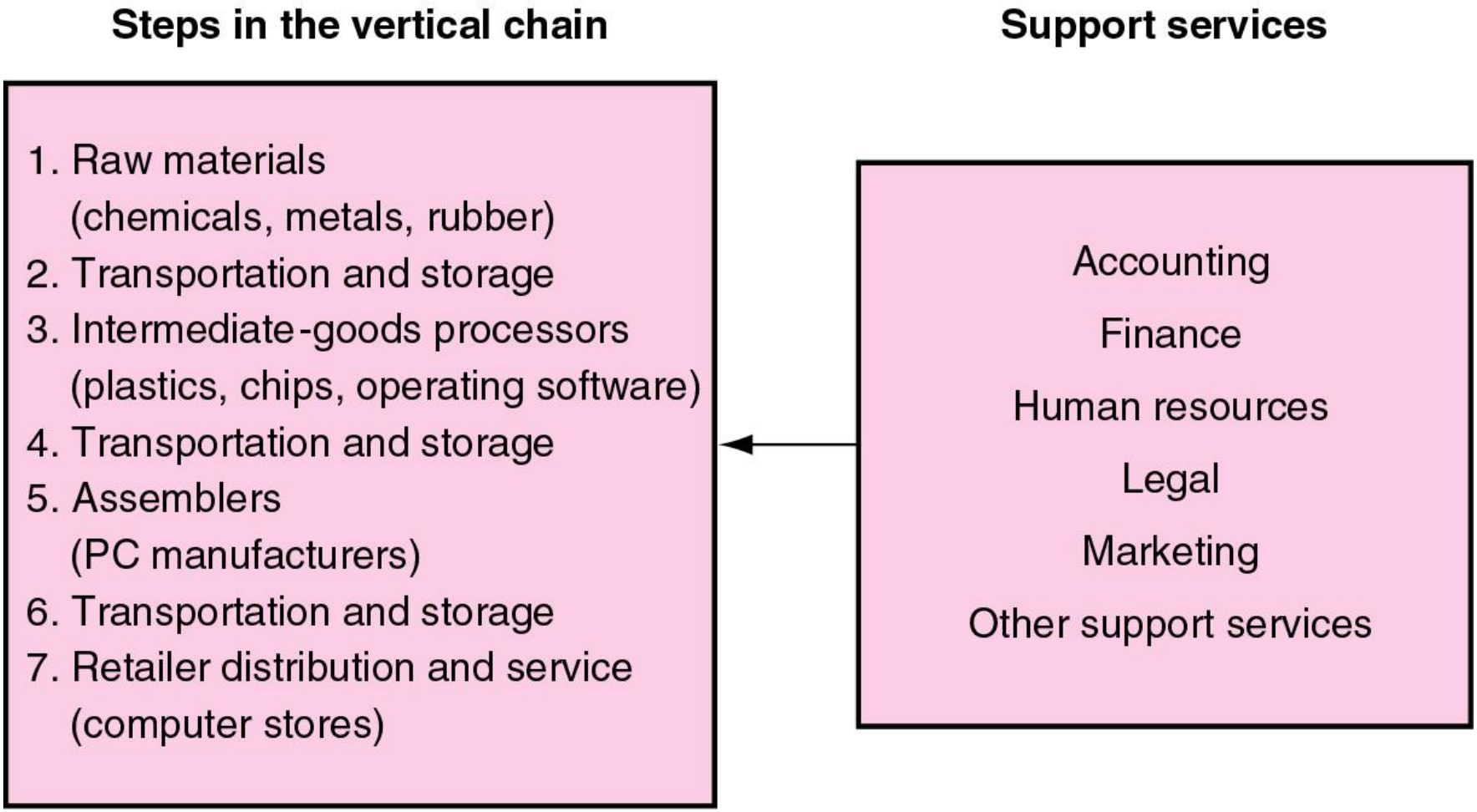
- Bounded rationality: behavior that is "intendedly rational, but only limitedly so" (Simon , 1957)
- Opportunism: "self-interest seeking with guile"
- The transaction as the unit of analysis
- Asset specificity: extent to which assets can be redeployed to alternative users and uses
- The fundamental transformation: change from thick markets at contract selection stage to bilateral dependency at contract execution and renewal stages
- The discriminating alignment hypothesis

