



# Order of presentation

1. Announcement
2. Recap
3. Revisiting Firm Theory

# The Foundations of New Institutional Economics: The theories of the firm

# Journey to Mission MarsInsEcon2023

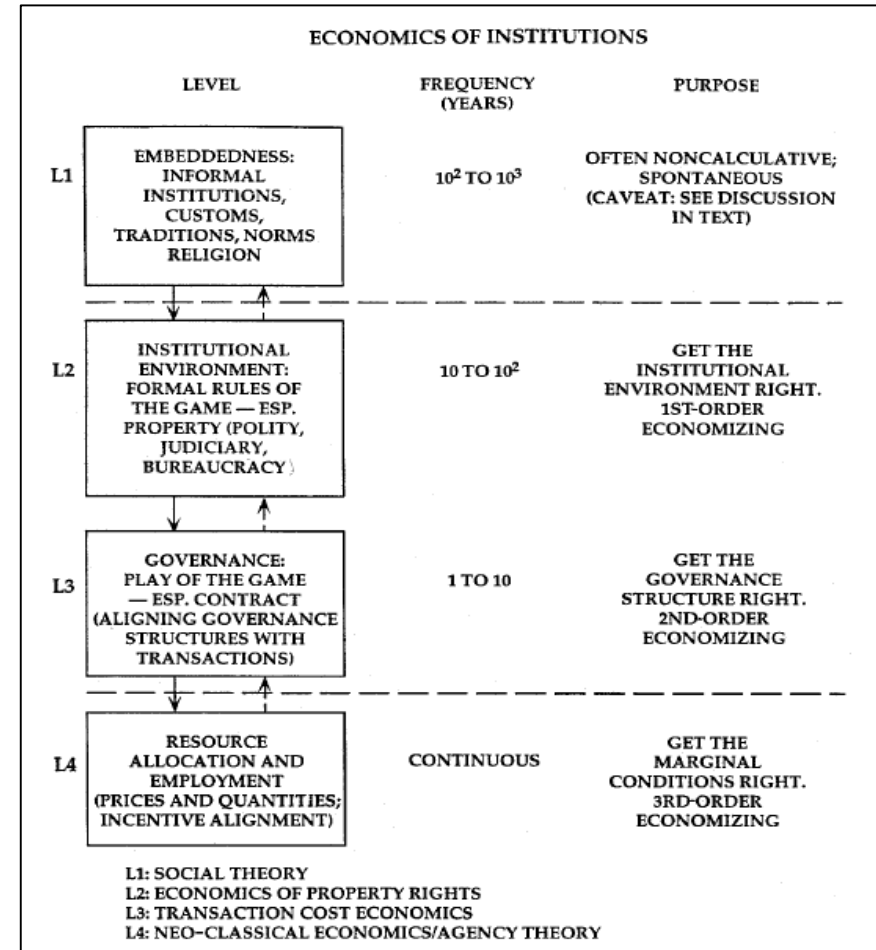


- ❖ Flight is **MarsInsEcon-2023**
- ❖ Vessel id is **Mars-Ins-Econ-2023**
- ❖ Currently in the **2<sup>nd</sup> week** of our flight

# Some key terms: NIE framework

❖ Framework examines the role of “social, cultural, political, and economic institutions” on “economic behavior and performance”

❖ Williamson’s framework identifies four interrelated levels of social or institutional analysis



# Level 1: Embeddedness, or Social or Cultural Foundations

- ❖ The highest level of the institutional hierarchy
- ❖ Comprised of informal institutions, customs, traditions, ethics and social norms, religion, and some aspects of language and cognition
- ❖ Provides the basic foundations for a society's institutions

# Level 2: Basic Institutional Environment

- ❖ Contains the basic institutional environment or what Williamson calls “the formal rules of the game”
- ❖ Entails Constitutions, political systems, and basic human rights; property rights and their allocation; laws, courts, and related institutions to enforce political, human rights and property rights, money, basic financial institutions, and the government’s power to tax; laws and institutions governing migration, trade, and foreign investment rules; and the political, legal, and economic mechanisms which facilitate changes in the basic institutional environment
- ❖ Changes in the basic institutional environment occur more quickly than changes in the cultural or social foundations (Level 1)

# Level 3: Institutions of Governance

- ❖ Encompasses what Williamson calls “the play of the game”
- ❖ Given the basic institutional environment, choices are made about the institutional (governance) arrangements through which economic relationships will be governed given the attributes of the basic institutional environment
- ❖ The basic structural features of the institutions (e.g. competitive markets), through which individuals trade goods, services, and labor are defined; the structure of contractual or transactional relations, the vertical and horizontal structure of business firms etc.
- ❖ Williamson suggests a change time frame of one to ten years



