#### Institutional Economics

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# CHAPTER ONE

## Concept and roles of Institutions

Like many terms in the areas of social sciences, there is no universally accepted definition. Institutions are different from organizations. The meaning of institution in sense of economics is much wider, complex and abstract than its literally known meaning.

**Definitions of institutions from the perspective of Old Institutionalists**

Institutions are "settled habits of thought common to the generality of men." (Veblen 1919)

Institutions are understood as essentially “collective action in control of individual action” (Commons 1934, 69).

Institution are "way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people." (Hamilton 1934)

Notably, in the "old" institutionalism, the concept of habit plays a central role both in its definition of an institution, as in its picture of human agency.

**Institutions from the perspective of New Institutionalists**

What are Institutions? **According to Douglas North** : Institutions are the rules of the game in society or, more formally, are the humanly devised constraints that shape human interaction. Institutions are the formal and informal rules and norms that organise social, political and economic relations (**North, 1990**) Ostrom (1990) provides a similar definition: Institutions refers to the rules, norms, and strategies used by humans in repetitive interactions.

According to World Bank (2002)

Institutions are ‘rules, enforcement mechanisms and organizations’. Institutions are rules that regulate human interactions. Examples of institutions include property, marriage, the market, money and industrial freedom. They are created to decrease uncertainty and risk in human exchange by providing a structure to everyday life. Institutions affect the performance of the economy by their effect on the costs of exchange and production. Together with the technology employed, they determined the profitability and feasibility of engaging in economic activity. The major role of institutions in a society is to reduce uncertainty by establishing a stable structure to human interaction.

**According to Douglas North** Institutions are made up of formal constraints (e.g., rules, laws, constitutions), informal constraints (e.g., norms of behaviour, self-imposed codes and conduct), and their enforcement characteristics. It shapes the direction of economic change towards growth, stagnation, or decline. They act as a set of constraints that govern the relations between individuals or groups in the exchange process. Institutions are rules. Rules help predict others' behavior in different situations.

Challenges for institutional analysis are:

* Confusion with definition.
* Institutions are invisible.
* Multiple inputs from different disciplines are needed.
* Given multiple disciplines and concepts a coherent institutional framework is needed.
* Multiple level of analysis.

**Levels of Institutions**

Institutions can be examined on a micro- or macro-level. In the micro view, the single individual’s actions are of interest and it is investigated why an agent acts in a certain way. Since institutions regulate human behavior, they must play a role regarding the determination of an agent’s actions.

However, institutions are also decisive from a macro point of view. Since a society’s morals, values, norms, and so on are considered to influence societal organization, these factors are suspected of influencing economic development.

The same holds for formal rules such as the political or legal system. Countries realizing significant differences in economic development often differ regarding their societal, political, and legal structures, too. Therefore, these ‘macro’ institutions, which are also rules regulating human interactions, might impact economic development.

**Organizations and Institutions**

The words organization and institution are often used interchangeably by many people. Though this usage is not entirely wrong, theoretically, there is a distinct difference between institution and organization.

The term organization refers to an organized group of people gathered together to achieve a particular purpose. An organization is defined as "groups of individuals bound by some common purpose to achieve objectives" (North, p5).

 Institutions can refer to mechanisms which govern the behavior of a set of individuals within a given community An institution is "any form of constraint that humans devise to shape human interaction" (North, p4). North discusses "formal" institutions, such as laws and rules, and "informal" institutions, such as norms, guidelines, and codes of conduct. He uses a sports metaphor for the distinction between these two definitions; organizations are the "players of the game" and institutions are the "rules of the game."

"Broadly defined, institutions are the prescriptions that humans use to organize all forms of repetitive and structured interactions including those within families, neighborhoods, markets, firms, sports leagues, churches, private associations, and governments at all scales." According to Ostrom, institutions specify what people may, must, or must not do under particular circumstances with particular costs for non-compliance. "Institutions" and "rules" are used interchangeably within this literature.

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| Purpose | Organization to earn money, or provide service to the members etc. | Institution to deliver knowledge to the people. |

## 1.2.Types of Institutions

**Formal rules** are consciously designed by humans and often codified in written form. E.g Formal rules are constitutions, statutes, common law, and other governmental regulations. They determine the political system (i.e., the governance structure and individual rights), the economic system (i.e., property rights and contracts), and the enforcement system (i.e., the Judiciary and the police). Governmental authorities enforce formal rules by means of sanctions such as fines, imprisonment, and execution.

**Informal rules** evolve spontaneously and unintentionally over time through human interaction, and take the form of unwritten. Informal rules are traditions, customs, moral values, religious beliefs, and all other norms of behavior that have passed the test of time. They are maintained from one generation to another through various transmission mechanisms such as imitation, oral tradition, and teaching. The enforcement of informal rules takes place by means of sanctions such as expulsion from the community, ostracism by friends and neighbors, or loss of status. Tribal chiefs and religious leaders have been known to use more severe forms of punishment. Informal institutions are: extensions, elaborations, and modifications of formal rules; socially sanctioned norms of behavior; and internally enforced standards of conduct.

**Neoclassical economics vs. Institutional Economics**

**Neoclassical economics:** The term neoclassical economicsdelineates a distinct and relatively homogenous school of thought in economic theory that became prominent in the late nineteenth century and that now dominates mainstream economics.

Neoclassical economics confines itself to assumptions of the following type:

* The assumption of rational, maximizing behaviour by agents with given preference functions;
* Non opportunistic behaviour (fully honest)among actors
* Institutions do not mater
* Homogeneous goods and services
* There is no transaction cost
* A focus on attained, or movements towards, equilibrium states;
* The absence of chronic information problems (there is, at most, a focus on probabilistic risk: excluding ignorance, radical uncertainty, or divergent perceptions of a given reality).
* Neo-classical economics assumes perfect information. However, in the real life uncertainty prevails

**Institutional Economics**emerged as a new school of thought with the more emphasis on the transaction costs, information problems, and bounded rationality. Institutional economics offers a theoretical framework for studying domestic institutions and organizations prevailing in an economy and the way these institutions emerge evolve and impact the behavior of individuals.

The new institutional economics is an attempt to incorporate a theory of institutions into economics. However in contrast to the many earlier attempts to overturn or replace neo-classical theory, the new institutional economics builds on, modifies, and extends neoclassical theory to permit it to come to grips and deal with an entire range of issues here to fore beyond its ken. New institutional economics has roots in neoclassical economics. It has broadened the traditional economic theory by admitting the observation already by Marx that institutions matter. The other difference to neoclassical economics concerns the assumption about human behavior.

Most New institutional economics approaches recognize bounded rationality instead of full rationality and opportunism instead of full honesty. New institutional economics believes that institutions arise as part of society’s effort to use scarce resources efficiently. New institutional economics combines economics, law, organization theory, political science, sociology and anthropology to understand social, political and commercial (e.g., business) institutions. Its goal is to explain what institutions are, how they arise, what purpose they serve, how they change and how, if at all, they should be reformed.

**Core assumptions of new institutional economics:**

* Imperfect information about the intentions and behaviour of other economic actors (there is moral hazard, adverse selection and information asymmetry among actors.
* Opportunism (self-interested individuals will not readily disclose the information about their preferences) dishonesty
* Heterogeneous goods and services
* Positive transaction costs
* Bounded rationality (Rationality of individuals is limited by the information they have, the cognitive limitations of their minds, and the finite amount of time they have to make decisions.)

**1.3. The function of institution**

Effective institutions of economic exchange play the following role: coordinate exchange,facilitate low cost exchange (transaction costs) and provide the necessary incentives for agents.

1. Coordination roles – institutions coordinate exchange at several levels. At its most basic level, coordinated exchange involves the reliable bringing together of buyers and sellers.

2. Facilitative roles – institutions facilitate efficient exchange by reducing information problems and by limiting opportunistic actions. The idea is as transaction costs increases, the potential gains from economic exchanges declines and hence economic activities decline.

3. Institutions provide incentives for exchange and resource management in that they create profitable opportunities for investment and exchange. In so doing, they encourage entrepreneurs and society more broadly to look for and invest in these opportunities and in particular to invest in infrastructure development and technical and institutional innovation.

An alternative way of looking at the role of institutions in agricultural development is in terms of three widely recognized pillars of agricultural development and poverty-reduction policy: expanding access to assets (such as land and capital), development of markets, and investment in basic public goods (such as rural roads and research). These respectively involve the development of institutions concerning property rights, markets, and the management of public good investments (through state organizations or private contractors, for example). There are also downstream and upstream institutional issues, regarding respectively the utilization of investment or policy outputs (for example, newly acquired or redistributed assets, market services, and new knowledge or technology) and allocation of financial and other resources to these (and other) alternative activities and investments.

**1.4. The interdependence of institutions**

**Classification of institutions**

In the literature there exist various ways of classifying institutions. They can be regrouped into three approaches depending on:

* The degree of formality;
* Different levels of hierarchy;
* The area of analysis.

**I. Degree of Formality**

Following North (1990), institutions include any form of constraint that human beings devise to shape human interaction. These constraints include both what individuals are prohibited from doing and, sometimes, under what conditions some individuals are permitted to undertake certain activities. In other words, they are the framework within which human interactions take place. Institutions consist of formal written rules as well as typically unwritten codes of conduct that underlie and supplement formal rules.

People in both rich and poor countries rely on informal institutions to facilitate transactions, but these institutions are relatively more important in poor countries where formal institutions are less developed. Moreover, poor people in developing countries are often ill-served by the limited formal institutions available. In poor countries, and poor regions in particular, informal institutions substitute for formal institutions. Countries and communities can go a long way towards resolving information and enforcement problems without using their formal public legal systems (World Bank, 2002).

That the informal constraints are important can be observed from the evidence that the same formal rules and/or constitutions imposed on different societies produce different outcomes. And discontinuous institutional change, such as revolution or military conquest and subjugation, produces new outcomes. But what is more striking is the persistence of so many aspects of a society in spite of a total change in the formal rules.

Although formal rules may change overnight as the result of political or judicial decisions, informal constraints embodied in customs, traditions, and codes of conduct are much more resistant to deliberate policies (North, 1990).

The informal and norm-based institutions that small community-based groups rely on tend to support a less diverse set of activities than do formal legal institutions. As countries develop, the number and range of partners that market participants deal with increases and market transactions become more complicated, demanding more formal institutions. Ideally, informal and formal institutions should complement each other.

**II. Different Levels of Hierarchy**

An alternative to a classification along the formality of institutions is offered by Williamson (2000). He proposes a classification scheme based on different hierarchical levels. The different levels of institutions presented in Table 1 are not exclusionary; rather they are interconnected. The higher level enforces constraints on the lower level, and feed-back exists from the lower level to the higher level.

Table 1.**A Hierarchy Based Classification Scheme for Institutions**

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*Source:* Author’s presentation based on Williamson (2000).

Level 1 institution is located at the social embeddedness level. Social norms, customs, traditions, etc. are located at this level. These traditional institutions often date back many centuries, are generally informal and can be regarded as exogenous to the economic system. This level is of utmost importance for people living in developing countries, where the other levels (II–IV) have only been partly established and/or do not function properly. Although institutions are in principle never static and could change in response to new economic opportunities or to crisis, the path of change on this level is rather slow or even non-existent. The purpose of these institutions is to define the way the society regulates itself. Most of the transactions undertaken are regulated by expectations, which in turn are based on beliefs and identities. Although no formal enforcement mechanism is in place the commitment to informal institutions is usually quite strong. The non-respect of certain values, traditions and norms can result in economic and social sanctions.

Level 1 institutions exert a certain influence on the design of property rights (level 2 institution). If, as an overall norm in a society, a certain minimum income is guaranteed for every member, a collective organization of property rights is more likely to prevail than a private market setting with free exchange.

Level 2 institutions relate to the rules of the game. Their main purpose is to define and enforce property rights. Most of them are formal institutions like conventions or laws, but examples also exist of informal institutions, e.g. rules governing access to natural resources, that are not written down but are quite strongly binding and therefore fit under this umbrella. In contrast to the institutions described in level 1 the time horizon of a potential change is shorter. However it usually still takes between 10 and 100 years.

Beside the rules of the game in the “Williamson sense”, the way the game is played is equally important. To define and enforce property rights, a legal system for defining contract laws and enforcing them is needed.

Institutions that relate to governance are classified as Level 3 institutions. These institutions craft order and reshape incentives, thereby building the governance structure of a society and leading to the building of specific organisations like the local or national government, state agencies, NGOs, etc. The time frame for changing and reorganizing transactions among governance structures is estimated to range from a few years to a decade. Though this level is influenced both by level 1 and 2, the various channels of feed-back loops and linkages are not yet clear.

Finally, level 4 institutions define the extent to which adjustment occurs through prices or quantities, and determine the resource allocation mechanism. Examples of this type of institutions are rules that are easy to change and that have an impact on resource allocation, employment, the social security system, etc.

This classification system helps to better understand institutional change and the impact of institutions on outcomes. If the interactions between institutions and development are analysed, the type of institutions, i.e. the level where a particular institution operates, will matter greatly.

**III. Area of Analysis**

(1) **Economic institutions**: I take economic institutions to determine the “economic rules of the game” in particular, the degree of property rights enforcement, the set of contracts that can be written and enforced, and some of the rules and regulations that determine the economic opportunities open to agents. Common examples of economic institutions would therefore include individual property rights, commercial law, contract law, patent law, the type of credit arrangements, etc.

**(2) Political power:** this is the ability to change economic institutions or undertake redistribution of income and assets.

**(3) Political institutions:** I take political institutions to be what regulates the limits of political power and determines how political power changes hands. Common examples of political institutions would include the constitution, electoral rules, constraints imposed on the power of the executive by other branches of the government, etc.

This distinction is useful, but it should not give the impression that we know exactly what these different “institutions” do in practice. There is considerable uncertainty about the role of these different objects for economic outcomes.

One way of thinking of political institutions as a way of restricting the future use or allocation of political power, hence providing some commitment value. At this point, it is also useful to note that in some situations we might want to distinguish economic policies from economic institutions. For example, a tax on capital by the government is a policy not an institution. For many of the applications, economic policies will be very similar to economic institutions, but one might want to bear in mind that they may be easier to change than economic institutions.

Therefore, in a schematic form, I am thinking of the situation as follows:



Therefore, we need to understand:

(1) What type of economic institutions are important for economic outcomes.

(2) The interaction between political power and economic institutions.

(3) How political institutions afect and allocate political power.

(4) The “origins” of political institutions, political power and economic institutions that is why do societies choose or end up with the institutions that they have.

Finally, a third alternative used in the literature to classify institutions is to differentiate between various areas of analysis. The four categories most commonly found in the literature are:

* economic institutions;
* political institutions;
* legal institutions;
* social institutions.

Under economic institutions, authors usually place rules that define the production, allocation and distribution process of goods and services, including markets (Bowles, 1998). Studies of political institutions usually employ variables that provide details about elections, electoral rules, type of political system, party composition of the opposition and the government, measures of checks and balances and political stability (Beck *et al*., 2002). Studies related to law and institutions refer to the type of legal system, the definition and enforcement of property rights and legal origin. Finally, studies on social institutions usually cover rules that have to do with access to health and education and social security arrangements, have an impact on gender balance and govern more generally the relationship between economic actors.