Note emphasis on behavior and process

Vertical integration: TCE's "paradigm problem"

- The stages of production (diagram)
- Historical trends
  - Merger wave of 1920s: public utilities, banking, food processing, chemicals, mining
  - Current debates on outsourcing
- Benefits of contracting out
  - Comparative advantage
  - Specialization, trade, and the division of labor
  - Thick markets for inputs (productive and allocative efficiency)

The stages of production



Explanations for vertical coordination

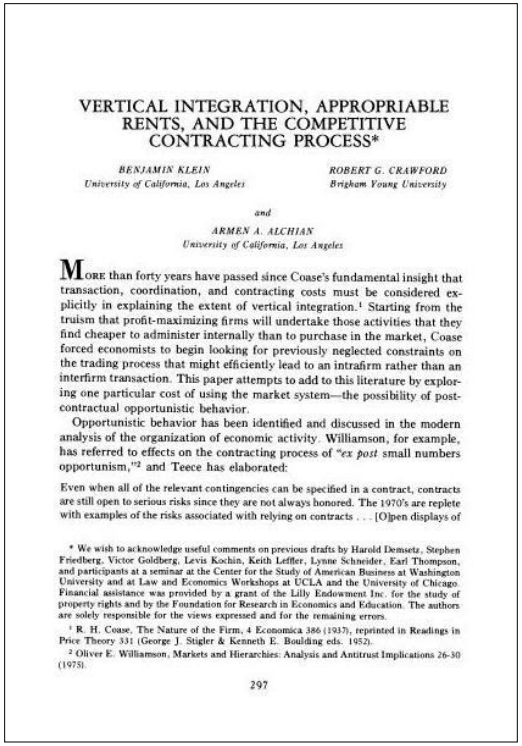
- Market-power explanations
  - Eliminating double marginalization
  - Facilitating price discrimination
  - Creating entry barriers
- Economic efficiency explanations
  - Eliminating free riding
  - Reducing supply uncertainty
  - Stigler's (1951) life-cycle explanation
  - TCE: the dominant explanation today

The basic TCE model

- Characteristics of transactions
  - Asset specificity
    - Physical
    - Site
    - Human
    - Temporal
    - Dedicated assets
    - Brand-name capital
  - Uncertainty
  - Frequency
- "Potential for "maladaptation"

Asset specificity and holdup

- Klein, Crawford, and Alchian (1978)
  - First to explicitly describe the "holdup problem"
  - Popularized the notion of "quasi-rents"
    - Economic rent: payments to a factor of production beyond that necessary to attract that factor to that activity
    - Quasi-rent (Marshall): payments to a factor of production beyond that necessary to keep that factor from leaving (excess of value over salvage value); generally greater than economic rents (see diagram)
  - Main point: specialized assets generate a stream of quasi-rents, since they aren't easily redeployable; once specialized assets are in place, trading partners will try to expropriate part of those quasi-rents



VERTICAL INTEGRATION, APPROPRIABLE RENTS, AND THE COMPETITIVE CONTRACTING PROCESS*

BENJAMIN KLEIN
University of California, Los Angeles

ROBERT G. CRAWFORD
Brigham Young University

and

ARMEN A. ALCHIAN
University of California, Los Angeles

More than forty years have passed since Coase's fundamental insight that transaction, coordination, and contracting costs must be considered explicitly in explaining the extent of vertical integration.[1] Starting from the truism that profit-maximizing firms will undertake those activities that they find cheaper to administer internally than to purchase in the market, Coase forced economists to begin looking for previously neglected constraints on the trading process that might efficiently lead to an intrafirm rather than an interfirm transaction. This paper attempts to add to this literature by exploring one particular cost of using the market system—the possibility of post-contractual opportunistic behavior.