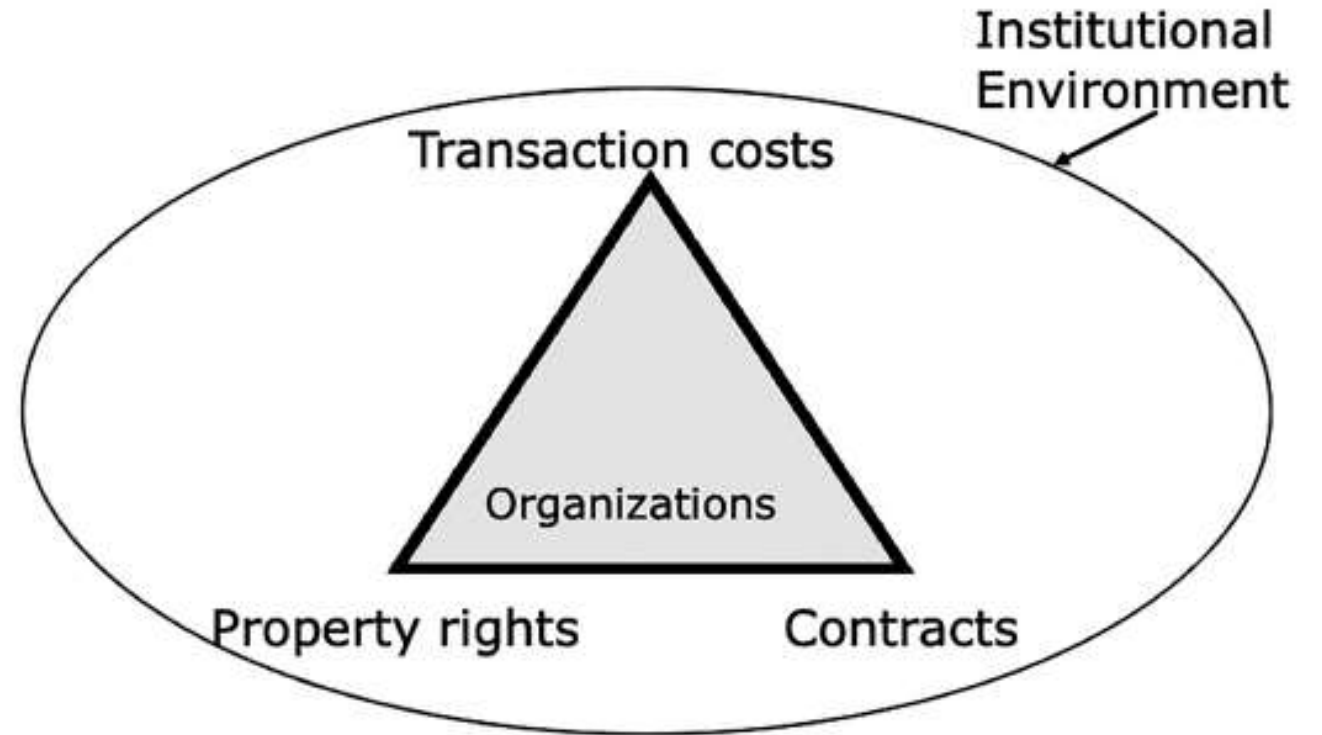
# Level 4: Short-term Resource Allocation (Neoclassical Market Economics)

- ❖ Refers to the day-to-day operation of the economy given the institutions defined at the other three levels
- ❖ Prices, wages, costs, and quantities bought and sold are determined here as are the consequences of monopoly, oligopoly, and other neoclassical market imperfections
- ❖ Williamson would include agency theory and incentive alignment within and between organizations here

# Importance of the NIE framework

1. Shows that a society's social and cultural foundations place constraints on the attributes of the basic institutional environment that will be feasible at a particular point in time
2. Framework also makes important observations about the speed with which adaptation may be expected to take place
3. Framework also makes it clear that the speed and direction of changes at these levels is not exogenous or necessarily monotonic

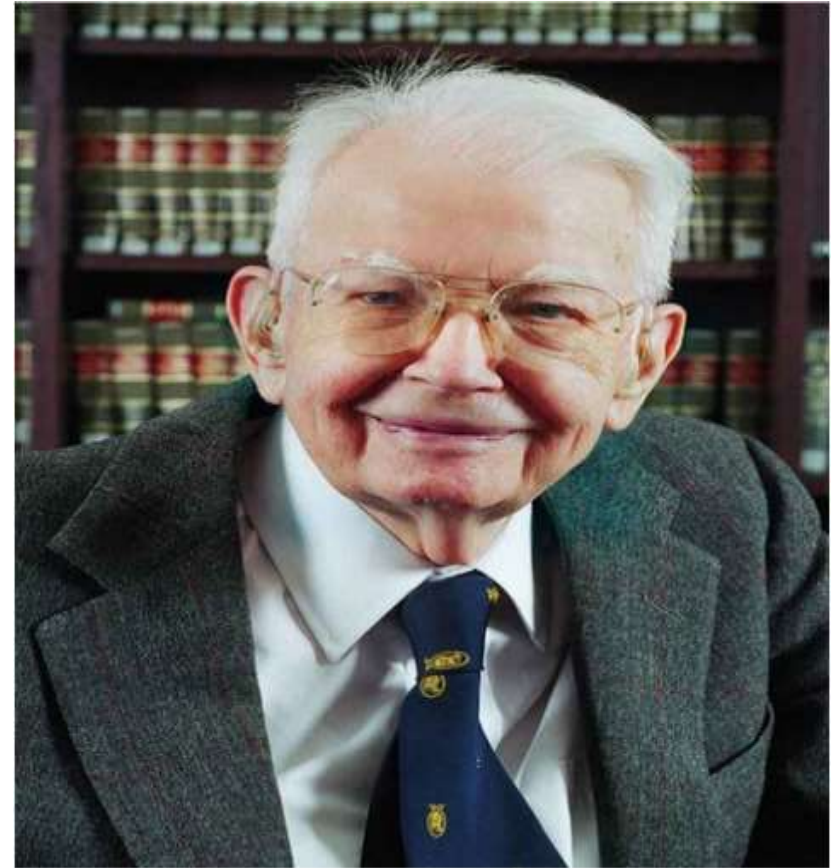
# The golden triangle



# Theory of the Firm

# Introduction

- ❖ The firm in mainstream economic theory is a 'black box' such that it on one end some inputs and production factors enter the box, and on the other end the outcomes appear as the final product
- ❖ What happens inside is not analyzed in detail, and the highly limited marginal cost hidden in the equation  $MC=MR$  becomes satisfactory enough
- ❖ Yet most resources in the modern economic systems are employed within firms
- ❖ In addition, these resources are dependent on administration decisions and not directed related to the market