Figure 1 summarises the different concepts used in defining and classifying institutions.

Figure 1.**Different Ways of Classifying Institutions**

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Having given an overview on the different definitions and concepts, the following chapter sets out the results of a detailed literature review on the impact of institutions on development outcomes.

Roland (2005) establishes the concept of slow- and fast-moving institutions.

Institutions can change slowly and continuously, or rapidly and irregularly. Culture depicts a typical slow-moving institution. Thus, culture is rooted in religion or other beliefs that have hardly changed over time. Since it is an institution that constitutes the identity of the society, only marginal change is possible. Hence, we are talking about a slowly but continuously changing institution.

By contrast, for example, political institutions can be changed rapidly and irregularly. A military coup or a rebellion can alter the power structure of a state overnight or at least within a few weeks or months. Legal institutions can be seen as in between, since there vision of statutes does not occurs very quickly ,but does not take centuries either.

However, a relationship between fast- and slow-moving institutions exists, since institutions are complementary and build systemic consistency (Roland, 2005). In examining institutions we deal with a system of institutions that influence and complement each other. Therefore, slow-moving institutions such as culture can be understood as the slow, but continuously altering, underlying foundation that influences the fast-moving institutions and vice versa. Fast moving institutions can change during no observable modification to a slow moving institution. Yet, after a long period of marginal change in slow-moving institutions, the aggregated shift might suddenly lead to a rapid and irregular adjustment in fast-moving institutions. Hence, inconsistencies between slow-and fast-moving institutions lead to changes(Roland,2005).The act that institutions interact and build complementary systems has far-reaching policy implications. Disturbing the complex institutional apparatus might result in equally complex inconsistencies and might have unpredictable consequences. Hence, replacing an apparently growth-inhibiting institution by a seemingly growth supporting institution can be risky. Another approach that sheds light on the issue of institutional change and transportability comes from Boettke, Coyne and Leeson (2008). The authors as-sign a crucial role to ‘institutional stickiness’, that is “the ability or inability of new institutional arrangements to take hold where they are transplanted” (p. 332). Within the model, institutions are categorized as ‘indigenously introduced endogenous institutions’ (IEN), ‘indigenously introduced exogenous institutions’ (IEX), and ‘foreign-introduced exogenous institutions’ (FEX). Here, foreign-introduced means institutions designed by outsiders such as foreigners, whereas indigenously introduced denotes institutions established by insiders or locals. Exogenous is meant to describe institutions implemented by a subordinate entity which could be the local government or a foreign organization or force. Endogenous, on the contrary, depicts institutions that are not formally designed but developed spontaneously from within the community of indigenous individuals.

**1.5. Institutions and development**

More pertinent to the discussion here, we may want to distinguish between the following different views of institutions:

(1) Efficient institutions view: According to this view, societies will choose the institutions that maximize their total surplus. How this surplus will be distributed among different groups or agents does not affect the choice of institutions. The underlying reasoning of this view comes from the Coase Theorem. Ronald Coase (1960) argued that when different economic parties could negotiate costless, they will be able to bargain to internalize potential externalities. The farmer, who suffers from the pollution created by the nearby factory, can pay the factory owner to reduce pollution. The same reasoning can be applied to political situations. If the current laws or institutions beneﬁt a certain group while creating a disproportionate cost for another, these two groups can negotiate to change the institutions. By doing so they will increase the size of the total surplus (“the pie” that they have to divide between themselves), and they can then bargain over the distribution of this additional surplus.

(2) Incidental institutions view: While the efficient institutions view is explicitly based on economic reasoning, a different approach, which downplays choices and emphasizes the development of institutions as a byproduct of other social interactions, is more popular among many political scientists and sociologists. According to this view, the set of political and economic institutions emerge not as a choice of economic actors, but is an incidental consequence of other actions. An interesting example of this is the work by Tilly (1990). Building on the Weberian tradition, Tilly proposed a theory of the formation of modern states, which argues that modern state institutions such as ﬁscal systems, bureaucracy and parliaments are closely related to the need to raise resources to ﬁght wars and thus arose in places with incessant inter-state competition.

(3) Rent-seeking institutions view: An alternative is that institutions emerge as a result of economic agents’ choices, but are not necessarily efficient. But why isn’t a set of institutions that maximize output chosen?

Because according to this view, institutions are not always chosen by the whole society (and not for the beneﬁt of the whole society), but by the groups that control political power at the time (perhaps as a result of conﬂict with other groups demanding more rights). These groups will choose the institutions that maximize their own rents, and the institutions that result may not coincide with those that maximize total surplus. North, in the same vein, argues that in all societies there is a: “persistent tension between the ownership structure which maximizes the rents to the ruler (and his group) and an efficient system that reduces transaction costs and encourages economic growth”.

For example, institutions that enforce property rights by restricting state predation will not be in the interest of a ruler who wants to appropriate assets in the future. By establishing property rights, this ruler would be reducing his own future rents, so may well prefer institutions that do not enforce property rights, and therefore do not constrain him from appropriating assets in the future to those that do. Therefore, equilibrium institutions will not be those that maximize the size of the overall pie, but the slice of the pie taken by the powerful groups.

Why doesn’t a Coase theorem type reasoning apply? The main reason for the non-applicability of the Coase theorem in politics is commitment problems. If a ruler has political power concentrated in his hands, he cannot commit not to expropriate assets or revenues in the future. The enforcement of property rights, which would encourage investment by the agents, requires that he credibly relinquishes political power to some extent. But according to the Coasian bargain, he has to be compensated for what he could have received using this power. Herein lies the problem. When he relinquishes his power, then he has no guarantees that he will receive the promised payments in the future. Therefore, by their very nature, institutions that regulate political and social power create commitment problems, and prevent Coasian bargains that are necessary to reach efficient outcomes.

(4) Costly institutions view: this approach combines elements of the ﬁrst and the third approaches. Institutions are constructed in order to solve economic problems, such as reducing transaction costs, enforcing contracts etc., and there is a tendency towards efficient institutions. However, this approach, differently from the efficient institutions view, recognizes that it might be costly to design institutions, so depending on these costs, the right set of institutions may not emerge in a society.

An example of this view would be Demsetz’s theory of property rights, which is also very similar to the theory of property rights that is advanced in North and Thomas. According to Demsetz, enforcing property rights has some costs, but also is beneﬁcial economically. When the beneﬁts exceed the costs, property rights will be enforced. As an example, he offers variations in property rights in land among American Indians. In many Indian societies, there were no property rights in land because land was abundant, and the inefficiencies from overhunting were relatively small. However, property rights developed following commercialization of fur trade, because the possibility of selling fur, the overhunting problem became more serious, so the beneﬁts from establishing property in over land increased. This caused the emergence of property rights in land among the tribes engaged in fur trading.

The general implications of this view are very similar to the efficient institutions view, but it allows for the presence of differences in institutions across societies that might have important economic consequences. Such differences would emerge because the costs of designing the right set of institutions may vary across societies.

**1.6. Institutions in economics**

Economic institutions are a set of constraints that govern the relations among individuals or groups in economic activities. The economic activity could be production, allocation, distribution or exchange. Economic institutions make up the economic system the framework that regulates economic activity.

Economic institutions as understood as proving the incentive structure that encourage agents to behave in certain way instead of other way. Institutions are, therefore, critical to determining economic performance by influencing the cost of production, the mode of allocations and the costs of transactions.

They may be broadly grouped into two categories: those that define the forms of ownership of the means of production, and those that define the mechanisms for resource allocation and co-ordination of economic activity. Markets can thus be considered as one form of institutions coordinating economic activities.

In the economic exchange of goods and services, then, institutions act as a set of constraints that govern the relations among individuals or groups in the process of economic exchange.

For instance, institutions facilitate sharecropping economic activity by create stable and predictable behavioral patterns by providing set of constraints and incentive structures.

Institutions thus help human beings to form expectations of what other people will do.

**Chapter 2: Key theoretical and analytical constructs**

**2.1. Property rights**

**2.1.1. Definition of Property rights**

Property rights define the expectation one can hold in dealing with others. The expectations can be explicitly stated in the laws in which case may be enforced formally or they can simply imbedded in the norms, customs, and conventions of the society in which case expected to be understood and accepted by the most of the members. Thus, institutions define property rights. As we mentioned earlier, even if there are laws that define rights of a given property, they cannot be considered as institutions if they are not enforced. Property rights specify how persons may be benefited and harmed and, therefore, who must pay who to modify the actions taken by persons.

**Property rights** are theoretical socially-enforced constructs in [economics](https://en.wikipedia.org/wiki/Economics) for determining how a resource or economic good is used and [owned](https://en.wikipedia.org/wiki/Ownership). Resources can be owned by (and hence be the [property](https://en.wikipedia.org/wiki/Property) of) individuals, associations, [collectives](https://en.wikipedia.org/wiki/Collective_ownership), or governments.  Property rights can be viewed as an attribute of an economic good. This attribute has broad componentsand is often referred to as a bundle of rights:

1. use rights - the right to use the good
2. the right to earn income from the good
3. the right to enforce property rights
4. extraction rights - the right to capture the benefits from the property through, for example, mining or agriculture;
5. transfer rights - the right to sell or lease the property to someone else;
6. exclusion rights - the right to exclude someone from the property;
7. encumbrance rights - the right to use property as security or for other purposes.

In economics, property is usually considered to be ownership ([rights to the proceeds generated by the property](https://en.wikipedia.org/wiki/Property_income)) and control over a resource or good. Many economists effectively argue that property rights need to be fixed and need to portray the relationships among other parties in order to be more effective.

Property rights to a good must be defined, their use must be monitored, and possession of rights must be enforced. The costs of defining, monitoring, and enforcing property rights are termed [transaction costs](https://en.wikipedia.org/wiki/Transaction_costs).

In economics, property right refers to a bundle of entitlements defining the owner's rights, privileges, and limitations for use of the resource. The meaning of the term ‘property rights’ varies, in large part, in accordance with the intellectual tradition in which it is used. Property rights are relationships among individuals that arise from the existence of scarce goods and pertain to their use. Property rights provide the basic economic incentive system that shapes resource allocation. Property rights are a fundamental institution governing who can do what with resources. Property Rights may be defined as: the capacity to call upon the collective to stand behind one’s claims to a benefit stream”, or “the claims, entitlements and related obligations among people regarding the use and disposition of a scarce resource.

The types of the rights, the assignment of the of the rights, the time horizon for which the rights will be effective, etc. depend on the existing the institutional environment and the typeof the properties. The efficiency of the exiting property rights can be judged based on the following three important criteria:

1. Universality—all scarce resources are owned by someone;

2. Exclusivity—property rights are exclusive rights; and

3. Transferability—to ensure that resources can be allocated from low to high yield uses.

**Universality** criteria imply that property rights for all scarce resources need to be clearly defined. If a property right for some resources is clearly defined leaving others poorly defined or undefined, the inefficiency in poorly defined resources can be transmitted into those properties whose rights are clearly defined. For example, establishing a clear property rights on capital and labor may not bring efficient utilizations of resources if for example the property rights for land is poorly defined or left undefined. Moreover, property rights focus on physical resources ignoring intangible property rights such as intellectual property rights.

In a condition where individuals cannot invest on their resource and effort if they cannot capture the benefits of their inventions and creative works.

**Exclusivity**. Non-exclusive right are rather meaningless. A given resource is non-exclusive means anyone member outside those to whom the property is assigned can also use the resource, appropriate the benefits, etc. Unless the right holder is able to exclude other non-right holders, the mere assignment of the right on given property to an individual or group will not provide the right incentive to exploit the full potential of the resource.

**Transferability** provides a great deal of incentive to the right holders. The fact that one resource can be transferred means, it can be used for collateral, future security and the like. It thus provide right holders the incentive to make long term investment to improve the resource. Land it a good example. If the owner of land cannot transfer the land, it implies that the will have less incentive to invest to improve the land. The result will be that the land will rapidly degraded.

Property rights can be assigned to individuals (firms), groups or government. Though mix of these assignments always exist in any society, the extent at which most properties are assigned to individual or collective (group, public or state) depend on the specific economic and political setting of the country. In every society including advanced market economies, there are some resources which are communally owned. The choice between individual rights and regulated common property would probably depend on such factors as transaction and enforcement costs, environmental and technological factors, and distributional considerations.

## 2.1.2. Characteristics of Property Rights

There are five characteristics of property rights that are salient to the present discussion. First, property rights will vary according to whether they are vested in the person or in the position held by the person. In the case of the property-rights structure discussed earlier, the property rights are owned by the residual claimant and may be bought or sold at will. However, in the case of the role occupant in a bureaucratic structure, property rights attach to the position, not the person, and a change in role or loss of role results in the loss of such rights. Thus in the case of the role holder, we might expect this characteristic of property rights to affect his or her motivation to control shirking, given that occupants do not have residual claimant status. Also, there is less incentive for the role holder to invest in the role, i.e., to improve team performance, if the benefits of such action cannot be transferred. The situation is analogous to a person leasing a house rather than owning it. The lease will be loath to invest in house improvements, since any such improvements are unlikely to be compensated for later when the lease expires. As a result, when property rights are vested in the position, one may expect other property rights to develop that may be earned by higher performance in the role; one such right might be the linking of the reward structure with productivity.

A second characteristic of property rights that is important in this context is the length of the contract negotiated between the parties. When long-term contracts are negotiated, as opposed to short-term or "once and for all" contracts, this also will affect the transaction pattern between parties, since the expectations of the parties will be oriented to the future. Team members will have more incentive to invest in team-specific skills if the employment contract is guaranteed. We might expect different transaction patterns to emerge between team members when the contract is based on employment-at-will as opposed to lifetime employment, as in some sectors of Japanese industry. Indeed, the guarantee of lifetime employment gives to the worker rights that are vested in the person, not the position.

A third characteristic of property rights is the degree of carefulness with which they are specified. When rights and obligations are clearly defined, either formally or informally, individuals are able to hold clear expectations in their dealings with others. When rights are conferred by whim or impulse, however, the opposite occurs. For example, the rise of territoriality in social exchange, when individuals are concerned to protect their rights from the encroachments of others, may be traced to ill-defined property rights. Contracts can never be complete, however, both because contingencies can never be fully specified in advance and because, for complex tasks, the cost of monitoring and enforcing contracts may be exorbitant. Thus custom and practice, or informal agreements between team members, as well as written contracts, will form a significant part of organizational expectations, and the extent to which such informal norms are adhered to and guaranteed will also influence the nature of the transactional atmosphere between team members.

A fourth characteristic of property rights is their degree of inclusiveness. In some situations, property rights will be drawn to cover many facets of the role holder's position: salary, conditions of employment, norms of conduct, and future status. In other situations, rights will define only specific aspects of the exchange, such as the agreement to work a standard time at an agreed rate of pay. Since a team member's behavior depends on the content of the rights attached to his or her position, this characteristic also has implications for the transaction patterns that will emerge in the organization.

A last characteristic of importance is the configuration of property rights present in the whole organization, not the rights attaching to any particular individual or position. At one extreme, rights may be distributed on the basis of common ownership, as in partnerships in which each person possesses residual claimant status, or, at the other extreme, one party may be granted residual claimant status. Once again, this characteristic has implications for the nature of the behavioral exchanges that will emerge in the team, as will be discussed below. In general then, it is possible to differentiate between "strong" property rights that are vested in the person and are precise, inclusive, and enduring, and "weak" property rights that are vested in the position and are imprecise, limited, and transitory.