Opportunistic behavior has been identified and discussed in the modern analysis of the organization of economic activity. Williamson, for example, has referred to effects on the contracting process of "*ex post* small numbers opportunism,"[2] and Teece has elaborated:

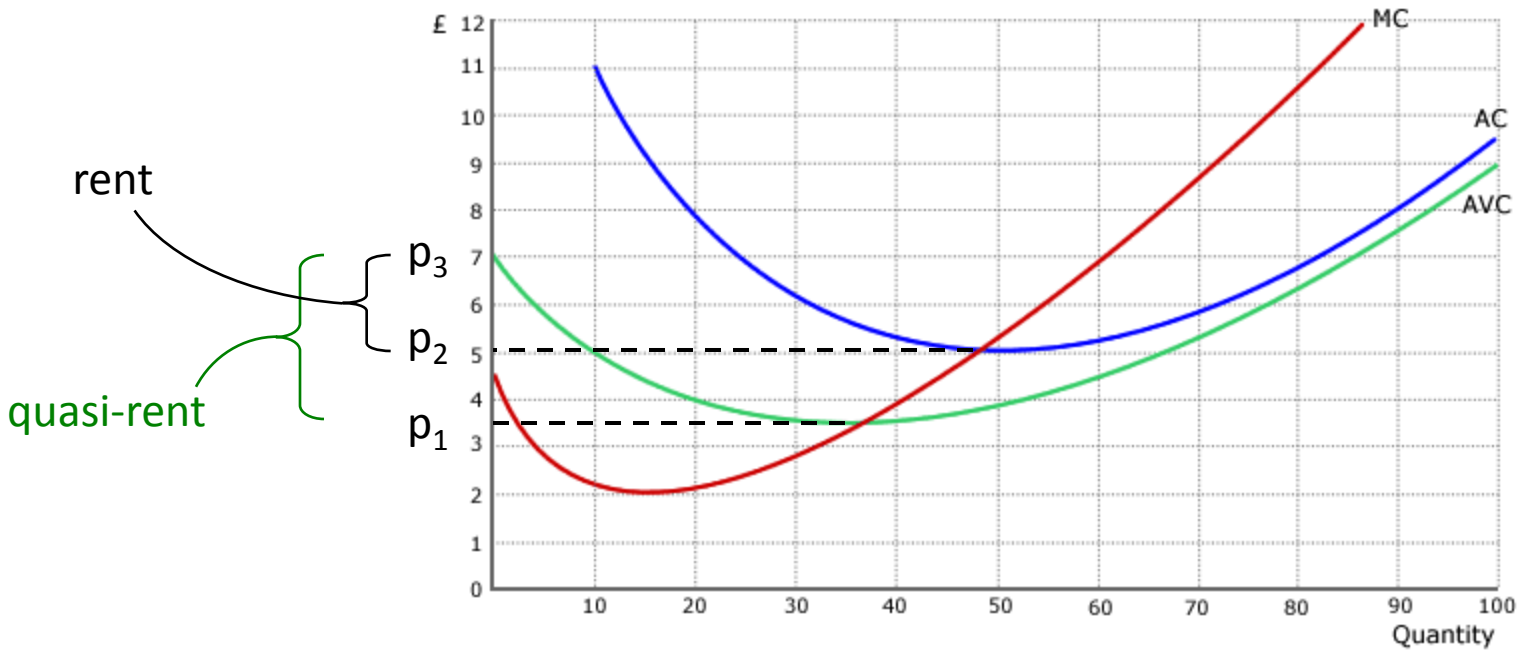
Even when all of the relevant contingencies can be specified in a contract, contracts are still open to serious risks since they are not always honored. The 1970's are replete with examples of the risks associated with relying on contracts . . . [O]pen displays of

* We wish to acknowledge useful comments on previous drafts by Harold Demsetz, Stephen Friedberg, Victor Goldberg, Levis Kochin, Keith Leffler, Lynne Schneider, Earl Thompson, and participants at a seminar at the Center for the Study of American Business at Washington University and at Law and Economics Workshops at UCLA and the University of Chicago. Financial assistance was provided by a grant of the Lilly Endowment Inc. for the study of property rights and by the Foundation for Research in Economics and Education. The authors are solely responsible for the views expressed and for the remaining errors.

[1] R. H. Coase, The Nature of the Firm, 4 Economica 386 (1937), reprinted in Readings in Price Theory 331 (George J. Stigler & Kenneth E. Boulding eds. 1952).

[2] Oliver E. Williamson, Markets and Hierarchies: Analysis and Antitrust Implications 26-30 (1975).