Ronald Coase (1910-2013)





**Linus Mugambi** @linus\_mugam... · 5h

Have you ever noted as you head to Westlands right from Chiromo all the way past Nairobi school, the billboards are all about the new car model in the Kenyan market, the latest phone models, new electronic gadgets, new tyres, Kenya Airways and etc.....

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**Linus Mugambi** @linus\_mugam... · 5h

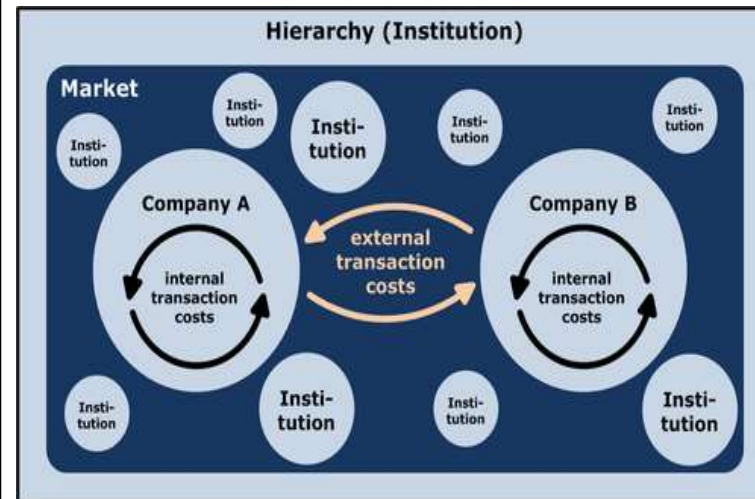
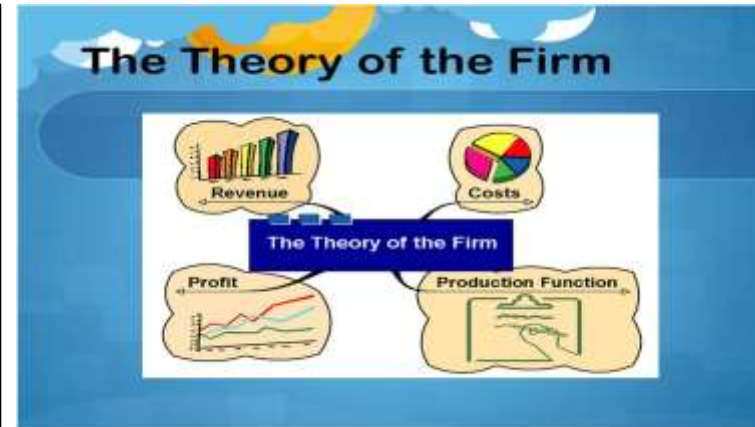
But as you go to Eastlands, Dandora, Kayole, **Eastleigh**, Mathare North, the billboards are all about new detergents, new types of pampers, mafuta ya ladies, mganga kutoka kitui, Betting firms like sportpesa, etc....

16 23 149



# The Neoclassical view of the firm

- ❖ Economy is coordinated by a system of prices (the “invisible hand”)
- ❖ Therefore, factors are based on choices of systems of prices
- ❖ **Not interested in internal arrangements within organizations** but what happens in the market, purchase of factors of production and the sale of goods that these factors produce
- ❖ The price system was considered the only way for coordinating mechanism. What about factors of production, management—who was to coordinate?





# Some key terms: Transactions

- ❖ Transfer of the rights to use a resource from one holder of rights to another
- ❖ Transactions comprise a legal transfer of ownership and therefore includes an exchange of rights and duties, which has been determined by the transaction parties or society involved





# Some key terms: Transactions

## ❖ Ingredients of transactions

1. Transfer of rights among parties
2. Usage of these rights under constraints that might be specified within the transactional agreement and/or by external rules
3. Goods or services that are technologically separable