The connection between transaction costs and property rights is summarized in the "Coase Theorem", which is defined as follow:

Coase Theorem: In the absence of transaction costs, the allocation of resources is independent of the distribution of property rights

When property rights are incomplete, individuals are always in the process of maintaining their existing property rights and attempting to establish new one. This leads to the property right definition of transaction cost.

Transaction cost # 1: the costs establishing and maintaining property rights. The first explicit statement of transaction costs may be defined as the cost of exchanging ownership titles’. Although this type of definition refers to property rights, transaction costs only arise when an exchange of property rights takes place. This leads to the neoclassical definition of transaction costs:

Transaction Costs #2: the costs resulting from the transfer of property rights.

# 2.1.3. Types of Property-Rights Regimes

# 2.1.3.1. Private property Regime

Private property is any property that is not public property. Private property may be under the control of a single individual or by a group of individuals collectively.A set of ordered institutional arrangements in which the state protects the rights of certain individuals to access, control and manipulate resource benefit steams. Others have a right to expect that only socially-acceptable uses will occur, and a duty to refrain from preventing those uses. What are the advantages of private property? Some agree on its role in the efficient allocation of resources and investment in resource improvements. Why have claims to private land use emerged in pastoral and agropastoral areas?

### 2.1.3.2. Common Property Regime

A common-pool resource is a particular type of good consisting of a natural or human-made resource system, the size or characteristics of which makes it costly, but not impossible, to exclude potential beneficiaries from obtaining benefits from its use. Common Property is the private property of a group of co-owners. Common property regime" refers to a particular social arrangement regulating the preservation, maintenance, and consumption of a common-pool resource. Common-pool resources are not necessarily governed by common property regimes, they may be owned by national, regional or local governments as public goods, by communal groups as Common property resources, or by private individuals or corporations as private goods. Almost all “big” environmental problems are a function of resources under non-private, non-market property rights (desertification, forest management, soil erosion, pollution, over-fishing, overgrazing). Examples of common-pool resources include irrigation systems, fishing grounds, pastures, and forests. Common-pool resources are generally subject to the problems of congestion, overuse, pollution, and potential destruction unless harvesting or use limits are devised and enforced, which could lead to the deterioration of livelihoods. In a common property regime, a common-pool resource has the appearance of a private good from the outside and that of a common good from the point of view of an insider. The resource units withdrawn from the system are typically owned individually by the appropriators. A common property good is rivaled in consumption.

### 2.1.3.3. State Property Regime

A state property regime is a set of institutional arrangements in which the state retains direct control of the benefits derived from a resource by determining access and use rules for individuals. In many socialist countries, individuals are entitled to use resources but not to transfer rights to the resources without the interference of the state. However, such state property regimes fail due to: rigidity of the state agencies in their application of rules; state agencies usually ignore, or even attempt to undermine, indigenous political structures and institutions; state agencies often lack the power, authority and/or will to implement rules prescribed at regional or national levels; and, state employees who are responsible for the enforcement of resources use rules are often remunerated, legally or illegally, through the collection of fines (e.g. Corruption and bribes).

### 2.1.3.4. Open-Access Resources

The property is not 'owned' by anyone. It is non-excludable (no one can exclude anyone else from using it), non-transferable, but may be rival (one person's use of it reduces the quantity available to other users). Open-access property is not managed by anyone, and access to it is not controlled. There is no constraint on anyone using open-access property (excluding people is either impossible or prohibitively costly).

Open-access property may exist because ownership has never been established, granted, by laws within a particular country, or because no effective controls are in place, or feasible, i.e., the cost of exclusivity outweighs the benefits. The government can sometimes effectively convert open access property into private, common, or public property through the land grant process, by legislating to define public/private rights previously not granted.

Open-access resources as we shall henceforth call them, have given rise to what has become known popularly as the "tragedy of the commons." Fishing grounds are the best know example of a potential open access resource. Given that more fish caught by one party implies less fish for all others; The scarcity value of the resource is ignored. The potential result is overfishing and a depletion of the stock to a level that cannot sustain itself.

The problems created by open-access resources can be illustrated by recalling the fate of the American bison. Bison are an example of "common pool" resources. Common-pool resources are characterized by non-exclusivity and divisibility. Nonexclusively implies that they can be exploited by anyone while divisibility means that the capture of part of the resource by one group subtracts it from the amount avail­able to the other groups. In the early history of the United States, bison were plentiful; unrestricted hunting access was not a problem. Frontier people who needed hides or meat could easily get whatever they needed; the aggressiveness of anyone hunter did not affect the time and effort expended by other hunters. In the absence of scarcity, efficiency was not threatened by open access.

As the years slipped by, however, the demand for bison increased and scarcity became a factor. As the number of hunters increased, eventually every additional unit of hunting activity increased the amount of time and effort required to produce a given yield of bison.

The summary of these categories of property right discussed above summarized in the figure below.

|  |  |  |  |
| --- | --- | --- | --- |
| Regime type | Owner | Owner rights | Owner duties |
| Private property | Individual | Socially acceptable uses, control of assets | Avoidance of socially unacceptable uses  |
| Common property | Collective | Exclusion of non-owners | Maintenance, constrain rate of use |
| State property | Citizens | Determine rules | Maintain social objectives |
| Open access | None | Capture | None |
| Figure: Summary of property right regimes |

**2.2. Transaction costs**

T**ransaction costs** refer to the costs originating from the various actions taken to reduce the risk of transaction failure. Transaction costs therefore the value of resources devoted to

(1) establish and enforce exclusive property rights and/or (2) define and enforce the attributes of the good or service being exchanged and (3) the losses incurred because of failure to (a) enforce exclusive property rights, (b) enforce required attributes, or (c) complete the transaction.

The point we want to show in the above hypothetical case is that most transactions from simple purchase of good to complex contracts involve positive transaction costs. The 'real world' is beset by positive transaction costs — on which account the assignment of **propertyrights and choice of governance structures** do matter. Assuming that positive transaction costs are not so great as to block the assignment of property rights altogether, then differential transaction costs will warrant the assignment of property rights one way rather than another.

Similarly respect to organization: except where positive transaction costs block the organization of some activities altogether, differential transaction costs will give rise to discriminating alignment — according to which some transactions will (for efficiency purposes) align with one set of governance structures and other transactions will align with others. In some, transaction costs will have a lot of bearing on the allocation, production and distribution activities.

Note that when we refer cost in economics, we are referring to opportunity costs not just the financial/accounting costs. We don’t consider only the direct money expenditures rather we estimate the opportunity costs of the resources (including the agents’ time) devoted in realizing the transactions. This is the correct meaning of cost in economics.

The concept of transaction costs is the foundation of New Institutional Economics. As Ronald Choase pointed out, the organization of transactions, with the inevitable costs it incurs, determines what goods and services are produced and the capacity of any economy to take advantage of the division of labor and specialization – the two key concepts of economic theory since Adam Smith. Thus, transaction costs profoundly influence not just individual firms but the size and activities of the entire economy.

The extent of transaction costs thus determine the level and types of economic activities. The extent of transaction costs then depend on the institutional environment that determine: the degree of information problem (on prices, new technologies, and other potential market players), the extent of opportunism, the strength of defining and enforcing property rights and contract and the level of risks posed by exogenous shocks.

**Sources of transaction costs**

Given the above example, we can identify transaction activities that involve costs. Although there are many other cost involving transaction activities, we will discuss the most common one.

**1.Information and search costs**

As we discussed in earlier chapters, in perfectly competitive markets economic agents are assumed to have perfect knowledge. The presumption is they can access whatever information they need without incurring considerable costs. But in reality information are not only imperfect but also involve costs. In addition, human being has limited ability to gather and process information. The implications are that economic agents devote a lot of resources to gather information. In the above example, determining the amount of payment require a lot of information such as future relative prices, the level of payments in other areas for similar agreements (if there is), estimation of each other’s potential gains, and the like. More importantly, each agent must collect information about each other’s trustworthiness, reputations, past history, social status, network, and the like. Searching appropriate partner (if there are two or more alternative partners) also require a lot of efforts. All these tasks involve costs that would otherwise been used for productive activities elsewhere in the economy.

**3.5.2. Bargaining and decision costs**

Having equipped with the required information, the transacting parties must make a lot of bargaining in order to reach at profitable terms of agreement. Depending on the complexity of the transaction, this can involve a lot of resources –lobbying, financing meetings, payment for third party mediating the bargaining, and the like. To achieve favorable terms and avoid possible risks, parties will have to devote time and resource in the bargaining. Once agreement is reached on general and key issues, drafting, reviewing and signing the agreement is not a simple task. It can involve a lot of cost.

**3.5.3. Supervision and enforcement costs**

Once the agreement is signed, each party need to monitor the other. Still this can take a lot of surveillances, supervision, hiring consultants or forming an independent organ, etc.

Enforcing when there are deviations could also involve a lot of costs. This can be through legal court or through informal ways.

In short we can find these three classes of transaction costs in many economic exchanges.

For instance hiring a worker require finding a suitable worker, examining potential applicants, bargaining on the wage rate, assessing the prevailing wage rates, metering performances (marginal contributions), designing appropriate incentive structure, penalizing shirking and malfeasances, and the like.

Why firms need supervisors? It is because workers may shirk, underperform, abuse firms resources, and the like. The various resources to devoted for management activities can be considered as transaction costs that would have been used for other productive activities.

**Dimensions of Transaction Cost**

**3.6.1.Behavioral pattern of the transacting parties**

As explained earlier, TCE is founded on two of the key behavioral assumptions that are spring from self-interest assumption: bounded rationality and opportunism. Economic agents are assumed to center their **own interest** when they make decisions. An economic agent is

assumed to be self-interest seeking with **guile**. First, even if the intentions of agents is to

promote self-interest, their level of realization is limited. This is due to information problem:

access to information and limited computational and cognitive capacity. Thus they cannot be

purely rational but boundedly rational.

### Transaction costs

Transaction costs will occur when dealing with another external party:

* Search and information costs: to find the supplier.
* Bargaining and decision costs: to purchase the component.
* Policing and enforcement costs: to monitor quality.

The way in which a company is organised can determine its [control](https://kfknowledgebank.kaplan.co.uk/KFKB/Wiki%20Pages/Controlling%20risk.aspx) over transactions, and hence costs. It is in the interests of management to internalise transactions as much as possible, to remove these costs and the resulting [risks](https://kfknowledgebank.kaplan.co.uk/KFKB/Wiki%20Pages/Risk.aspx)and uncertainties about prices and quality.

For example a beer company owning breweries, public houses and suppliers removes the problems of negotiating prices between supplier and retailer.

Transaction costs can be further impacted by the following:

* **Bounded rationality**: our limited capacity to understand business situations, which limits the factors we consider in the decision.
* **Opportunism**: actions taken in an individual's best interests, which can create uncertainty in dealings and mistrust between parties.

The significance and impact of these criteria will allow the company to decide whether to expand internally (possibly through vertical integration) or deal with external parties.

 The variables that dictate the impact on the transaction costs are:

* Frequency: how often such a transaction is made.
* Uncertainty: long term relationships are more uncertain, close relationships are more uncertain, lack of trust leads to uncertainty.
* Asset specificity: how unique the component is for your needs

A transaction is a process by which a product or service is transferred across a technologically separable interface (**Williamson, 1985**). In classic economic theory, it is assumed that information is symmetric in the market and the transaction can be executed without cost. In reality, however, markets are often inefficient.

A consequence of Williamson’s definition is that it is limited to situations where resources are physically transferred. Those physical transfers may occur within the firms as well as between firms, using markets. Thus, there are internal transactions within the firm and market transactions, which can be understood as a result of labor division (**Richter, 1999**).

Commons (**1934**) defines transaction as the transfer of the property right on a good or service, which does not consider only the physical transfer, but also the transfer in terms of property and rights of using a resource, which leads to the contracts related to the use of resources.

 In order to proceed with a transaction, producer must search for information and monitor the ongoing process to ensure a favorable deal. The costs involved in such transaction-related activities are called transaction costs. In economics and related disciplines, a transaction cost is a cost incurred in making an economic exchange (restated: the cost of participating in a market).

Transaction costs can be divided into three broad categories (**Coase, 1937**):

1.Search and information costs are costs such as in determining that the required good is available on the market, which has the lowest price, etc.

2.Bargaining costs are the costs required to come to an acceptable agreement with the other party to the transaction, drawing up an appropriate contract and so on. In game theory this is analyzed for instance inthe game of chicken. On asset markets and in market microstructure, the transaction cost is some function

of the distance between the bid and ask.

3.Policing and enforcement costs are the costs of making sure the other party sticks to the terms of the contract, and taking appropriate action (often through the legal) if this turns out not to be the case.

**2.3. Contracts**

NIE’s third core concept is contract. In the standard neoclassical paradigm, contracts are agreements between parties that are (1) perfectly enforced and (2) perfectly complete. Once again the concept of contract was progressively developed along different paths by the two main branches of NIE. Williamson stressed the issue of incomplete contracts as early as 1971 in a paper on vertical integration. In his formulation, opportunism -- the idea that parties to an exchange may defect from the spirit of cooperation when the stakes are high -- overturned neoclassical behavioral assumptions that ignored these human traits. To Williamson, a contract is “an agreement between a buyer and a supplier in which the terms of exchange are defined by a triple: price, asset specificity, and safeguards” (ital. from OEW, 1996, p. 377). Williamson’s approach to contracts became central to NIE’s analysis of governance, and, as emphasized by the Nobel Committee in 2009, became the source of many successful empirical investigations, operationalizing the Coasian approach in micro-economics and industrial organization.

 The ‘Northean’ branch emphasized early on the key role of contract enforcement and the institutions it requires, particularly the polity (North, 1981, chap. 4).enforcement and especially the role of coercion in protecting property rights and individual rights later developed into a theory of its own. North highlighted the trade off between the high cost of private protection of property using private police, private armies and the like, versus the risk of state protection of property, which might reduce private costs but invite state encroachment on rights (see North et al., 2009; and also North and Weingast, 1989; Weingast, 1993; Greif, 2005). The risk of state predation led North, Weingast, and others to emphasize ways the state might credibly commit to respect private property rights, a theme that united the two branches of NIE.

Contracts in neoclassical economic theory are generally assumed to be complete. According to the theory, when contracts are incomplete, adaptation to changes can be enforced through appropriate legal system.

To what extent real world contracts will be complete depend on the behavioral assumptions.

Let us see the outcomes of contracts under alternative behavioral assumptions. Let us take four combinations of behavioral assumptions:

1.**unbounded rationality/nonopportunism** – a condition of contractual utopia;

2.**unbounded rationality/opportunism** – a case where contracts can be made to work well by recourse to comprehensive contracting;

3.**bounded rationality/nonopportunism**– where contracting works well because of general clause protection against the hazards of contractual incompleteness; and

4.**bounded rationality/opportunism** – which reflect more the real world contracting problems and the difficult contracting issues reside. The entries that appear in thefollowing four-way classification of contract are offered as an overview.