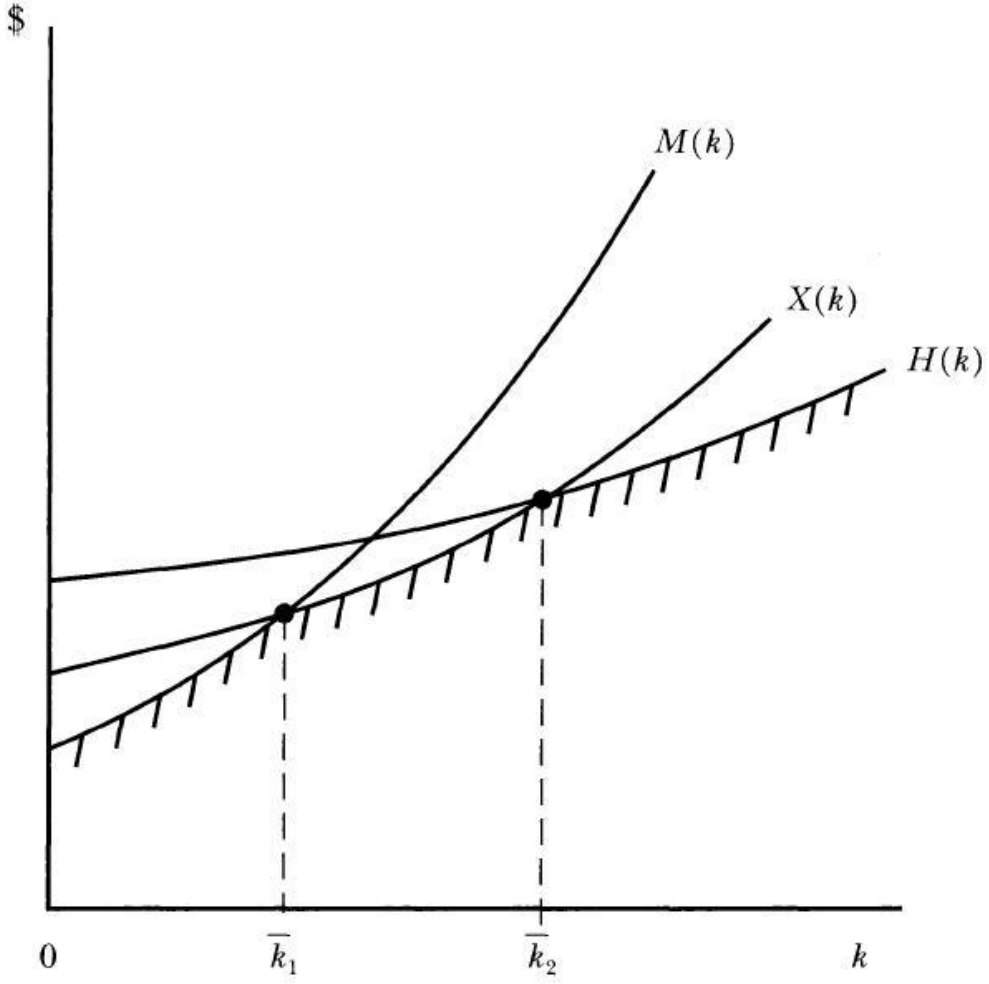
Perfect competition, shutdown, and quasi-rents



The basic TCE model

- Characteristics of transactions
  - Asset specificity
    - Physical
    - Site
    - Human
    - Temporal
    - Dedicated assets
    - Brand-name capital
  - Uncertainty
  - Frequency
- Governance structures

Discriminating alignment: one independent variable



Discriminating alignment: two independent variables

Asset Specificity	Uncertainty: Low	Uncertainty: Medium	Uncertainty: High
Low	Market transaction	Market transaction	Market transaction
Medium	Contract	Contract or vertical integration	Contract or vertical integration
High	Contract	Contract or vertical integration	Vertical integration

Note on hierarchy

- The firm as a nexus of contracts
  - Complete versus incomplete contracts
- Hierarchy and authority
  - Coase: fiat
  - Hart: ownership and residual rights of control
  - Williamson: mutual forbearance