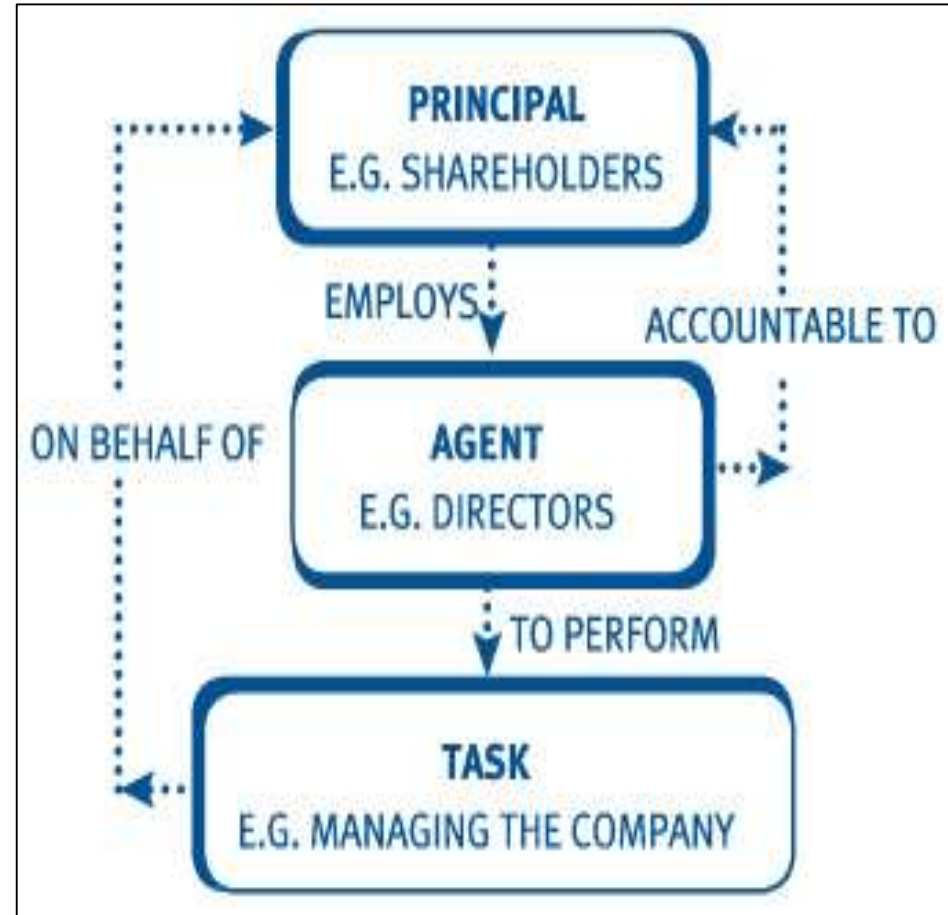


# Types of transactions

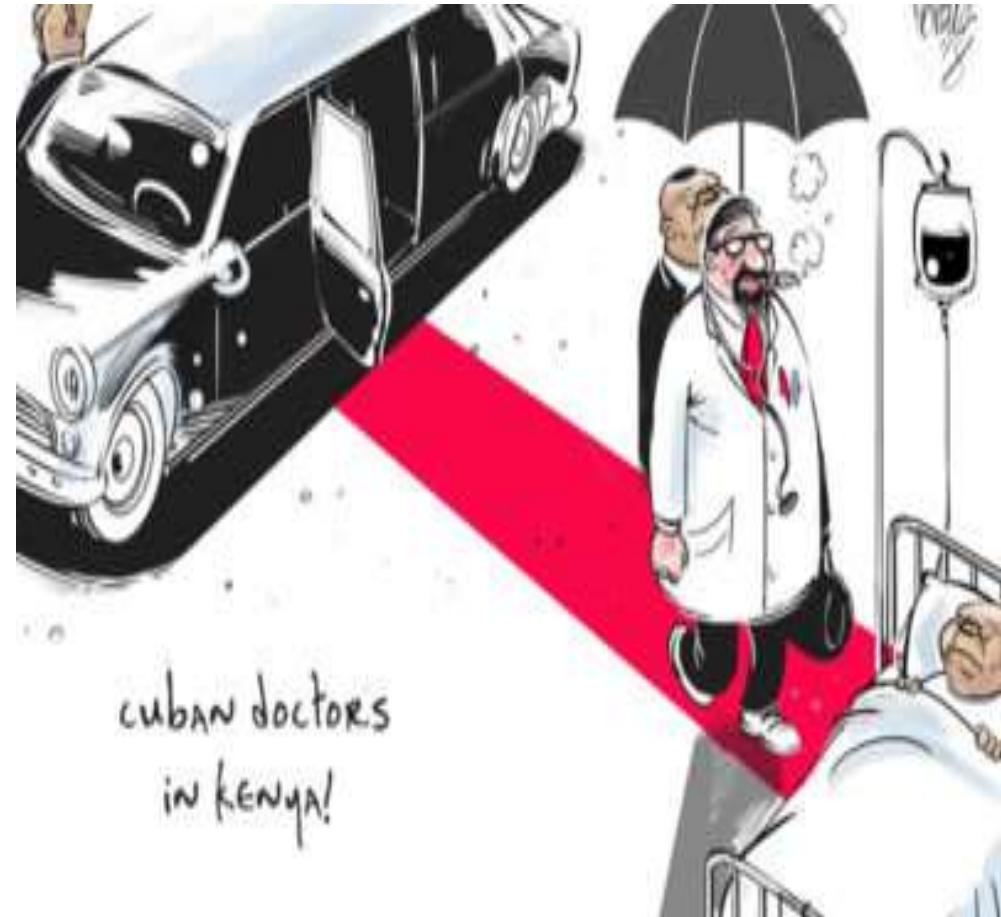
- ❖ Market transactions: Takes place in the market between individual buyers and sellers, resulting in voluntary transfer of property to customers and a transfer of money to suppliers
- ❖ Markets transactions are also called bargaining transactions



❖ Managerial transactions:  
Characterized by the relationship  
between a legal superior and  
legal inferior within an  
organization