**Table --- Contracting problems associated with alternative behavioral patterns Williamson**

**(1995)**

In the first case (upper left), since there is no information problem and computational capacity, all contracting parties not only know what desirable terms of their own but also others. They can thus agree on contract terms that exactly meet their self-interest. Since agents are assumed to be self-enforcing and trustworthy to the agreement. Then not only the contract will be perfect ex ante, parties also take appropriate measures to ex post contract problems. In the second case (upper right), contracting parties are boundedly rational and hence the may not develop complete contracts ex ante. But since they are assumed to be non opportunistic, agreeing on general clause will be enough as they take appropriate measures when there are contracting problems ex post.

In the third case (bottom left), the transacting parties know perfect terms of contract ex ante but since parties can act opportunistically, they need to develop a comprehensive contract that describe each and every details. The last (bottom right) represent real world contracting situation. In this case, not only parties are boundedly rational, they are also assumed to be opportunistic. Since they are boundedly rational, the contract tend to be incomplete ex ante. This parties are opportunistic, they tend to use every loophole provided by the incomplete contract to act against the interest of each other. This situation pose a lot of contracting problems and raise the transaction costs.

Transaction costs of ex ante and ex post types are usefully distinguished. The first are the costs of drafting, negotiating, and safeguarding an agreement. This can be done with a great deal of care, in which case a complex document is drafted in which numerous contingencies are recognized, and appropriate adaptations by the parties are stipulated and agreed to in advance. Or the document can be very incomplete, the gaps to be filled in by the parties as the contingencies arise. Rather, therefore, than contemplate all conceivable bridge crossings in advance, which is a very ambitious undertaking, only actual bridge-crossing choices are addressed as events unfold. Safeguards can take several forms, the most obvious of which is common ownership. Faced with the prospect that autonomous traders will experience contracting difficulties, the parties may substitute internal organization for the market. This is not, to be sure, without problems of its own. Moreover, ex ante inter-firm safeguards can sometimes be fashioned to signal credible commitments and restore integrity to transactions.

The frequency and asset specificity of transactions give rise different forms of contracting: market, trilateral, bilateral and unified governance structures.

**Relational contracting**

Relational contracts are usually embedded in some forms of social relationships, The reference point for effecting adaptations remains the original agreement, the reference point under a truly relational approach is the entire relation as it has developed through time. Such contracts are loosely defined, their implementations are flexible and their enforcements are provided by the social relationships.

**5.4.2.Contract incompleteness**

Contractual incompleteness exposes the contracting parties to certain risks. We will discuss these costs under ex ante and ex post transaction costs.

Ex ante problems

The adverse selection problem where one party to the trade has private information that it can choose selectively to disclose, which asymmetry the other party cannot overcome except at great cost. The condition is a manifestation of a more general problem that is responsible for measurement difficulties, namely, idiosyncratic information.

Information asymmetries of two kinds can be distinguished at the contract execution stage.

The more familiar is where one party to the trade has more knowledge over the particulars than does the other. A second, less widely recognized type of asymmetry takes the form of discussed by Alchian and Demsetz (1972) about shirking of workers. Here each party to the transaction knows the full truth of what has occurred, but it is costly to disclose the facts to anyone other than an on-site observer. Even if workers know each other’s contributions in a given cooperative work activities, they will prefer the supervisor do the assessment. Ex post costs of contracting take several forms. These include

1.themaladaption costs incurred when transactions drift out of alignment

2.the haggling costs incurred if bilateral efforts are made to correct ex post misalignments,

3.the setup and running costs associated with the governance structures (often not the courts) to which disputes are referred, and

4.the bonding costs of effecting secure commitments.

Monitoring and enforcing costs depends on many factors: the complexity of the agreement, the uncertainties arise from exogenous shocks (macroeconomic, sociocultural, political and legal environment) and behavioral pattern of parties, specificity of the asset, the repetitiveness of their agreement.

The incompleteness of contracts means that there are non-contractible elements due to difficulties in contemplating in advance all possible future contingencies and measuring performance under each contingency. Because of this unspecified portion of the contract, there are potential economic problems in the sharing of joint output between contracting parties, and hence incentive problems in investing (up-front) in relation-specific assets.

**Principal-Agent Problem**

The principal agent problem is associated with the principals difficulty of knowing the right agent and the actions agent takes in a long-term contracts. To be clear, we will discuss this by taking an insurance contract as an example.

As we discuss at the beginning of the module, compared to business in other sectors, business activities in the agricultural sector are fraught with a lot of risks – natural and market risks.

Thus, insurance markets are especially more important in the agribusiness than other business activities. Yet the insurance market suffer from these two agency problems: adverse selections and moral hazards. Unlike other transactions, insurance transactions require long term contracts that require long-term commitment.

The two principal-agent problems -moralhazardand adverse selection – pose transaction challenge. Ex ante problems are that the insurer (principal) cannot specify appropriate term as it cannot determine the individual’s (agent) risk level. Theoretically the insurer may not need to know the individual risk level if the distribution of insurance seekers follow the actual distribution of risk levels in the population. In this case, the insurer can specify some average premium in such a way that the likely claim of the high-risk individuals offsets the low-risk individuals. But in reality, not only the insurer may not perfectly know the distribution of the risk, the distribution of the insurance seekers may not follow actual distribution. Rather, it is argued the high-risk individuals are **more likely** to be willing to buy insurance compared to low-risk individuals.

In such cases, the insurer can set a high premium for all insurance seekers. This will discourage the low-risk individuals because the high-premium is not proportional to their individual risk levels. Even if we ignore the problem the above strategy will create on low risk individuals, it still pose a problem because the insurer doesn’t also know how high is the risk level of the high-risk individuals. It can be that only those individuals whose risk level are so high as to be justified by the ‘high premium’. To determine an appropriate premium and to make sure that it is not selecting only the adverse insurance seekers, it will have to collect a lot of information. The search cost will be high. For example, the insurance company may demand health certificate for livestock to determine the health risk. This will involve cost. Similarly, the insurance company need to collect a lot of information. Even after doing all these, a boundedly rational insurer will still face uncertainty. The information cost plus the risk cost give the transaction costs posed by adverse selection.

But in addition to this, the insurer also face another information problem. Once the individual bough the insurance policy can take hidden action that entail additional cost on the insurer. It may be very difficult to monitor the actions of livestock herders. Livestock herder can slaughter the livestock and still claim insurance payment for deaths whose causes are not in the policy. Moreover, the insured livestock herder may not take the necessary precautionary actions to avoid the hazard. It can rather take risky actions. To minimize these uncertainties, the insurance company incurs monitoring costs. Yet, a boundedly rational monitor can still face uncertainty. The monitoring costs added to this uncertainty costs give rise to transaction costs posed by moral hazard.

The transaction costs posed by the adverse selection plus the transaction costs that arise due to moral hazard give rise to total transaction costs. Depending the institutional environment and the technology level, this transaction costs could be so high as to block insurance transactions.

Exactly the same argument can be made for credit services. Principal-Agent problems also pose a similar transaction costs issue in the labor market. The employer may not exactly know the distribution of individual abilities of job applicants. In addition to the costs the searching, testing, selection, bargaining and agreement tasks, the employer may still cannot be certain that incompetent individuals are not recruited. It is to minimize this most employers assign probation period before they approve the recruitment. But even after all these efforts, an employer cannot just leave for the workers to manage themselves. The employer will have to devote a lot of resources to monitor and measure the performances of the worker. Even then, hidden actions such as shirking, using principal’s asset for personal use, and the like that whose costs are born by the principal but whose benefits accrue to the agents (workers). All these are transaction costs that arise due to information problems. The theory can be extended into numerous long-term

contracts.

In all these cases, contract incompleteness becomes the main reason for the emergence of many institutions (norms, traditions, conventions, etc.) in the society. Close examination of the social relationships in developing countries can provide insights on the purposes of many informal institutions.

**1.1.Agency Theory**

An **agent** is a designated economic actor who, acts for, on behalf of, or as representative for other economic actor designated as **principal.** Agency relationship is then the relationship between the principal and agent in a particular domain of decision problems. The relationship between employer (principal) and manager (agent); the manager (principal) and workers (agents) can both be considered as agency (principal-agent) relationships differing in the domain of decisions.

It arises when a principal compensates an agent for performing certain acts that are useful to the principal and costly to the agent and there are elements of the performance that are costlyto observe. This is the case to some extent for **all contracts**, given that we live in a world of information asymmetry, uncertainty, and risk. Principals do not know enough about whether (or to what extent) a contract is being or has been satisfied. The solution to this information problem, closely related to the moral hazard problem, is to ensure (as far as possible) the provision of appropriate incentives so that agents act in the way principals wish them to. It involves changing the institutional arrangement (rules of the game) so that the choices that the principal predicts the agent will make coincide with the choices the principal desires.

Agency theory studies the design of ex ante incentive-compatible mechanisms to reduce agency costs in the face of potential moral hazard by agents: it addresses the question of how a principal (for example, an owner of capital or manager of labor) can structure contracts, incentives, and sanctions to encourage, at low cost, agents (users of capital, or laborers) to behave in ways that will lead to the achievement of the **principal’s goals**. Alternative strategies can also be designed to minimize the costs of constrain adverse agents and encourage suitable agents. They are largely concerned with the motivational problems posed by the relationships and the design of incentive-compatible mechanisms to reduce agency costs and in some case constrain opportunistic actions.

The agency theory is very relevant in explaining the transaction problems observed in many markets. This approach address principal-agent problem in terms of principal’s strategy in designing incentive compatible arrangement that economize the transaction costs posed by the agency problem. Such strategic responses of the principal is discussed in the theory of economic organizations.

**Principles of contracts**

In a voluntary transaction context between the principal and the agent, the principal has to design incentive-compatible contracts. Milgrom and Roberts (1992) identify four basic principles of contract design:

1.The informativeness principle: any measure of performance that (on the margin) reveals information about the effort level chosen by the agent should be included in the compensation contract.

2.The incentive-intensity principle: an optimal intensity of effort is devoted to solving the principal-agent problem, so it will to some extent always be “not fully resolved,” and thus principal-agent issues are always subject to further experiment and contest in the public and private sectors.

3.The monitoring intensity principle: situations in which the optimal intensity of incentives is high correspond to those in which the optimal level of monitoring is also high.

4.The equal-compensation principle: activities equally valued by the employer should be equally valuable (in terms of compensation, including such nonfinancial aspects as pleasantness) to the employee. This principle relates to the problem that employees may be engaged in several activities, and if some of these are not monitored or are monitored less heavily, they will be neglected, as activities with higher marginal returns to the employee are favored. Targeting certain measurable variables may cause others to suffer. For example, if agricultural extension workers are rewarded by the volume of input packages sold to farmers or the number of loans granted to farmers, they may deemphasize equally or more important aspects of their role that were not explicitly targeted in their performance contract.

**2.4. Judicial decision making**

Property rights are useless if they are not secured by an appropriate law. Hence, to utilize the full potential of property rights the legal system must guarantee the owner complete freedom of choice and exclusiveness with respect to the relevant asset. Hence, neither state-run nor private expropriation can be tolerated.

However, complete secure property rights can only exist under the rule of law and thereby with an independent judiciary. Any other legal system offers a possibility for private or state-run interest groups to intervene. Even if a non-democratic government provides secure property rights, the form of government permits minorities to enforce their interests via a coup d’etat or bribery, for example.

Hence, de facto political power is able to determine the legal environment to the detriment of property rights.

Therefore, the rule of law and an independent judiciary are essential for secure property rights.

The rule of law and an independent judiciary are guaranteed in democratic states.

Hence, the allocation of secure property rights is usually accompanied by a democratic system and postulates an independent judiciary. This is the case since the legal system must be able to enforce property rights against governmental and private of- fences. Democracy ensures that formal institutions cannot be changed on behalf of a certain interest group that possesses the appropriate resources. Property rights in conjunction with civil liberties guarantee the efficient use of every asset in a society, and thereby the optimization of per capita income. Nevertheless, property rights can also exist and be protected in other political systems, but since their application will probably be constrained in a non-democratic state, total economic efficiency will be adversely affected (Besley&Kudamatsu, 2008; Rodrik, 2007). Furthermore, to develop their full potential ownership rights must be accompanied by a free-market system that allows any individual to use their assets in a way that maximizes their utility. Then, the economy can realize its maximal growth potential on an aggregated level.

**2.5. Markets and firms**

Efficient markets are a consequence of institutions that provide low-cost measurement and enforcement of contracts at a particular moment, but I am interested in markets with such characteristics over time. Essential to efficiency over time are institutions that provide economic and political flexibility to adapt to new opportunities. Such adaptively efficient institutions must provide incentives for the acquisition of knowledge and learning, induce innovation, and encourage risk taking and creative activity.

In a world of uncertainty, no one knows the correct -;olution to the problems we confront, as Hayek has persuasively argued. Therefore institutions should encourage trials and eliminate errors. A logical corollary is decentralized decision making that will allow a society to explore many alternative ways to solve problems.

It is equally important to learn from and eliminate failures. The institutions therefore must not only provide low-cost measurement of property rights and bankruptcy laws, but also provide incentives to encourage decentralized decision making and effective competitive markets.

**Chapter 3: Demand for institutions**

**3.1. The role of transaction costs**

 Dear learner, can you write what are the roles of transaction cost economics in societal economic development?

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Transaction is a transfer of a good or service across technologically separable interfaces. Transaction costs also defined as the “costs of running the economic system. These transaction costs are distinguished as ex-ante and ex-post transaction costs. Ex-ante transaction costs include those of drafting, negotiating, and monitoring an agreement. Ex-post transaction costs is refers to the costs of mal adaption, haggling, setup, and running associated with governance and the bonding costs of securing commitment

Coase defined transaction costs as the “cost of using the price mechanism” or “cost of carrying out a transaction by means of an exchange on the open market”. In the New Institutional Economics (NIE) transaction costs are typically defined as the costs of negotiating, writing, monitoring and enforcing a contract. NIE theorists focus on the intangible costs that require indirect methods of estimation. These costs are the result of limited knowledge and information captured by the terms “bounded rationality” and “information costs.”

Bounded rationality refers to the inability to have perfect information, so that contracts that cover a period of time are inherently incomplete and may require renegotiation should unexpected events arise. Information costs refer to the unobservability of effort in gathering information, such as quality levels and knowledge, so that third parties (a judge, for example) cannot verify whether a buyer and seller have fully complied with their exchange agreements. Uncertainty refers to the inability to anticipate all possible contingencies, increasing the likelihood of renegotiating a contract. Transaction risks represent the losses incurred because of failure to enforce exclusive property rights, enforce required attributes, or complete the transaction. Spot-market transactions are the normal form of transaction in basic neoclassical economics

# 3.2. The Origin of Transaction cost

 Dear learner, can you write what are the origin of transaction cost economics in societal economic development?

