TRANSACTION COST ECONOMICS

The firm is an institution within which transactions between individuals take place, as alternative to transactions that take place in a market

Why should a firm have advantages or disadvantages relative to any other marketplace?

Transaction costs:

- Nature of the transaction
- How the transaction is organized

→ Institution that minimizes the transaction costs

E.g. Institutional environment (sales tax)

The existence of the firm → the boundaries of the firm

MC (transaction inside the firm)= MC (same transaction in the market)

Williamson O. (1985) “ The Economic Institutions of Capitalism”, New York, Free Press

- *ex ante costs* are incurred before the transaction takes place.
  - draft of the contract
  - terms of the transaction that must be negotiated
- *ex post costs* are incurred to achieve and safeguard the deal ex ante drafted

Transactions tend to be organized in a way that maximizes the net benefits they provide (including the costs of transaction)

Factors that give rise to the costs of transaction:

- HUMAN FACTORS
- QUALITY OF TRANSACTION

HUMAN FACTORS:

- Bounded rationality
- Opportunism

Bounded rationality

It will be costly for individuals to contemplate and hence to contract for <u>every contingency</u> that might arise over the course of the transaction

→ incomplete contracts

→ there might be contingencies that cannot be foreseen

→ increases in ex-post costs

Opportunism

Individuals are:

- Self-interested
- Astute

It is opportunistic to refuse to give information that you hold and another lacks when the other person asks you to give up that information

QUALITIES OF TRANSACTION

3 aspects or qualities of the transactions, that can influence their costs:

- Asset specificity;
- Extent of uncertainty;
- Frequency

1. Asset Specificity

A transaction has high levels of asset specificity if, during the exchange, one party, or the other, or both become more tied to and in the power of the other party

Example 1:

A company that produces glass bottles and locates a plant near to a firm that produces mineral water

- EACH SIDE HAS SPECIFIC ASSETS AT RISK

  → opportunism

→ Resources to negotiate a more rigid contract **ex ante** and to enforce that contract **ex post**

Example 2:

n economic agents

- 1 buyer
- n-1 sellers

e.g.

buyer = automotive company

sellers = firms producing car head lights

- Both the sides have invested in specific assets for this transaction and each side has specific assets at risk

→ opportunism

→ Resources spent to negotiate a more rigid contract **ex ante** and to enforce that contract **ex post**

Investments in transaction-specific assets:

- specialized physical assets
- site specificity
- specialized human assets

OPPORTUNISM+ASSET SPECIFICITY

2. Uncertainty of the transaction

About the contingencies that will prevail during the transaction.

Uncertainty + bounded rationality

→ higher ex-ante and ex-post costs

3. Frequency of the transaction

the relative costs of various instruments for dealing with transaction.

- Transactions that are one-time-only or that recur only infrequently (general standard form of contract)
- Transactions that recur frequently (special governance structure)

CLASSIFYING TRANSACTIONS BY THE TERMS OF GOVERNANCE

Terms of governance: the way in which the terms of the transaction are adapted to contingencies when they arise.

Classification scheme of the transactions on the basis of the terms of governance:

(i) Transactions within the framework of ***classical contracting*** are those in which the terms of the transaction are **completely** specified ex-ante.

(ii) Neoclassical contracting or Trilateral relationship: third parties, who act with discretion are added

(iii) Bilateral relationship: NO formal agreement among the parties

iv. Hierarchical transaction: One of two parties (***hierarchical superior)*** retains, by law or by costume, most of the authority.

Main example: work contract.

v. ***Unified governance structure:*** one party to the transaction takes command of the assets of the other party, internalizing the transaction

→ownership implies control

What sort of governance structure minimizes the transaction costs in specific instances?

Transaction are classified according to:

- The asset specificity of the transaction:
  - Non-specific
  - Intermediate specificity
  - High specificity
- The frequency of the transaction:
  - Occasional (rare)
  - Frequent

Firm → unified governance structure

Is the firm an entity similar to the market?

EXAMPLE

2 parties: party A

Party B

- Party A has got and will supply expertise concerning the <u>design</u> of some product
- Party B has got and will supply the expertize in <u>manufacturing</u> that product

Some necessary tools:

- Computers
- Robots and industrial machinery

SITUATION (1)

- A owns the computers
- B owns the robots and the industrial machinery

Either A is an independent industrial designer

Or B is a subcontractor

SITUATION (2)

- A owns the computers, the robots and the industrial machinery

  => She controls all the assets → she controls a firm

  which employs B for his labor services.

→ **firm-mediated transaction**

→ UNIFIED GOVERNANCE STRUCTURE

- Why not ALWAYS unified governance structure?

Differences between:

- ***High-powered*** <u>market</u> incentives
- ***Low-powered*** <u>internal</u> incentives

- In market- mediated transaction :

  B has strong incentives:

  - to produce efficiently
  - to care for his assets
- In a firm- mediated transaction:

  these incentives are less strong

→ Costs connected to an incentive scheme

→ the firm can’t be considered perfect substitute to the market

SUMMING UP:

Attributes that define a governance structure:

- Incentive intensity
- Administrative control
- Contract low regime

HIERARCHY STRUCTURE → coordinated adaptations
MARKET STRUCTURE → autonomous adaptations

HIERARCHY V.S. MARKET:

- Less incentive intensity
- More administrative controls
- Internal dispute resolution

→ the need for coordinated adaptations builds up as asset specificity deepens

(FIGURE: Comparative costs of governance)

EMPIRICAL ANALYSIS

cross-section studies

probit/logit models

- dependent variable = decision of vertical integration (unified governance structure)
- independent variables = measures of asset specificity:
    - specificity of physical assets
    - specificity of human capital
    - dedicated assets
    - site specificity

- Vertical integration is found also when those different kinds of specificity don’t work!

- Empirical evidence of transaction cost economics is not so robust!

Limits

<u>hold-up problem</u>

- Asset specificity + Incomplete contract

  => hold-up problem

- hold-up problem => inefficiency

- the unified governance structure (the firm) solves the hold-up problem.

- disintegration
- Outsourcing
- dealing through the market

→ the emergence of alternative solutions to hold-up problems

Japanese Subcontracting

Mix elements of market and hierarchy

→long-term, close relations with a limited number of independent suppliers

CONTRACTS:

- Short and imprecise;
- Essentially committing the party only to work together to resolve difficulties as they emerge.

Key characteristics:

1) Long-term, repeated nature of the interaction
→ logic of repeated games

2) Auto companies monitor supplier behavior

Small number of suppliers → pros and cons

3) Supplier association