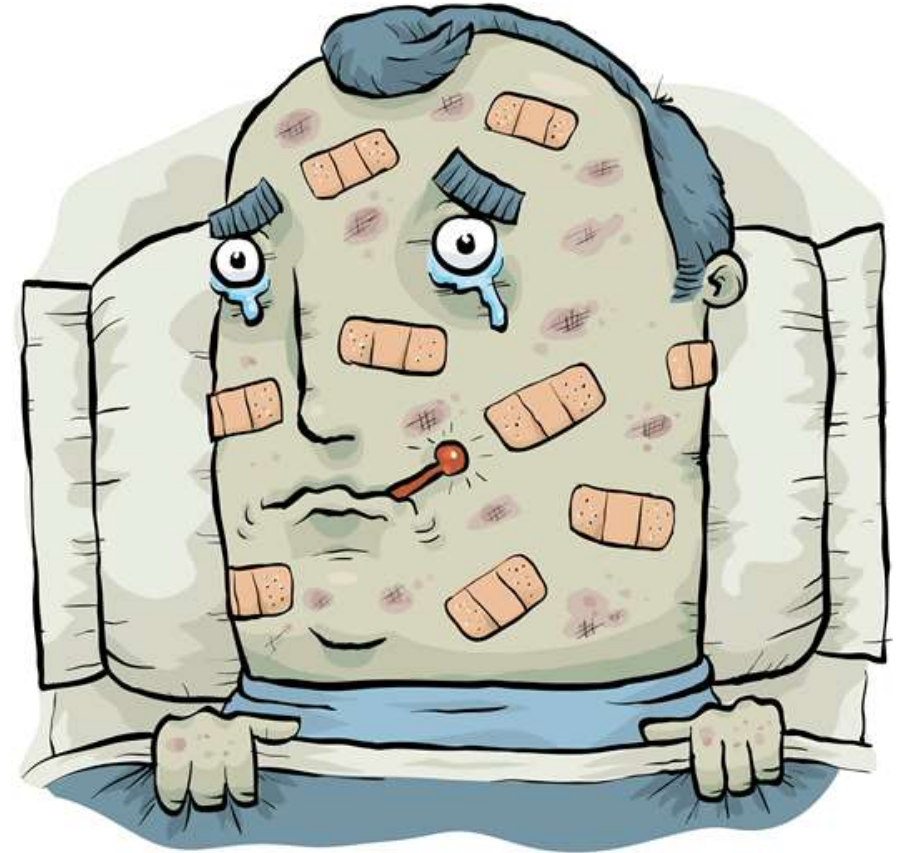
❖ The political transactions: This is agreed on by decision-makers, who have the legal authority to determine how the wealth in society should be distributed e.g., minimum wage





# Transactions

- ❖ To transact, agents have to incur costs to find out how and where transactions occur and about the possible risks and uncertainties involved
- ❖ These expenses are called **transaction cost**
- ❖ The resources used by the agents to carry out **transactions diminish the welfare gains derived by the exchange itself**



These transaction costs are killing me.

# Transactions costs

- ❖ Transaction costs of establishing, transferring, and policing rights of transactions
- ❖ Transaction costs were introduced into economics by Ronald Coase
- ❖ He defined them as costs of using the market
- ❖ Ignoring transaction costs (or setting them to zero) is equivalent to assuming markets that function efficiently and costlessly. However, when markets function efficiently and without costs, there is no reason for firms to exist. Why?
- Organizing operations of firms is costly
- ❖ Firms exist because the costs of using the market (i.e., transaction costs) are higher than the costs of using hierarchies like firms

# Transactions costs

- ❖ According to Carl Dahlman, transaction costs are “search and information costs, bargaining and decision costs, policing and enforcement costs”
- ❖ Why bother about transaction costs? The higher the transaction costs, the lower the number of transactions. And a lower number of transactions implies a lower degree of specialization and, at the end of the day, less income



# The Firm through the lenses of Ronald H. Coase



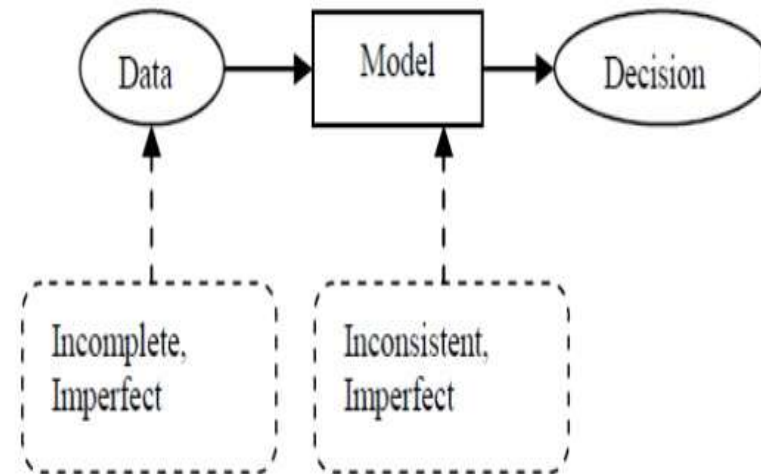
# Ronald Coase: The Firm

- ❖ Based on “[The Nature of the firm](#)” that was published in *Economica* Vol 4 (1937) pp. 386-405
- ❖ It’s a seminal model of understanding firms
- ❖ This article, written over eighty-seven years ago points out the need to incorporate transaction costs in the analysis of contractual decisions
- ❖ According to him, this is the role of “costs of using the price mechanism” either to discover prices (offers), to negotiate contract terms, or to sign separate contracts for each transaction