The general hypothesis of transaction-cost economics (TCE) is that institutions are transaction-cost reducing arrangements that may change and evolve with changes in the nature and sources of transaction costs. Coase (1937) pioneered this work in his article “The Nature of the Firm,” in which he argued that market exchange is not costless. Coase underlined the important role of transaction costs in the organization of firms and other contracts. He explained that firms emerge to economize on the transaction costs of market exchange and that the boundary of a firm or the extent of vertical integration depends on the magnitude of these transaction costs. Coase was not the first to use the term “transaction costs” (the term is attributed to Arrow) but expanded on this concept in his paper “The Problem of Social Cost” (Coase 1960). His insight that the costs of reaching, modifying, and implementing agreements restrain the potential gains from trade provided the foundation for analyzing organizations and governance in terms of transaction cost. Thus, in a world of transaction costs, the relative merits of different organizational forms depend on a comparison of the costs of transacting under each.

Arrow (1969) defined transaction costs as the “costs of running the economic system.” These transaction costs are distinguished as ex-ante and ex-post transaction costs.Ex-ante transaction costs include those of drafting, negotiating, and monitoring an agreement. Ex-post transaction costs is refers to the costs of mal adaption, haggling, setup, and running associated with governance and the bonding costs of securing commitment (Williamson 1985). Moreover, unlike market price, transaction costs are unique to each agent or firm and are related to the process of exchange itself.

Eggertson (1990) provides perhaps one of the more comprehensive discussions on the reasons for the existence of transaction costs, also emphasizing that information costs and transaction costs are not identical. When information is costly various activities related to the exchange of property rights between individuals give rise to transaction costs.These activities include: Haggle is an attempt to decide on a price or conditions which are acceptable to the person selling the goods and the person buying them, usually by arguing. Example it’s traditional that you haggle over/about the price of things in the market

1.The search for information about the distribution of price and quality of commodities and labor inputs, and the search for potential buyers and sellers and for relevant information about their behavior 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; and 6. The protection of property rights against third party encroachment.

The uncertainty of the behavior of trading partners and the costs of contract negotiation identified by Eggertson are key sources of transaction costs identified in the literature. Schmid (2004), however, adds another two to the list: 1) The uncertainty of future states of the world ,particularly the general level of demand and new technology and 2) The inability of the brain to deal with complex decision making (people find it difficult to deal with complexities and therefore rely on routines).

As developed by Williamson (1975, 1985, 1996); Klein, transaction cost economy maintains that the implication of positive transaction costs is that contracts are typically incomplete. Therefore, parties that invest in relationship specific assets expose themselves to the hazard that, if circumstances change, their trading partners may try to expropriate the rents accruing to specific assets (assets that have been committed to a particular transaction), a hazard known as the hold-up problem (Shelanski and Klein 1995). Transactions costs are then costs incurred by parties to protect themselves against the hold-up problem, and institutions are sets of rules, arrangements, and relationships that parties invest in to economize on such costs . Thus institutions are a means to reduce information and transaction costs. Alternatively, to follow Dorward’s (2001) argument, institutions are formed to reduce uncertainty in human exchange (or risk). Markets are only one type of social device for settling the terms of transactions. The focus here is thus on the costs of doing business, specifically, the making, monitoring, and enforcing of contracts. The ease or difficulty of contracting and the types of contract made are determined by the level and nature of transaction costs. These costs are influenced by the extent of imperfect information involved in making a transaction and the risks involved in transaction failure. Williamson (1991) identifies three major determinants of transaction costs and of transaction cost-reducing governance structures: 1) The specificity of assets involved 2) The uncertainties surrounding the transaction, and 3) The frequency of that transaction.

Ménard (2005) notes that these three variables are notoriously difficult to measure, and almost all the empirical literature avoids any attempt at measuring transaction costs directly, using instead reduced-form models in which transaction costs are assumed to be minimized. However, Williamson (1991) argues that transaction costs increase with a higher degree of asset specificity, a higher degree of uncertainty, and lower frequency of transaction. Furthermore, Williamson reasons that increases in these three variables are associated with shifts from spot markets to hybrid to hierarchical forms of governance, the last form involving vertical integration or a variety of alternative governance structures or institutional arrangements of economic organization.

The working hypothesis of TCE is thus that economic organization is an effort to align transactions, which have different attributes, with governance structures, with different costs and competencies, in a cost-economizing way (Williamson 1991). More precisely, it is an effort to maximize profits allowing for trade-offs among risks of contracting; transaction costs required to reduce those risks; and normal production (or transformation) costs, risks, and revenues (Dorward 2001). Conventional analysis of market failures makes use of two attributes to distinguish among four basic types of goods and services: excludability and subtractability (or rivalness) of use. Excludability relates to the difficulty of restricting those who benefit from the provision of a good or a service. Subtract ability or rivalness refers to the extent to which one individual’s use subtracts from (or rivals) the availability of a good or service for consumption by others. Both of these attributes can range from low to high and can be used as the defining attributes of the following basic types of goods: Private goods have both high excludability (through private property rights) and high subtractability. When a private good (or service) is consumed, there is nothing left for the next consumer. Examples include food, clothing, and consumer goods.

Toll goods (sometimes referred to as club goods) have high excludability (people can be excluded through payment of tolls or memberships) and low subtractability.Examples include roads and various services for which fixed costs are high relative to variable costs and use is low relative to capacity. Sub tractability generally increases as utilization increases.

Public goods yield non subtractive benefits that can be enjoyed jointly by many people who are hard to exclude from obtaining these benefits. Examples include enjoyment and use of general environmental services, such as clean air, and institutional services, such as law and order. Common pool resources have low excludability, but the use of such a resource subtracts from that resource. Examples include natural fisheries and common lands used for grazing, hunting, or extraction of other natural resources. Merit goods are those with private good characteristics but that yield further non excludable positive externalities. Examples include education and health services, which provide immediate excludable and subtractable benefits to individuals, but their use by individuals provides further benefits to society as a whole (by raising the productivity of labor).

Note that increasing population pressure and/or economic growth often cause subtractability or rivalness to increase, whereas technical and institutional changes can lead to changes in exclusion costs. Thus, for example, subtractability in the use of fisheries increases with increasing fishing intensity. With regard to excludability, although digital technology has made the copying of music much easier and hence reduced excludability in the music industry, new electronic surveillance and tracking technologies allow better low-cost control of access to fisheries and toll goods, such as roads. Increases in excludability may also be achieved by changes in institutional arrangements.

**3.2. Interdependence between transaction costs and institutions**

The turn towards transaction costs and institutions did not mean a turn away from neoclassical economics, however. The assumption of zero transaction costs and unchanging institutions could be relaxed within the context of neoclassical theory. As North (1971) argued: “What we need is a body of theory which encompasses the traditional models of the economist and both widens its scope and allows us to include an explanation of the formation, mutation and decay of organizational forms within which man cooperates or competes.”

North was moving towards a neoclassical theory of institutions in which the form of institutions or organizations was itself determined by traditional neoclassical rationality and constraints. The idea that neoclassical theory could be used to explain why institutions functioned as they did was a fundamental breakthrough and North’s second major conceptual contribution. The idea was implemented in a series of papers with Lance Davis and with Robert Paul Thomas, which led to two books (Davis and North 1971, North and Thomas 1973).

Both books argue that we can explain changes in the organization of human interaction (institutions) on the basis of the rational interests of individuals attempting to structure the world around them in ways that maximize net benefits. The classic application of the technique is North and Thomas’s explanation of how the rising price of labor in fourteenth century Europe as a result of the Black Death, led to the institution of wage labor in western Europe and a return to the institution of serfdom and slavery in Eastern Europe. The same relative price shock led to two different, but both rational, institutional changes.

Two lines of thinking emerged from the idea of neoclassical institutions, and they were not entirely consistent with one another. In one line, institutional change occurs because of short-run variations in relative prices that create, at some point in time, the incentives to restructure human organizations. For some reason, these changes persist.

This led North to investigate both path dependence and transaction costs. Transaction costs play a key role, because they are both a reason to change institutions to reduce (or increase) transaction costs, and because transaction costs subsequently can make it difficult to change institutions and so contribute to institutional persistence.

The other line of thinking was a growing dissatisfaction with neoclassical economics altogether as a way to understand the process of economic growth specifically, and more broadly to understand the process of economic change over time. His third significant breakthrough was the realisation that neoclassical theory was not just inadequate, but that it was unable to explain long-term economic and institutional change in any society, growing or not.

North directed his first clear criticism at economic historians, while acknowledging the important contribution that economic theory and quantitative techniques made to advancing our understanding of historical processes, nonetheless. “From my quite subjective perspective, the new economic history has made a significant contribution to revitalizing the field and advancing the frontiers of knowledge. Yet I think it stops short – far short – of what we should be accomplishing in the field.” (North 1974, p. 1).

Criticism of neoclassical theory in economic history

His criticism of neoclassical theory in economic history, development, and growth would culminate in North (1981), which many (including myself) believe to be his best book. The introduction and second chapter extend the argument that we must have more than a history of markets to understand economic change. The third chapter titled “A Neoclassical Theory of the State”, lays out a logical neoclassical argument for why, in the presence of transactions costs, political systems do not inevitably evolve institutions that promote economic growth. Indeed, as long-term economic history suggests, the tendency is for political systems to evolve that do not support growth. Chapters four and five argue that we need a theory of organizations as well as a theory of beliefs and ideology if we are to understand long-run change, particularly long-run change that does not inevitably produce growth and development.

The contradiction between the two lines of thinking is clear in North (1981). On the one hand, there is a strong argument that neoclassical economics is incapable of delivering the full range of explanations necessary to understand economic change, particularly ideologies and beliefs. On the other hand, there is a strong argument that rational individual behaviour is consistent with institutional choices that retard, rather than promote, economic growth. One wonders whether the question is to be neoclassical or not to be neoclassical?

The real question the book is trying to grapple with is: Persistence or change? Going back to North and Thomas (1973), institutions change when there are gains from doing so, but then persist because of the high transaction costs of changing them.

In North (1981), beliefs and ideologies persist. Because beliefs (and norms and culture) are based on the cumulative experience of society passed down through culture and formed through repeated interactions of many people through norms of behaviour, beliefs do not change quickly and it is extremely difficult to for social actors to manipulate beliefs in current time.

As a result, beliefs are always a function of what happened in the past and can impede change in the present for good or ill. It is the persistence of beliefs and institutions from the past (culture) that explain why changes in the present often produce results that impede rather than promoting growth and development. The importance of beliefs in this framework plays a major role in North (1990) and it is the central focus of North (2005).

The framework in North (1981) includes two different time patterns of institutional change. One is episodic and discontinuous, like the move towards wage payments after the Black Death in Western Europe; the other is continuous and marginal. Changes in beliefs and ideologies, in norms, and in informal and formal rules occur constantly and, while changes sometimes persist, they need not. Neither continuous nor episodic institutional change is necessarily persistent.

Fleshing out these ideas in the 1980s produced a classic example of change during a crisis that persists: the analysis of constitutional institutions in seventeenth-century England in North and Weingast (1989). This paper’s emphasis on institutional mechanisms explains why particular institutions are self-enforcing and persist over time. At the same time, North was writing his 1990 book Institutions, Institutional Change, and Economic Performance. Persistence plays a large role in this book, which regularly emphasizes that the function of an institution is to provide stability and predictability to human behavior.

The big contribution of the 1990 book, however, is the definition of institutions that North called the sports analogy. Institutions are the rules of the game and the means of enforcement, and organizations are the teams that play the game. The definition motivates three behavioral choices that organizations can make: one is to maximize under the rules; the second is to devote resources to changing the rules; and the third is to cheat. The alternatives are not mutually exclusive, and they comprise a framework for understanding the dynamics of institutional change.

**Chapter 4: Measurement of transaction costs**

Measuring transaction costs has been a burning issue since it appeared for the first time. However, the measuring works face numerous difficulties. First, there is no unified conclusion about the definition of transaction costs. So, it is too hard to identify what transaction should be considered, what costs or expense should be regarded as transaction costs. Second, it’s unobservable that costs appear in the shape of non-market value. Because of different culture and customs backgrounds, different behaviors in transactions lead to different transaction costs. They are too difficult to be calculated numerically. Thirdly, opportunity cost cannot replace the transaction costs. The principals conducted in transaction are just a little portion of numerous transaction behaviors, and opportunity costs can just represent a part, but not all. It’s also important for measuring transaction costs to analyze why the principal adapts one but not others. The methods of transaction costs measurement are separated into macro and micro aspects. On the macro aspect it refers measuring the costs of economics system operation or institution transformation. On the micro aspect, it refers measuring the costs of some industry or field executing a transaction. We should also consider the meaning of transaction costs on two aspects. The measurement includes accurate measuring and margin contrast analysis. The former means adopting statistics data to calculating the costs, and the latter means non-accurate but comparable analysis.

On the Macro Aspect

Most of the works on macro aspect are concentrated on the measuring economy transaction costs and studying interaction between transaction costs and economic growth.

**Direct Measurement:** In this direct measurements scholars first, partition the economic as national economics sections, transaction section, actions of economic principals. Then, use indexes such as employee compensation, industry growth, GNP or GDP to calculate costs. Yet, the imperfect is that they simply add the calculable value in the market but haven’t considered the transaction costs which should also be seen as market price. It is reasonable to separate the social operation costs into transaction costs and transfer costs but difficult to implement. In China, Miao and Chen (2002) have adapted the method of direct measurement to measure the transaction costs of national economic from 1978 to 2000. They also proposed the macroeconomic frame of transaction costs measurement. Enterprise should be regarded as basic surface when measuring transaction costs, and at the same measuring the transaction costs inside and outside of it. All in all, we can see that the surface of enterprise links the macro aspect together to the micro aspect in the figure1.

**Building Measurement Model:** The popular measuring model is Structural Equation Model. Da & Zhang (2009) have built a model of Multiple Indicators and Multiple Causes upon Structural Equation Model and measured the scale of non-market transaction ever since China reform and opening up to the outside world. The transaction costs are important indicators when evaluating national economy like GDP and GNP. The total national transaction costs are consisted of transfer sections costs, trading sections costs and public sections costs.

Buying and selling costs

Figure 4 Frame of transaction cost measurement

Observable Transaction Costs

Family search costs

Transaction costs

Direct transaction costs

Enterprise transaction costs

National transaction service costs

Interior management costs

Unobservable transaction costs

Indirect transaction costs

Intermediate input costs

Transaction input final product

Transaction medium department cost

### On the Micro Aspect

**Buy-Sell Price Margin Method:** This method has provided the measuring of enterprise aspect. It is helpful for an enterprise to choose the pattern of operating and profit, but it hasn’t included the costs of monitoring, enforcing and time.

**Typical Reference Quantities Method:** Selecting typical reference quantities such as time, price, transaction population number, and unity them into the same unit. The key point of this method is to find out the easy available or to switch quantities among numerous indicates.

$$Ex ante transaction costs \left(ExanteTC\right)=\left( total annual person days of face to face time spent \right)\*\left(percent of time spent on price negotiation/contracting\right)÷(supplier sales to the buyer)$$

**Data Statistics Method:** Many scholars directly use government statistics data or field survey statistics to conduct research although this way needed to cost a large number of manpower, material resources and time, but it contributes to remarkable and persuasive achievement. Government institutions documents researching can be regarded as a means of measuring public policy transaction costs. It is possible to study communication, documents, contract agreement, telephone, conference, web access and other information from the government departments.

