

# **INSTITUTIONS AND INSTITUTIONAL DESIGN**

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## **Part V: Cooperation and transaction costs**

NTNU, Trondheim  
Fall 2003

# Literature

- Williamson, Oliver E. 1996 “The Mechanisms of Governance”, New York, Oxford University Press,
- North, Douglass C. 1990 “Institutions, Institutional Change and Economic Performance”, Cambridge, Cambridge University Press,

## More literature:

Alchian, Armen A 1950 “Uncertainty, Evolution, and Economic Theory” *Journal of Political Economy* 58(3):211-221

Alchian, Armen A 1965 “Some Economics of Property Rights” *Il Politico* 30(4):816-829 (reprinted in Alchian 1977 “Economic Forces at Work”, Indianapolis, Liberty Press)

Eggertsson, Thrainn 1990 “Economic Behaviour and Institutions”, Cambridge, Cambridge University Press

Matthew, R C O 1986 “The Economics of Institutions and the Sources of Growth”, *Economic Journal* 96(Dec):903-910

North, Douglass C 1981 “Structure and Change in Economic History”, New York, W.W.Norton

Shepsle, Kenneth A, and Weingast, Barry R 1981 “Structure-Induced Equilibrium and Legislative Choice”, *Public Choice* 37(3):503-519

# Neo-institutional economics

- Studies how alternative social rights and organisations affect behaviour, resource allocation and equilibrium outcomes
- Studies the variation of organization in various types of economic activity
- Studies the logic of political and social rules governing production and exchange

NIE preserves the “core” of the economics research paradigm by insisting on

- Stable preferences
- Rational choice, and
- Equilibria.

But NIE do change the elements of the protective belt of the economics research paradigm:

- The specification of the situational constraints the agents face
- The specification of the type of information the agents have about their situation
- The specification of the type of interaction that is studied

In practice this basically means introduction of transaction and information costs

# Transaction and information costs

## Implies

- **Optimality** (Pareto/ Kaldor-Hicks) is **no longer an interesting** criterion
- **Efficiency** is **no longer an interesting** criterion
- Assignment of **property rights is paramount**, introducing economic organisation, and making political institutions a key to understanding economic growth

Optimality is the result by definition in neo-classical models, based on full information and zero transaction costs. These optimal outcomes are called efficient. Empirical outcomes deviating from the model outcome are called inefficient. In the neo-classical model there is no rationale for contractual arrangements such as the firm, or even money. It is not at all clear how economic outcomes in a world of full information can be used as a yardstick of efficiency in real-world situations. (Eggertsson 1990:20-22).

# Transaction costs

- “The fundamental idea of transaction costs is that they consist of the cost of arranging a contract ex ante and monitoring and enforcing it ex post, as opposed to production costs, which are the costs of executing a contract.” (Matthew 1986)
- When information is costly, many exchanges give rise to transaction costs

Costly activities resulting in transaction costs include: (Eggertsson 1990:15)

1. “The search for information about the distribution of price and quality of commodities and labour inputs, and the search for potential buyers and sellers and for relevant information about their behaviour and circumstances.
2. The bargaining that is needed to find the true position of buyers and sellers when prices are endogenous.
3. The making of contracts.
4. The monitoring of contractual partners to see whether they abide by the terms of the contract.
5. The enforcement of a contract and the collection of damages when partners fail to observe their contractual obligations.
6. The protection of property rights against third-party encroachment – for example, protection against pirates or even against the government in case of illegitimate trade.”

Technological change may give better measurements, but it also gives more complex products. An educated guess is that technological change has increased transaction costs in modern economies.

Money may be an essential device for lowering transaction costs. If so, its absence in Walrasian general equilibrium models is understandable: there are no transaction costs in those.

# Measurement

- Measurement cost will affect systematically the structure of contracts and the organisation of economic institutions.
- State regulations are often directed at lowering measurement costs, not only redistribution. Sometimes the goal is better measurement of the tax base: redistribution and growth are not necessarily opposites.

# NIE extends the economic approach

1. Investigating the equilibrium outcomes resulting from constraints posed by property rights and transaction costs
2. Trying to endogenize the organization of markets and the structure of contacts
3. Seeing social and political institutions as outcomes of exchange between individual agents. Competition for survival among institutions leads to equilibrium institutions.

Eggertsson (1990:30 note 39) “North(1981) argues that a successful theory of institutional change will require not only a theory of the state and a theory of demographic change but also a theory of ideological behaviour and a theory of technical change. So far there has been limited success in endogenizing some of these factors.”