# Key concepts: Bounded rationality

- ❖ A firm consists of systems of relationships which come into existence when the direction of resources is dependent on an entrepreneur
- ❖ Coase: “It may be that as the transactions which are organized increase, the entrepreneur fails to place the factors of production in the uses where their value is greatest, that is, fails to make the best use of the factors of production”
- ❖ To put it differently, “A firm will tend to be larger the less likely the entrepreneur is to make mistakes”

## Bounded-Rational Decision Making



# Bounded rationality

- ❖ This assumption therefore allows Coase's theory to explain what should be organized in the firm, and what its limits are
- ❖ An important reason why the firm has boundaries is that managers have a bounded rationality that does not allow them to organize as many transactions as they would like to
- ❖ If it is possible to outsource part of the product to other firms (without monopoly power) the manager should then do it

# Key concepts: Uncertainty

- ❖ The role of uncertainty is referred to in order to explain why, depending on sectoral , firms may be more or less present
- ❖ For example, considering the use of long-term contracts,
- ❖ Coase stated that “owing to the difficulty of forecasting, the longer the period of the contract is for the supply of the commodity or service, the less possible, and indeed, the less desirable it is for the person purchasing to specify what the other contracting party is expected to do”
- ❖ Coase pointed out that the “dissimilarity of the transactions” would increase the cost of organizing a transaction within a firm
- ❖ This gives rise to the idea of focusing on core transactions
- ❖ Indeed, firms should focus on the transactions they know how to handle best because the attention of firm managers is limited

# Key concepts: Markets and Firms characterises

- ❖ Outside the firm, price movements direct production, which is coordinated through a series of exchange transactions on the market
- ❖ Within a firm, these market transactions are eliminated and in place of the complicated market structure with exchange transactions is substituted the entrepreneur–coordinator, who directs production
- ❖ It is clear that these are alternative methods of coordinating production

# Institutional environment

- ❖ Coase considered how change in the institutional environment may affect the decision to create firms stating that “if we consider the operation of sale tax, it is clear that it is a tax on market transactions and not on the same transactions organized within the firm
- ❖ Since these are alternative methods of ‘organization’ – by the price mechanism or by the entrepreneur – such a regulation would bring into existence firms which otherwise would have not been there”
- ❖ Markets and firms are thus primarily analysed as substitutes rather than complements
- ❖ Therefore, firms need markets only because they allow some transactions not internalized by firms to be realized between them

# Institutional environment

- ❖ Apparently, transaction costs, that is, those related to browsing and searching for offers, negotiating contracts and individual arrangements of procurement conditions, may be so high that instead of relying on the external market, it is better to create something like an internal market
- ❖ As a result, it could be possible to establish a department in the organization that would take on the burden of implementing a specific product component in such a way to reduce overall costs

# The problem with Coase's view of the firm

1. The definition of the firm viewed as the place where the coordination through prices is replaced by coordination through authority is vague as many aspects of such authority relationships may be found on the market as well (property rights, incentive theory, resource based view etc.)
2. Coase does not analyse the internal organization of the firm in as much as he reduces it to authority and command yet the firm's internal organization is actually something more complex
3. He weakly analysed the relationships between markets and firms
4. He did not consider the alternative bases of contractual choices such as transaction costs



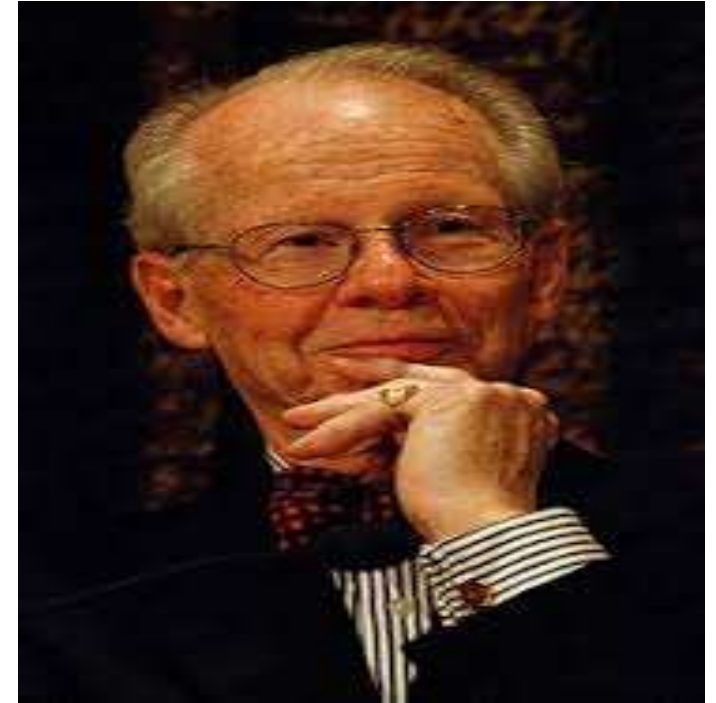
# The problem with Coase's view of the firm...more

1. Excessive dichotomy of organizational and transaction costs (and firms as entities opposed to the market)
2. Underestimation of firms' heterogeneity in explaining their formation
3. Problems defining the concept of the firm
4. Problems explaining the existence of firms through excessive focus on chain integration