##  Difficulties of Transaction Costs Measurement

Measuring about transaction costs has been a burning question since it appears. However, the measuring works face numerous difficulties. First, there is no unified conclusion about the definition of transaction costs. So it is too hard to identify what transaction should be considered, what costs or expense should be regarded as transaction costs. Second, it’s unobservable that costs appear in the shape of non-market value. Because of different culture and customs backgrounds, different behaviors in transactions lead to different transaction costs. They’re too difficult to be calculated numerically. Thirdly, opportunity cost can’t replace the transaction costs. The principals conducted in transaction are just a little portion of numerous transaction behaviors, and opportunity costs can just represent a part, but not all. It’s also important for measuring transaction costs to analyze why the principal adapts one but not others.

On the perspective of contract signing and executing, Matthews (1986) presents the fundamental idea of transaction costs. He believes that transaction costs consist of the costs of arranging a contract before signing and monitoring and enforcing it after signing, as opposed to production costs, which are the costs of executing the contract. We considered that his narrow definition enables the measuring of transaction costs. That is the work of measuring could be preceded around the contract. For the contract arranging, executing, monitoring and enforcing, one could measure the transaction costs in different stages separately. So we consider Matthews’ definition is supportable and reasonable for measuring.

**Chapter 5: Governance Structure**

**Governance Structures (Types of Contractual Arrangements)**

In 1985 year, Williamson considers the main contractual agreements for provision of services can be dividedinto three groups:

1.Market arrangements: A market transaction occurs if a farmer hires a machine from a provider without establishing any relationship with the provider. In a typical agricultural setting, this pure “spot market” formachinery services does not appear to be very relevant, because of information asymmetries. Farmersprefer to continuously hire machinery from the same provider with whom they establish a relationship oftrust. Farmer contractors represent the most market-oriented solution among the available contractualarrangements. But even here some social relationships between provider and client can be found, built ontrust and interest in long-term customer relationship.

2.Hierarchical arrangements: If a farmer purchases the machine for his farm, one can interpret this as a“hierarchical arrangement” in Williamson’s sense (1985) because the transaction is organized within thefarm enterprise (hierarchy) rather than hired in form of a market transaction. If a farmer establishes a longtermrelational contract with an enterprise to hire in machinery services, this can also be considered as ahierarchical arrangement.

3.Co-operative arrangements: In principle it is useful to consider three different types of co- operativearrangements: (A) informal sharing (= sharing of machinery and work between neighbors without cashpayment, which in the region occurs mainly on farms with smaller area), (B) farmer groups (= informalgroup of farmers, who buy machinery together and use it within the group. Often extended family membersand neighbors), and (C) Cooperatives (= formal organized larger group of farms, where farmers aremembers and pay annual fees and the machinery belongs to the cooperative).

The match of governance structures with transactions attributes those results from these previous economizing efforts is shown in Figure 3.



**5.1 Market governance**

Classical Contracting. Market governance is the main governance structure for nonspecific transactions of both occasional and recurrent contracting. Markets are especially efficacious when recurrent transactions are contemplated, since both parties need only consult their own experience in deciding to continue a trading relationship or, at little transitional expense, turn elsewhere. Being standardized, alternative purchase and supply arrangements are presumably easy to work out.

Nonspecific but occasional transactions are ones for which buyers (and sellers) are less able to rely on direct experience to safeguard transactions against opportunism. Often, however, rating services or the experience of other buyers of the same good can be consulted. Given that the good or service is of a standardized kind, such experience rating, by formal and informal means, will provide incentives for parties to behave responsibly. To be sure, such transactions take place within and benefit from a legal framework. But such dependence is not great. As S. Todd Lowry puts it, "the traditional economic analysis of exchange in a market setting properly corresponds to the legal concept of sale (rather than contract), since sale presumes arrangements in a market context and requires legal support primarily in enforcing transfers of title." He would thus reserve the con-cept of contract for exchanges where, in the absence of standardized market. Alternatives, the parties have designed "patterns of future relations on which they could rely.

The assumptions of the discrete-contracting paradigm are rather well satisfied for transactions where markets serve as a main governance mode. Thus the specific identity of the parties is of negligible importance; substantive content is determined by reference to formal terms of the contract; and legal rules apply. Market alternatives are mainly what protect each party against opportunism by his opposite. Litigation is strictly for settling claims; concentrated efforts to sustain the relation are not made because the relation is not independently valued

**5.2 Trilateral governance**

1. Neoclassical Contracting. The two types of transactions for which: trilateral governance is needed are occasional transactions of the mixed and highly idiosyncratic kinds. Once the principals to such transactions have entered into a contract, there are strong incentives to see the contract through to completion. Not only have specialized investments been put in place, the opportunity cost of which is much lower in alternative uses, but the transfer of these assets to a successor supplier would pose inordinate difficulties in asset valuation.56 The interests of the principals in sustaining the relation are especially great for highly idiosyncratic transactions. Market relief is thus unsatisfactory. Often the setup costs of a trans-action-specific governance structure cannot be recovered for occasional transactions. Given the limits of classical contract law for sustaining these transactions, on the one hand, and the prohibitive cost of transaction-specific (bilateral) governance, on the other, an intermediate institutional form is evidently needed. Neoclassical contract law has many of the sought-after qualities. Thus rather than resorting immediately to strict reliance on litigation-with its transaction-rupturing features-third-party assistance (arbitration) in resolving disputes and evaluating performance is employed instead. (The use of the architect as a relatively independent expert to determine the content of form construction contracts is an example.)57 Also, the expansion of the specific-performance remedy in past decades is consistent with continuity purposes-though Macneil declines to characterize specific performance as the "primary neoclassical contract remedy."58 The section of the Uniform Commercial Code which permits the "seller aggrieved by a buyer's breach . . . unilaterally to maintain the relation"59 is yet another example.

**5.3. Bilateral governance**

3. Transaction-specific Governance: Relational Contracting. The two types of transactions for which specialized governance structures are commonly devised are recurring transactions of the mixed and highly idiosyncratic kinds. The no standardized nature of these transactions makes primary reliance on market governance hazardous, while their recurrent nature permits the cost of the specialized governance structure to be recovered. Two types of transaction-specific governance structures for intermediate-production market transactions can be distinguished: bilateral structures, where the autonomy of the parties is maintained, and unified structures, where the transaction is removed from the market and organized within the firm subject to an authority relation (vertical integration). Bilateral structures have only recently received the attention they deserve and their operation is least well understood. (a) Bilateral Governance: Obligation Contracting. Highly idiosyncratic transactions are ones where the human and physical assets required for production are extensively specialized, so there are no obvious scale economies to be realized through interfirm trading that the buyer (or seller) is unable to realize himself (through vertical integration). In the case, however, of mixed transactions, the degree of asset specialization is less complete. Accordingly, outside procurement for these components may be favored by scale-economy considerations.

As compared with vertical integration, outside procurement also is good in eliciting cost control for steady-state supply. Problems, however, arise when adaptability and contractual expense are considered. Whereas internal adaptations can be effected by fiat, outside procurement involves effecting adaptations across a market interface. Unless the need for adaptations has been contemplated from the outset and expressly provided for by the contract,which often is impossible or prohibitively expensive, adaptations across a market interface can be accomplished only by mutual, follow-on agree-ments. Inasmuch as the interests of the parties will commonly be at variance when adaptation proposals (originated by either party) are made, a dilemma is evidently posed. On the one hand, both parties have an incentive to sustain the relation-ship rather than to permit it to unravel, the object being to avoid the sacrifice of valued transaction-specific economies. On the other hand, each party appropriates a separate profit stream and cannot be expected to accede readily to any proposal to adapt the contract. What is needed, evidently, is some way for declaring admissible dimensions for adjustment such that flexibility is provided under terms in which both parties have confidence. This can be accomplished partly by (1) recognizing that the hazards of opportunism vary with the type of adaptation proposed and (2) restricting adjustments to those where the hazards are least. But the spirit within which adaptations are effected is equally important.60 Quantity adjustments have much better incentive-compatibility proper-ties than do price adjustments.

For one thing, price adjustments have an unfortunate zero-sum quality, whereas proposals to increase, decrease, or delay delivery do not. Also, except as discussed below, price-adjustment proposals involve the risk that one's opposite is contriving to alter the terms within the bilateral monopoly trading gap to his advantage. By contrast, a presumption that exogenous events, rather than strategic purposes, are re-sponsible for quantity adjustments is ordinarily warranted. Given the mixed nature of the exchange, a seller (or buyer) simply has little reason to doubt the representations of his opposite when a quantity change is proposed. Thus buyers will neither seek supply from other sources nor divert prod-ucts obtained (at favorable prices) to other uses (or users)-because other sources will incur high setup costs and an idiosyncratic product is nonfungi-ble across uses and users. Likewise, sellers will not withhold supply because better opportunities have arisen, since the assets in question have a special-ized character. The result is that quantity representations for idiosyncratic products can ordinarily be taken at face value. Since inability to adapt both quantity and price would render most idiosyncratic exchanges nonviable, quantity adjustments occur routinely.

Of course, not all price adjustments pose the same degree of hazard. Those which pose few hazards will predictably be implemented. Crude escalator clauses which reflect changes in general economic conditions are one possibility. But since such escalators are not transaction-specific, imperfect adjustments often result when these escalators are applied to local conditions. We should therefore consider whether price adjustments that are more closely related to local circumstances are feasible. The issue here is whether interim price adjustments can be devised for some subset of conditions such that the strategic hazards described above do not arise. What are the pre-conditions? Crises facing either of the parties to an idiosyncratic exchange constitute one class of exceptions. Faced with a viability crisis which jeopardizes the relationship, ad hoc price relief may be permitted. More relevant and interesting, however, is whether there are circumstances whereby interim price adjustments are made routinely. The preconditions here are two: first, proposals to adjust prices must relate to exogenous, germane, and easily verifiable events; and second, quantifiable cost consequences must be confidently related thereto. An example may help to illustrate. Consider a component for which a significant share of the cost is accounted for by a basic material (copper, steel). Assume, moreover, that the fractional cost of the component in terms of this basic material is well specified. An exogenous change in prices of materials would under these circumstances pose few hazards if partial but interim price relief were permitted by allowing pass-through according to formula. A more refined adjustment than aggregate escalators would afford thereby obtains.

It bears emphasis, however, that not all costs so qualify. Changes in overhead or other expenses for which validation is difficult and which, even if verified, bear an uncertain relation to the cost of the component will not be passed through in a similar way. Recognizing the hazards, the parties will simply forgo relief of this kind.

**5.4. Unified governance**

Internal Organization. Incentives for trading weaken as transactions become progressively more idiosyncratic. The reason is that, as the specialized human and physical assets become more specialized to a single use, and hence less transferable to other uses, economies of scale can be as fully realized by the buyer as by an outside supplier. The choice of organizing mode then turns on which mode has superior adaptiveproperties. As discussed elsewhere, vertical integration will invariably appear in these circumstances. The advantage of vertical integration is that adaptations can be made in a sequential way without the need to consult, complete, or revise interfirm agreements. Where a single ownership entity spans both sides of the transactions, a presumption of joint profit maximization is warranted. Thus price adjustments in vertically integrated enterprises will be more complete than in interfirm trading. And quantity adjustments, of course, will be implemented at whatever frequency serves to maximize the joint gain to the transaction. Unchanging identity at the interface coupled with extensive adaptability in both price and quantity is thus characteristic of highly idiosyncratic trans-actions which are vertically integrated. Obligation contracting is sup-planted by the more comprehensive adaptive capability afforded by ad-ministration. The match of governance structures with transactions that results from these economizing efforts is shown in Figure II.

II.



**FIGURE II MATCHING GOVERNANCE STRUCTURES WITH COMMERCIAL TRANSACTIONS**

**Uncertainty**

Uncertainty Transactions conducted under certainty are relatively uninteresting. Except as they differ in the time required to reach an equilibrium-exchangeconfiguration, any governance structure will do. More relevant are transactions where uncertainty is present to an intermediate or high degree. The foregoing has dealt with the first of these. The question here is how the governance of transactions is affected by increasing the degree of uncertainty.

Recall that nonspecific transactions are ones for which continuity has little value, since new trading relations are easily arranged. Increasing the degree of uncertainty does not alter this. Accordingly, market exchange continues and the discrete-contracting paradigm (classical contract law) holds across standardized transactions of all kinds, whatever the degree of uncertainty. Matters are different with transaction-specific investments. Whenever in-vestments are idiosyncratic in nontrivial degree, increasing the degree of uncertainty makes it more imperative that the parties devise a machinery to "work things out"-since contractual gaps will be larger and the occasions for sequential adaptations will increase in number and importance as the degree of uncertainty increases. This has special relevance for the organiza-tion of transactions with mixed investment attributes. Two possibilities exist. One would be to sacrifice valued design features in favor of a more standardized good or service. Market governance would then apply. The second would be to preserve the design but surround the transaction with an elaborated governance apparatus, thereby facilitating more effective adap-tive, sequential decision making. Specifically, a more elaborate arbitration apparatus is apt to be devised for occasional, nonstandard transactions. And bilateral governance structures will often give way to unified ones as uncertainty is increased for recurrent transactions. Reductions in uncertainty, of course, warrant shifting transactions in the opposite direction. To the extent that uncertainty decreases as an industry matures, which is the usual case, the benefits that accrue to integration presumably decline. Accordingly, greater reliance on obligation market contracting is commonly feasible for transactions of recurrent trading in mature industries.

**Chapter 6: Institutional changes in the process of development.**

## Concepts of Institutional Change

A theory of institutional change is essential for further progress in the social sciences in general and economics in particular. The driving forces for institutional change are the technical progress and change in relative factor prices. Institutional change is the product of the interaction between demand and supply, basically influenced by the neoclassical equilibrium model. Market forces create a demand for institutional change.

**All institutions are equal; some institutions are more equal than others:** Different approaches seem to agree that institutions have different levels of manifestation and that some are easier to change than others. For example Hobsbawm in his analysis on the invention of tradition distinguishes between traditions and customs, while “the object and characteristics of ‘traditions’ is invariance”, customs do not “preclude innovation and change up to a point.

Alchian and Demsetz in their analysis of property rights argue “the most important effect of alterations in institutional arrangements may well be the impact of such reorganizations on the cost of transacting”. Taking the approach of transaction costs, institutional change is itself a resource using activity. Therefore the transaction costs of change have to be considered as a variable to determine the manifestation of the institution.

The Coase-theory argues that institutions will be “altered when the benefits from change will exceed the costs”. However, the context has to be considered. Rule changes may result from self conscious choice or may evolve over time as people develop shared understandings of what actions or outcomes may, must, or must not be done in particular situations. It is pointed out that there are different levels of rules ordered in a hierarchical system, “where each level is more costly to change than the previous one”. The costs of change are dependent on the set of rules, and are the highest for alterations of constitutional choice rules.

 Changes in deeper-level rules usually are more difficult and more costly to accomplish, thus increasing the stability of mutual expectations among individual interacting according to a set of rules”. The discussion on different manifestations of institutions indicates that the transaction costs for change vary. The costs for change are positively related with the level of institution. An analysis for the reasons of change might help to determine the costs of change.

**Reasons for change:** Formal and informal institutions may change over time. So what determines during the process of structural reproduction the alteration of certain structures? The reasons for change can be “an artifice of extreme information incompleteness”. According to this approach, the individual or the communities are only partially informed about the ‘world’ and the relations of subjects and objects in the world to each other.