# Property rights

- Use rights
- Income rights
- Alienation rights

Social norms may lower substantially

- Costs of exclusion
- Costs of enforcement
- Private property
- State property or communal property
- Common property or open access

Eggertsson(1990:33) “We refer to the rights of individuals to use resources as property rights. A system of property rights is a “method of assigning to particular individuals the ‘authority’ to select, for specific goods, any use from an unprohibited class of uses” (Alchian 1965)”

Property rights may be **attenuated** (that is regulations by the state may reduce the legitimate options of use)

Property rights may be poorly **delineated** (many problems calling for attenuation may rather be seen as poorly delineated rights)

Property rights may be partitioned ( e.g. various persons owning different aspects of land based resource)



# The theory of agency

- Agency is established when a principal delegates some right to an agent bound by a contract to represent the principal's interest in return for some compensation
  - Asymmetric information
  - Shirking or opportunistic behaviour
  - Monitoring or measuring performance
  - Technology of monitoring
  - Bonding
  - Moral hazard
  - Adverse selection

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The total cost of agency is the costs of monitoring plus the loss due to residual shirking. But NB! these costs are measured against the neoclassical nirvana model.

**Asymmetric information** the agent knows more about what happens

**Shirking or opportunistic behaviour** leads to the need for

**Monitoring or measuring performance**

Depends on the nature of risk and preferences of the parties

Technology of monitoring and

Bonding

May be important to the type of contract and organisation used

**Moral hazard**

measurement by proxy gives rise to temptation to shirk

**Adverse selection**

occurs when different principals use different measures. The one with the least accurate measure will get the persons with the lowest qualities.

# Contracts

- The structure of contracts depends on the legal system, social customs, and technical attributes of assets involved in the exchange
- Introduction of new contractual forms may be compared to technical innovations in production
- The firm as a nexus of contracts. Alternatives:
  - Direct contracting consumer and input owners
  - Self-governance of input owners (bypassing the entrepreneur)

Not that organisations are designed not only to reduce shirking and opportunistic behaviour, but also to facilitate coordination. Coordination is also a costly activity because of scarce information.

# Competition among contractual arrangements

- Contractual form that give rise to positive profits survive, other forms disappear
- Instead of modelling rational individuals and trace the consequences of their choices, we should start by assuming complete uncertainty and irrational behaviour and then add elements of foresight and motivation (Alchian 1950)

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Armen Alchian (1950) "Uncertainty, Evolution and Economic Theory"

The filter of competition will ensure that only profitable forms of contract will survive.

In such a world of uncertainty "rational behaviour may call for modes of behaviour rather than adjustments in terms of the marginal conditions of optimization in traditional economics." (Eggertsson 1990:56)

Still risk seeking entrepreneurs may make bold experiments. If they succeed they are admired.

# Theory of the state

- The state sets and enforces the fundamental rules that govern exchange
- The power of small groups in democratic polities: **interest** weighed by consequences, multiplied by **power**, and **governed by information and transaction costs**
- The logic of collective action: free riding

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1. A community with no common rules, no legislative or judicial bodies, no enforcement agency
  1. (implies private individual resources for protection)
2. A society with common rules defining exclusive rights, a lawmaking body, courts of law, but no police force or army, hence private enforcement of law
  1. (Iceland's commonwealth 930-1262)
3. A society where the state sets the rules, arbitrates in disputes, and enforces exclusive rights
  1. Principal-agent relations (state-subject). The contract can be analysed in view of transaction costs.
  2. The power of the sovereign is limited by agency costs and constrained by competition. The problems of creating a structure of property rights that maximize the tax base can be understood in view of large transaction costs.

# Equilibrium political institutions

- Condorcet's paradox (Arrow's impossibility theorem) is empirically suspect
- Voting and decision making in legislative assemblies are controlled by elaborate procedures that yield equilibrium outcomes
  - Structure induced equilibrium (Shepsle and Weingast 1981): committees with their own jurisdictions and agenda setting power

But the making of such institutional structures is also an exercise in institutional choice. How was the rules chosen, why isn't they changed more often? One reason may be uncertainty about the total fallout. It may threaten the power of those who now are in control.

Exchange among politicians have high transaction costs and have to be self-enforcing. Repeated plays, reputations, depend on stable rules.

Uncertainty about the outcomes that a new regime will produce implies that a given structure may ex ante be associated with a set of structure induced equilibrium points.

Shepsle thinks this uncertainty is enough to explain the stability of institutions and the barriers to continuous institutional change.

# Problems in NIE

- Rational choice models do not work when ideological beliefs are unstable.
- Therefore, NIE needs a theory of ideology.
- Other problems include
  - Strategic interaction
  - Non-economic motives

Eggertsson (1990:79) “The structure of property rights is determined by the state and reflects the preferences and constraints of those who control the state. All choices made by individuals and groups who control the state are constrained by the requirement to maintain power, but the ultimate impact of institutional change on power relationships is often shrouded in uncertainty. Therefore, institutional change that in traditional neoclassical models appear to be consistent with wealth maximization are often seen as disadvantageous by the power elite because the changes are likely to raise the cost of agency or even threaten an outright loss of control.”