# Alternative views of the firm: Oliver Williamson

# Introduction

- ❖ Williamson's contribution is best known through the **Transaction Cost Theory**
- ❖ Theory is associated with his works of 1975, 1985 and 1996
- ❖ **This theory regards the transaction as the basic unit of analysis**
- ❖ A transaction occurs when a good or service is transferred across a technologically separable interface (stages)
- ❖ **Understanding of transaction cost economizing is central to the study of organizations through assessing how their governance structures serve to economize on these transaction costs**
- ❖ "... analysis of economic governance (system of institutions and procedures) especially the boundaries of the firm"



Oliver E. Williamson : 1932- 2020

# Transaction Cost Theory

- ❖ The main research question that transaction cost theory (TCT) seeks to address is why economic transactions are organized in the way that they are in the modern society (Williamson, 1994)
- ❖ Specifically, why are some economic transactions internalized within the boundaries of firms while others are procured to external parties?
- ❖ Stated more simply: why do firms do what they do?
- ❖ The general conclusion is that activities are internalized inside the firm **when there is some form of market failure, and most notably market failure of intermediate inputs**
- ❖ TCT **argues that there are costs to conduct transactions through the market**; these transaction costs can be reduced through mechanisms other than markets (Coase, 1937; Williamson, 1975)-**Remember types of transaction costs**

# Transaction Cost Theory

- ❖ TCT considers the firm as a hierarchy that adds value by economizing on transaction costs
- ❖ Efficiency in TCT is conceptualized as pareto efficiency where governance modes are compared according to their ability to facilitate transactions until the point at which it is impossible to make one party better off without making the other party worse off
- ❖ TCT claims that the firm, in many cases, provides a relatively more efficient method of organizing relative to the market because of optimization of transaction costs or overall value

# TCT assumptions about human and human behaviour

## 1. Bounded rationality

- ❖ The neoclassical theory assumes that individuals have perfect information and act as utility maximizers with calculative rationality
- ❖ Bounded rationality reflects individuals' inability to process large degrees of information and their difficulty in assigning probability values to the occurrence of future events
- ❖ Decision making is nearly always uncertain and risky, making it difficult for human agents to make optimal decisions
- ✓ Limitations of the human mind
- ✓ The structure within which the mind operates

# TCT assumptions about human and human behaviour

2. Opportunism: Agents have far-sighted behaviour, and they might, therefore, behave opportunistically

- ✓ People can also be dishonest in economic transactions
- ✓ As Williamson (1985: 48) puts it “Plainly, were it not for opportunism, all behavior could be rule governed”

❖ In neoclassical economics, humans are viewed as self- interested; individuals pursue their own self-interest in their own activities

❖ Opportunism with guile takes this assumption a step further to assume that individuals may engage in behavior that is both subtly and overtly deceitful ex-ante and ex-post to agreeing on contracts

# TCT assumptions about environmental factors

❖ Environment here means economic systems that firms operate in

## 1. Asset specificity

❖ This is investments in transaction-specific assets

❖ It is the extent to which the investments made to support a particular transaction have a higher value to that transaction than they would have if they were redeployed for any other purpose

❖ Williamson defined **asset specificity** as “durable investments that are undertaken in support of particular transactions, the opportunity cost of which investment is much lower in best alternative uses or by alternative users should the original transaction be prematurely terminated” (1985: 55)



# Asset specificity

- ❖ When assets are not specific to an exchange, the market may be the most efficient way (or the best way for minimizing costs) to organize it
- ❖ The asset specificity makes specific reference to the extent to which an asset can be redeployed to alternative uses and/or by alternative users without a substantial sacrifice of its productive value (Williamson, 1989: 141)
- ❖ Six different types of asset specificity exist: site specificity (specialization by proximity), physical asset specificity, human asset specificity (that arise from firm-specific training or learning by doing), dedicated assets (large discrete investments made in expectation of continuing business, the premature termination of which business would result in product being sold at distress prices), brand-name capital and temporal specificity (Williamson, 1989: 141-142)

# TCT assumptions about environmental factors

## 2. Uncertainty

- ❖ Perfect-information assumption of the neoclassical view
- ❖ Information about past, current and future states is not perfectly known, for various reasons.
- ❖ Without the existence of bounded rationality and opportunism, uncertainty would be much less of a problem because general rules would generally prevail (Williamson, 1985)

# TCT assumptions about environmental factors

## 3. Frequency of the transactions

- ❖ If transactions are infrequent then the costs of alternative governance structures may not be justified
- ❖ A larger frequency or larger volumes of transactions, however, gives rise to justification for alternative governance structures such as the firm