Hence, not all parameters are known. Individuals and communities establish institutions with their incomplete information. New information about the objects and subjects in the world is changing the definition of the position of the individual and the community. New information may trigger new self-definition, communication, practices or technical changes. These in turn could lead to either new institutions or manifestations of the old formal and informal institutions.

However, the focus on new information seems to be incomplete, new information is not the only cause of change. The individual has a variety of choices to respond to one structure, or to choose different structures, decisions for possible responses may change the settings and can lead to new self-definitions of the actor, or to new definitions of the social environment about the actor. Again the new self-definition may lead to new practices, which might change informal and formal structures.

According to the above approaches, every institution is vulnerable to influences and hence to change. The situation of the institution might be determined through inner and outer influences, which encourage changes, either in information or in the behavior of individuals. Institutional change occurs when a sufficient number of individuals are able to disrupt the institution. However, as the focus on different stakeholder groups indicates, the number of individuals is not the main determinant of change. It seems that the power position of the individual is important. Powerful individuals unsatisfied with the current situation can dominate the process of institutional change. The focus on power in relation to institutional change allows a combination of demand and supply approaches to induced institutional change. Hence, the focus on the role of power structures and power relations is a key to analyze institutional change.

In the New Institutional Economics (NIE) literature two different approaches to institutional change are used: demand and supply induced change. NIE scholars have argued in their earlier work that the main reason for change is minimization of transaction costs and efficiency. “It is as if it were being assumed that institutional innovation took place in a perfectly competitive political arena guaranteeing that only efficiency-improving innovations would be selected.”

However, the main advocate of demand induced change, had to abandon the claim that institutional change is an attempt to increase efficiency. North argued that inefficient institutions stay unchanged if they have the necessary support. That is, institutions stay in place either because of “path dependency, the Prisoner Dilemma or imperfect information about future gains”. He reasons “in the first explanation, high sunken costs induced by past institutions make transition to what could be a superior institution socially unprofitable.

In the second explanation, without cooperation, the cost of breaking an existing rule may be too high on individuals, and it is thus individually rational for socially sub-optimum institutions such as castes to remain existence.” A different perspective is taken by Garston, who argues still in line with North, “institutions may persist in behavior and structure may be maintained, when neither serves the current interests of participants”. Garston’s reasoning is similar to the distinction of Hobsbawm between traditions and customs. Garston states “the interplay between the two aspects (ceremony and function) of organizations is seen as highly related to changes in the technology employed, since what is functional once may become ceremonial when methods of production change”. However, while Garston’s approach only relates to technological changes and production, Hobsbawm approach focuses on customs, which become fixed in time, because of political decision to manifest status and values. Keohane validates this reasoning and argues “considerations of power and status may be more important than the functions performed by the institutions.

## Institutional Change: Agents, Sources, Process, Direction

The agent of change is the entrepreneur, the decision maker(s) in organizations. The subjective perceptions (mental models) of entrepreneurs determine the choices they make. The sources of change are the opportunities perceived by entrepreneurs. They stem from either external changes in the environment or the acquisition of learning and skills and their incorporation in the mental constructs of the actors. Changes in relative prices have been the most commonly observed external sources of institutional change in history, but changes in taste have also been important. The acquisition of learning and skills will lead to the construction of new mental models by entrepreneurs to decipher the environment; in turn the models will alter perceived relative prices of potential choices. In fact it is usually some mixture of external change and internal learning that triggers the choices that lead to institutional change.

Deliberate institutional change will come about therefore as a result of the demands of entrepreneurs in the context of the perceived costs of altering the institutional framework at various margins. The entrepreneur will assess the gains to be derived from reconstructing within the existing institutional framework compared to the gains from devoting resources to altering that framework. Bargaining strength and the incidence of transaction costs are not the same in the polity as in the economy, otherwise it would not be worthwhile for groups to shift the issues to the political arena. Thus entrepreneurs who perceive themselves and their organizations as relative (or absolute) losers in economic exchange as a consequence of the existing structure of relative prices can turn to the political process to right their perceived wrongs by altering that relative price structure. In any case it is the perceptions of the entrepreneur--correct or incorrect--that are the sources of action.

Changes in the formal rules may come about as a result of legislative changes such as the passage of a new statute, of judicial changes stemming from court decisions that alter the common law, of regulatory rule changes enacted by regulatory agencies, and of constitutional rule changes that alter the rules by which other rules are made.

Changes in informal constraints—norms, conventions, or personal standards of honesty, for example—have the same originating sources of change as do changes in formal rules; but they occur gradually and sometimes quite subconsciously as individuals evolve alternative patterns of behavior consistent with their newly perceived evaluation of costs and benefits.

The process of change is overwhelmingly incremental. The reason is that the economies of scope, the complementarities, and the network externalities that arise from a given institutional matrix of formal rules, informal constraints, and enforcement characteristics will typically bias costs and benefits in favor of choices consistent with the existing framework. The larger the number of rule changes, ceterus paribus the greater the number of losers and hence opposition. Therefore, except in the case of gridlock (described below), institutional change will occur at those margins considered most pliable in the context of the bargaining power of interested parties. The incremental change may come from a change in the rules via statute or legal change. For informal constraints there may be a very gradual withering away of an accepted norm or social convention or the gradual adoption of a new one as the nature of the political, social, or economic exchange gradually changes.

The direction of change is determined by path dependence. The political and economic organizations that have come into existence in consequence of the institutional matrix typically have a stake in perpetuating the existing framework. The complementarities, economies of scope and network externalities mentioned above bias change in favor of the interests of the existing organizations. Both the interests of the existing organizations that produce path dependence and the mental models of the actors—the entrepreneurs--that produce ideologies "rationalize" the existing institutional matrix and therefore bias the perception of the actors in favor of policies conceived to be in the interests of existing organizations.

Both external sources of change and unanticipated consequences of their policies may weaken the power of existing organizations, strengthen or give rise to organizations with different interests and change the path. The critical actor(s) in such situations will be political entrepreneurs whose degrees of freedom will increase in such situations and, on the basis of their perception of the issues, give them the ability to induce the growth of organizations with different interests (or strengthen existing ones).

Revolutionary change occurs as a result of gridlock arising from a lack of mediating institutions that enable conflicting parties to reach compromises that capture some of the gains from potential trades. The key to the existence of such mediating political (and economic) institutions is not only formal rules and organizations but also informal constraints that can foster dialogue between conflicting parties. The inability to achieve compromise solutions may also reflect limited degrees of freedom of the entrepreneurs to bargain and still maintain the loyalty of their constituent groups. Thus the real choice set of the conflicting parties may have no intersection, so that even though there are potentially large gains from resolving disagreements, the combination of the limited bargaining freedom of the entrepreneurs and a lack of facilitating institutions makes it impossible to do so.

However revolutionary change is never as revolutionary as its rhetoric would have us believe. It is not just that the power of ideological rhetoric fades as the mental models of the constituents confront their utopian ideals with the harsh realities of post revolutionary existence. Formal rules may change overnight, but informal constraints do not. Inconsistency between the formal rules and the informal constraints (which may be the result of deep-seated cultural inheritance because they have traditionally resolved basic exchange problems) results in tensions which typically get resolved by some restructuring of the overall constraints--in both directions--to produce a new equilibrium that is far less revolutionary than the rhetoric.

## Demand Induced Change – Bottom-Up Change

North, taking a demand management approach to institutional change, argues, “The agent of change is the individual entrepreneur responding to the incentives embodied in the institutional framework. Change typically consists of marginal adjustments to the complex of rules, norms, and enforcement that constitute the institutional framework. For North the most important source of institutional change is the change of relative prices.

On the other hand Feeny argues, the basic source of the demand for changes in institutional arrangements is the recognition that existing arrangements leave potential gains uncaptured. Alchian and Demsetz looking at shifts from common property regimes to private property regimes argue that changes in technology and demands make the resource more valuable. Hence, changes in prices for the resource may lead to changes in institutions. These approaches are not necessarily contradictory. Taken into account that the veil of ignorance is slowly lifted, new information may lead to the recognition that existing arrangements leave gains uncaptured as well as new information may change the relative prices for a resource.

The introduction of the parameter ‘information’ links technological change and institutional changes. NIE literature points to the interdependence between technological and institutional change, whereby both influence each other and can induce change of the other. Hechter links the formation of institutions with changing environmental and demographic conditions. Institutions in place may adapt to increased or new demands, which are caused by environmental and demographic changes. Hechter, looking at the formation of institutions argues, “demand alone is insufficient to produce co-operative institutions”, he reasons “individuals must be highly visible to one another in order to reduce the severity of the free rider and assurance problem. His statement is useful for the debate on institutional change. Because it shows that demand alone is insufficient to induce changes. Demand has to be conjunctive with a potential control capacity. Keohane reasons that the formation of international regimes is determined by “relationships of power and dependence in world politics” and “constraints are dictated not only by environmental factors but also by powerful actors. In the context of institutional change it means that the success of demand-induced changes is based on power.

The theory of demand-induced changes is a bottom-up approach. It implies that small changes at the bottom influence the whole structure. Hechter reasons “if institutions emerge as a result of the demand for joint goods, then shifts in a variety of environmental and demographic conditions will heighten demand for certain kinds of joint goods and favour the emergence of institutions supplying these goods”.

Hajer, using an argumentative approach (communication science) to institutional change argues that the rules-in-use change when the implicit meaning of terms within communication changes. “Rules, distinction, or legitimate modes of expression, only have meaning to the extent that they are taken up. It implies that the rules and conventions that constitute the social order have to be constantly reproduced and reconfirmed in actual speech situations, whether in documents or debates.

##  Supply Induced Changes: Change From Above and From Outside

The demand approach to institutional change does not take into consideration that change can be induced from above. Binswanger refers to supply-side induced change, which can either be induced from above, within the institution, or change can also be induced through outsiders. He argues, institutional change may occur as a result of advances in the supply of knowledge about social and economic behavior, organization and change”. He points to similarities between institutional and technical change. In both cases change is possible through advances in knowledge in the specific disciplines. In the case of institutions, change could be induced by shifts in knowledge in the social sciences and their related professions.

Binswanger’s approach can be utilized at different levels of institutions. Hence outside knowledge does not necessarily change the whole institutions but only parts, which are directly influenced by new knowledge. However, for these parts the knowledge is provided from above and changes are implemented in a top-down approach. Downs’ assumption of the rational and selfish individual has consequences for institutional change. It implies that the politician’s individual return will be different to the social return and that the “institutional innovation will not be supplied at the social optimum level”.

In addition, arguing from Downs’ perspective, then one could reason that governments do not have a developmental goal and only organized pressure groups determine political goals and influence politicians. This is possible because the main goal of the politician is to stay in power. Therefore, they act according to the interest of powerful pressure groups, who could influence their re-election. This reasoning confirms the analysis of Olsen on collective action. “Both theories (public choice and collective action) suggest that the markets for economic and political resources wherein the demand for institutional change is expressed are so imperfect as to create fundamental biases in the direction of institutional change. These biases generally favor organized producers over consumers.

However, Khan argues against the purely rational and selfish motivation of Or utilizing Luhmann’s approach “communication between human beings is what makes society a reality”. The manifestation of changes such as law, are only the last evidence of change.

However, Binswanger is himself critical of the approach of supply induced institutional change, as mentioned earlier he sees similarities between institution and technology. He argues “inappropriate institutional transfer results in biases in the supply of institutional change that are similar to the biases that inappropriate technology transfer introduces into the supply of technical change. He continues, “Institutional innovations are probably even more location-specific than are technical innovations.” His reasoning indicates that he perceives established institutions to be less flexible than technology. Hence, supply induced institutions have to fit certain criteria, to be successfully implemented.

Gibbs and Bromley argue that the institutional environment and technology have to complement each other to function sustainably and efficiently. However, their reasoning can be interpreted in the way that institutions are only supplementing technology, and that it would be enough for induced institutions to support the existing technology to become sustainable. According to their reasoning technology and institutions are not equal factors.

A different approach is taken by Berkes, arguing that institutions “cannot be created anew”, and that “local people cannot be divorced from the social structures of which they are a part”. Keohane confirms this reasoning and argues “just as the actors in world politics are constrained by existing institutions so are institutions ad prospects for institutional change, constrained by the practices taken for granted by their members. This would imply that new institutions have to sustain the old institutions to be successfully implemented and to be sustainable.

Feeny argues from the point of the old institutions, for him it is evident that “existing institutional arrangements affect the supply of institutional change”. This confirms Douglas’ and Bourdieu’s reasoning about institutions and their effects on institutional change. Feeny’s statement raises the issue of institutional path dependency. The concept of path dependency is accepted by economic historians as well as political scientists. However, the concept of path-dependency does not incorporate wider political changes in power structures and shifts in hegemony. The simplified version of the concept is given by Papadakis who states “where you get to depends on where you are coming from, and some destinations you simply cannot get to from here”.

A less deterministic and more actor orientated approach to institutional change is taken by de Janvry. He reasons that the key to understanding the influence of the institutional environment “is to identify which agents have the incentive and the capacity to implement institutional change and how well these agents are defined. Feeny adds to such capacity the willingness needed to implement change, he argues, “The supply of institutional change depends on the capability and willingness of the political order to provide new arrangements.

Papadakis, analyzing the political order and its influence on institutional change, concludes, established political organizations are usually better placed than new ones both to take advantage of and to influence the institutional framework. On the other hand, de Janvry reasons that “policy makers do not have an objective of their own, and are simply motivated by staying in office, doing for that purpose whatever it takes”. His reasoning confirms Downs’ belief in the rational actor in politics and bureaucracies. De Janvry’s argument does not contradict Feeny, however, because he argues “there are a number of important factors that affect the capability and willingness of the political order to provide new arrangements.

These factors include the cost of implementing the new arrangements, the normative behavioral code, conventional wisdom, and the expected net benefits to powerful elite decision makers who exercise positions of dominance. Feeny tries to combine actor and structure approaches. The main actors seem to be elite groups influencing decision-making or making the decision themselves. Feeny states more blandly the “political and economic costs and benefits to the ruling elites are a key to explaining the nature and scope of change”. However, missing in Feeny’s approach is the consideration that elites operate on different spatial and social levels with different functions. Elites are on the national, regional and local level and within their sphere of influence they might support or resist changes of institutions at multiple levels. Also the ability of elite groups to operate at different levels can make them more effective at a specific level compared with a group acting at a single level.

Feeny states that the costs of implementing supply-induced changes are significant. He links supply-induced changes to the transaction costs of change. While Binswanger argues that supply induced changes are cost minimizing, “the possibility of borrowing institutional innovations reduces the costs of institutional change. Allan’s analysis of innovation as the sequence “knowing, wanting, having, operating and efficiently operating” indicates that knowledge does not necessarily imply a reduction of transaction costs. On the contrary it could be argued that it is possible that knowledge creates opposition and leads to an increase of transactions costs. In addition, as Allan’s approach indicates it is necessary to differentiate between operating and efficient operating, hence further, and often very substantial transaction costs arise. Shepsle validates Allan, and reasons that changing institutions impose transaction costs. He specifies the kind of transaction costs, which are bound to rise. “The transaction costs include not only those devoted to decision making, but also those required to enforce the procedure of the new regime and for individuals to adapt to the new procedures. The costs of police forces, law courts and penal institutions are evidence of the phenomenon. In the literature this problem is referred to as ‘second order public good problem’.