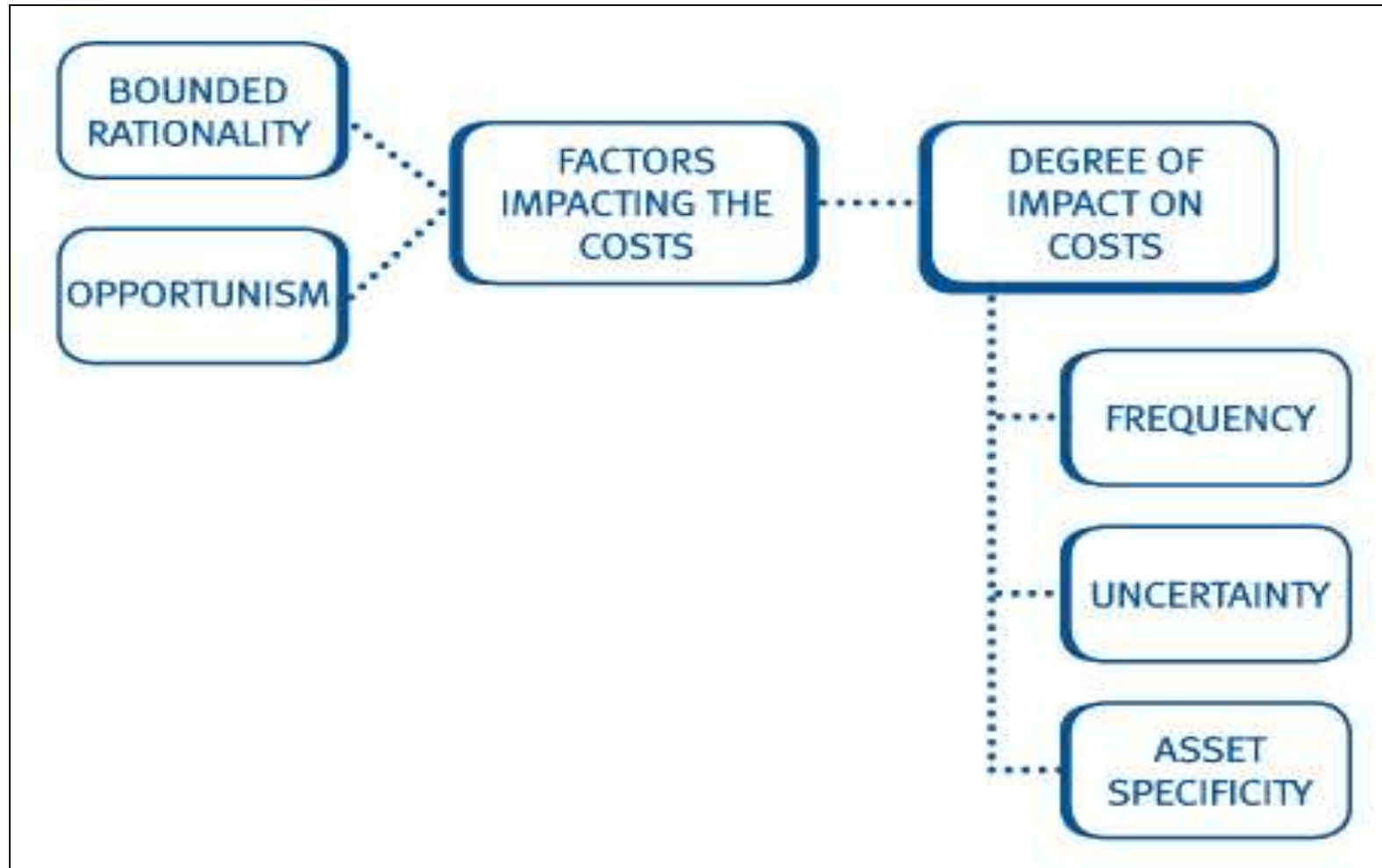
# Determinants of the transaction costs

- ❖ The agents' bounded rationality
- ❖ Opportunism that is originated when one of the partners pursues his own short-term self-interest
- ❖ The assets specificity
- ❖ Internalization will be preferred to externalization if three conditions are verified:
  - ✓ The degree of the transaction uncertainty is high
  - ✓ If the assets involved in the transaction are specific
  - ✓ If the transaction is the recurrent type

# Governance implications of TCT

- ❖ The key governance implication of TCT is that as assets became more and more specific, other forms of governance will be needed ranging from trilateral to unified governance structure (the firm) (Williamson, 1979, 1981, 1985)
- ❖ For example, non-specific transactions of both occasional and recurrent contracting will be principally governed by the market

# Summary of Williamson's TCT



# Coase vs. Williamson's view of the firm

	COASE	WILLIAMSON
<b>Unit of analysis</b>	Firm	Transaction
<b>Transaction costs</b>	Cost of price discovery	Adjustment cost due to opportunism (both in order to avoid and in response to opportunistic behavior)
<b>Cause of transaction costs</b>	Heterogeneity and spatial distance → costly to discover prices	Asset specificity combined with guileful self-interest seeking behavior → holdup, maladaptation
<b>Resource allocation</b>	Firm $\approx$ Market	Firm $>$ Market
<b>Specialization</b>	Through market exchange	Within firms
<b>Efficiency in firm</b>	Technical	Allocative
<b>Efficiency in market</b>	Allocative	-

Source: Bylund (2021)

# Extensions to Coase and Williamson's theories of the firm

## ❖Refer to:

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3. Eric Brousseau and Jean-Michel Glachant. (2008). *New Institutional Economics A Guidebook*. Cambridge University Press. Page 31-36.
4. Martins, R., Serra, F., Leite, A., Ferreira, M. P., & Li, D. (2010). Transactions Cost Theory influence in strategy research: A review through a bibliometric study in leading journals.
5. Is Transaction Cost Economics Behavioral? – **Read Chapter 1 of Peng (2021)** - Toward Behavioral Transaction Cost Economics : Theoretical Extensions and an Application to the Study of MNC Subsidiary Ownership



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**Any questions?**