The conceptual division between the demand and supply versions of institutional change suggests that there is either one or the other. Mary Douglas in her anthropological analysis of society takes both processes into consideration. Douglas divides society with its institutions into centre and border. In her theory the centre is constituted of hierarchical and individually organized institutions; the border of voluntary organized institutions. She argues that the “centre is too constricted in its casing of institutional habits” and claims that “no change ever comes from the centre, all innovation comes from without”. The outsider sees more clearly and renewal comes from the margins of society.” Changes suggested from the centre focus not on real alternatives but on suggestions, which are “best known and closest to existing programs”. However, it is problematic to differentiate between the centre and the periphery of institutions, and marginal and real changes.

The boundaries between the different terms are weak. Douglas’ concept of only marginal changes from within is in agreement with Bourdieu’s approach of habitus and change. Her distinction between marginal and real changes, does enhances the NIE debate, which does not give sufficient attention to change. In Douglas’ approach, ‘real’ changes alter the institutions while ‘marginal’ changes reconfirm the institutional structure, without changing it. A problem with the Douglas approach is, whether it can be determined if the agent of change is an outsider acting within the institution. Other questions, which stay unanswered, are: What qualifies an individual to be an outsider to an institution and to what institution is the individual an outsider? Even though, Douglas’ approach seems to be helpful in determining the nature of change and the analysis of such change, it also complicates the analysis.

Overall, it seems that institutions change, when benefits to the stakeholders within the institution are high, and when the alteration does not threaten their interest. However, it is necessary to distinguish between different stakeholder groups at different institutional levels and in different space / time circumstances. The distinction is important because a supply side institutional change from the top level can cause resistance or only partial adaptation on the lower levels. This could arise because of regional or local level resistance to change from above. On the other hand, local changes, which threaten higher-level stakeholders, may face resistance from above. Water management and water management institutions beyond the customary level are hierarchical. Social and institutional theory is very helpful in linking actors, structures and interacting processes, which enable and shape institutions and the pace of institutional reform.

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## Influences on Institutional Change: Adaptive Capacity

As the discussion about institutional change indicates, the power of interest groups is one key to understanding the dynamics within institutions. Power-relations and hierarchies are very significant in stakeholders’ interaction. Olson argues that inequalities are beneficial in stimulating and sustaining collective action. Das Gupta on the other hand argues, that “strong socio-economic hierarchies seriously undermine the potential for collective action”. The influence of hierarchies on institutions is prominent in the literature of adaptive capacity.

In this the concepts of social ingenuity, social adaptive capacity and social capital are used interchangeably. The concept of reflexivity aims to explain the same phenomena. All four approaches are based on the same concept; namely that a high level of the social good, that enables change and reduces transaction costs, improves the capacity to deal with crises and uncertainty, whether the crisis is political, economic or environmental. Social ingenuity is key to the creation, reform and maintenance of public and semi-public goods such as markets, funding agencies, educational and research organizations and effective government. Reflexive societies can adapt to changing conditions, the higher the level of adaptability the more reflexive the society. Hence, a highly flexible society has more chance of survival. Furthermore, high level of this social good will enable individuals and groups to change institutions.

Homer Dixon argues that “technological ideas are not the only productive ideas; just as important are ideas about social organization, especially about reforming and building institutions. Edwards agrees and argues’ “the value of civil society lies precisely in its transformative potential: the ability of citizens to lever fundamental changes in the market economy, and in the structures of politics and social relations that underpin it. The generation and dissemination of productive ideas is endogenous not just to the economic system but also to the broader social system that includes a society’s politics and culture.

The research of the World Bank points to the fundamental and enabling structures of society. The Bank’s research indicates that “strong social networks and a dense web of civic associations are likely to facilitate certain aspects of economic performance. However, not every network is positive, social capital can also be associated with costs, “such as cults, group loyalties, destructive acts of hate groups, drug cartels, terrorist organizations, nepotism laws. The focus of those wanting to enhance economically beneficial social capital would have to pick on ‘winners’ which promote social behavior which is wanted by powerful in- and outsiders. (The question arises what is wanted? Ideologies, contend and dominate, can be religious, believe systems, economic or political. An example would be the new forms of colonization, Northern emphasis on democracy, feminism and environment dominating the NGO agenda in the South)

Edwards who critically analyses economic development strategies argues “the easiest areas to influence in the short run – like the number of NGOs and other civic organizations – may not be especially important in the grand scheme of things. He points out that the “social enrichment is a matter of behaving differently toward each other, not just adding on more social contacts. He concludes that, “the most important areas of social capital are also the most contingent and the most difficult to engineer – attributes of trust, tolerance and non-discrimination. All these are norms, informal and non-legislated institutions. However, Edwards points out that the norms and behavior of a community’s “social capital can disempower poor people where the wider political setting is not supportive, and political and economic inequalities are not addressed.

If the society is already unequal, then trust might lead to further exploitation of the poor by the rich and influential. Hence notion and extent of trust are scale related, or poor people do best when they are cautious reciprocators. Overall the analysis shows that, inflexible hierarchies within society prevent the development of social capital, ingenuity or adaptive capacity. The discussion about institutional change and adaptive capacity shows that, powerful stakeholders are the key to understanding the dynamics within society. Some stakeholders can be defined as elites within a society.

Marcus connects elites with institutions and points out that elites are “intimately associated with the working of institutions since their informal organization evolves along with or in opposition to formal organization in a complex society. In early definitions of elites, they were understood as “groups situated in a social system, in which they, as elites, dominate an institutional order”, in modern societies elites are defined “as creatures of institutions in which they have defined functions, offices, or controlling interests. However, elite organizations differ from institutional structures, in the sense that elites “re-create a domain of personal relationships that extend across functional and official boundaries. Elites interact with other elites in other institutions. They create networks, which are not necessarily functional for the formal institution nor are they linked with the formal institutional hierarchy. While this explains relationships between different institutions, it does not fully explain how elites and Modern societies are determined by six principles: industrialization, centralization, statism, secularization, decrease of importance of religion, individuation. However, the distinction between modern and pre-modern is dangerous; it allows the rise of simplification of ‘the other’ institutions interact. Marcus argues, “elite organization accomplishes the reconstitutions of one kind of rules (bureaucratic codes and procedures that are publicly available) through the creation of other rules of a different type (tacit, operational rules) in order to make formal organizations serve the interests, however defined, of the members of the elite. Hence through institutionalization and institution building they are able to keep and enhance their role in the power structure.

In pre-modern societies elites kept their power through the patriarchal and clan systems, in modern societies elites “can only offer expertise and professionalism as a legitimation for their positions. But in modern societies legitimacy is not only achieved through technical knowledge, it can also be based on functions defined in law. Legal legitimacy “has evolved as the ultimate, abstract source of authority in mass liberal society. Marcus argues that the justification of the authority of the elites is based on law or by the “claim to serve the institutions of society in disinterested and rational ways, a claim that is the best public legitimation of themselves that elites can offer in a world organized by rational and apparently democratic, processes. In general, it has been argued that elites have positive as well as negative influences on institutional change.

##  Importance of Institutional Change in Economic Development

Development is a multifaceted process that involves change in a wide variety of economic, social, and physical factors as they affect people’s opportunities and constraints to participate in society and make choices. Poverty is similarly multifaceted and related to communities’ and individuals’ social, physical, and economic relations and the constraints on the choices they can make. Economic growth is an important element of both development and poverty reduction in its own right (through its relationships with income opportunities) and because other important components-such as the building of human and social capital, of infrastructure, and of improved governance-are unlikely to be sustained or accessible without it.

What then does economic growth or development involve? Early writings in development economics largely attributed underdevelopment to deficiencies in factor endowments, specifically physical and human capital, and to the lack of technology. Using this framework gives a simple traditional microeconomic view of development as a widespread process of change across different sectors and communities that shifts supply and demand curves to the right, increasing supply and demand (and their elasticities) and consumer and producer surpluses. Initially the supply curve (S1) is relatively inelastic. Development involves an outward shift and increased elasticity in the sup-ply curve (S1moves to S2). Increased producer and consumer incomes throughout the economy lead to expanded demand (which shifts from D1 to D2). The result of these changes is a new equilibrium with much greater volumes bought and sold (Q1 increases to Q2), a fall in prices (P1falls to P2) and large increases in consumer and producer welfare (as indicated by expansions in consumer and producer surpluses: CS1 and PS1increase to CS2 and PS2, respectively).



Figure 5.1: Changes in supply and demand during economic development

What is involved in this expansion in the producer supply curve? The comparative static approach implicit in this analysis cannot, of course, answer this question in any detail; hence it is necessary to dig a little deeper. Figure 5.2 distinguishes between two sets of supply curves describing producer supply (S1and S2) and supply to consumers (S1′and S2′), the first resulting from costs of production (up to the farm gate) and the second resulting from the costs and risks both of production and of getting produce purchased and paid for by consumers. The differences between S1and S1′ and between S2 and S2 ′therefore represent transaction costs and risks of consumer supply-the costs and risks of doing business-and transport costs in less-developed and more-developed economies, respectively. These differences in the figure suggest that development involves (1) an outward shift and increasing elasticity in the producer supply curves and (2) a reduction in the transport, communication, and transaction costs and risks per unit supply to consumers. Development research and policy analysis therefore needs to be concerned with both of these processes, the relationship between them, and the means of promoting them.



Figure 5.2: Changes in supply and demand during technical and institutional development

Reductions in transport, communication, and transaction costs and risks are achieved by technical change, infrastructural investment, and institutional changes (for example, standardized weights and measures; the structure and enforcement of business laws; and the relationships between producers, consumers, and market-chain intermediaries), as all these efforts can make it easier, cheaper, and less risky for buyers and sellers to communicate and trade with one another over longer distances.

Since many transaction costs are fixed per transaction or per transaction relationship, increasing traded volumes can also reduce transaction costs per unit good or service transacted. The shift in the producer supply curve (S1 to S2 ) arises largely as a result of new production technology and specialization, which together lower basic production costs per unit, particularly at higher volumes of production (because of increased economies of scale). Higher volumes of production and specialization themselves are encouraged by the larger markets that are opened up by cheaper transport and communications; better institutions; and lower costs of capital, capital equipment, and materials. These are also encouraged by lower transport, communication, and transaction costs and risks, this time in producers’ purchases as opposed to sales.

Technical and institutional change and infrastructural development are critical drivers in this process, stimulating and also benefiting from factor accumulation, which also provides important positive feedbacks in the development process if institutions provide appropriate investment incentives.

This discussion has examined economic growth processes involving the use, production, and consumption of private goods and services. There are, however, further challenges to agricultural development where it depends on natural resources that are not only used by large numbers of small-scale farmers but are also important in providing other goods and services to rural people (for example, water, fish, fuel wood, construction materials, grazing, and wild foods). Such resources have often been particularly important to women and poorer, more disadvantaged groups in rural society. Traditional institutions have managed these as common-property resources and have balanced the costs and benefits of using and maintaining them among different users. The development of institutions that coordinate efficient and equitable management, use, and exchange of these resources poses a different, but related, set of challenges to those discussed above. As with private goods, solutions require an appropriate balance of and integration among infrastructural development and institutional and technical change. These solutions must recognize that effective institutions in developed countries often do not work in Africa, which has lower volumes and densities of economic activity, smaller economic units, poorer infrastructure, and different traditions in common-property resource management.

It should be apparent from this discussion that institutional change potentially plays a significant role in economic development. Its actual importance is an empirical question, which may be conceptualized in terms of the relative contribution of institutional change to its direct and indirect effects in shifting S1and S1′to S2 and S2′ (see Figure 5.2). Cross-country work on comparative economic growth in the twentieth century also suggests that the quality of institutions, and therefore implicitly institutional change, is a critical factor in economic growth (Pande and Udry 2005). Acemoglu, Johnson, and Robinson (2001) also provide evidence that the institutional hypothesis explains the differences in prosperity and levels of economic growth among countries. According to this view some societies have “good institutions” that encourage investment in machinery, human capital, and improved technologies; consequently these countries achieve economic prosperity.

In medieval Europe, the political power of local rulers was extensive. Local rulers could confiscate the property of individual traders from other regions without incurring penalties. In response, private mercantile guilds evolved to promote trade and to guard against the arbitrary action of local rulers. These guilds established agreements with merchants in foreign cities and with local authorities themselves. Arbitrary confiscation was punished by the withdrawal of large amounts of business by the guild, and so local rulers were forced to respect the rights Of its members. This change in the balance of power helped to promote the security of foreign traders.

In the 12th century, traders in Europe established community-based mechanisms to facilitate the exchange of credit and trade across borders. These mechanisms were based on the community accepting responsibility for the performance of its members vis-à-vis other communities. For example, when a Genoese merchant defaulted on a loan from a merchant in London, community leaders in Genoa were responsible for enforcing the contract by imposing sanctions on the defaulter. Community origin was easily established, meaning that reputation within the community was important, and agents could betrusted not to renege on their contracts.

As cities grew in size and number, so did the communities of merchants and traders, making collective action more difficult.

Unrestricted entry into trading led tomorecompetition among traders, and increased problems of information and enforcement. Growth meant trading with members from other social and ethnic backgrounds, which meant that social connections could not easily be used as a basis for information or enforcement. Members no longer wanted to be collectively responsible for individual breaches of contract. So leaders pushed for an enforcement and sanctioning system based on individual responsibility rather than community responsibility. To the extent that community growth implied more intracommunity social and economic diversity, it also reduced the political viability of the community. But the extent to which communities could abolish community-based mechanisms depended on a reliable third party to enforce contracts. In England, the monarch performed this role, and in 1275 King Edward I issued a statute outlawing community responsibility for debts.

The example illustrates a general principle: as economies grow and develop, different types of institutions are needed to facilitate transactions. Many different actors can push for new institutions. But the role that the state plays depends on its capacity and political viability: a strong state that respects the law itself and refrains from arbitrary action is a critical factor.

**Chapter 7: General framework for collective action**

# Section One: Concepts of Collective Action

Overview

 Dear learners, this section is about the Concepts of Collective Action involved in institutional economics.

**Objectives**

Dear learner after reading this lesson you can be able to: -

Explain the Concepts and Roles of Collective Actions

#  1.1. Explain the Concepts and Roles of Collective Actions

 Dear learners, can you list the definitions and major Roles of Collective Actions?

Collective action can be understood as an action taken by a group of individuals to achieve common interests. This collective action refers to the collaboration of two or more individuals in pursuit of a common goal: Collective action ranges all the way from unorganized custom to the many organized going concerns, such as the family, the corporation, the trade association, the trade union, the reserve system, the state. The principle common to all of them is greater or less control, liberation and expansion of individual action by collective action (Commons 1931: 650).Economics is based on collective action in the form of transactions that involve the exchange of resources:

Either the state, or a corporation, or a cartel, or a holding company, or a co-operative association, or a trade union, or an employers' association, or a trade association, or a joint trade agreement of two associations, or a stock exchange, or a board of trade, may lay down and enforce the rules which determine for individuals this bundle of correlative and reciprocal economic relationships. Indeed, these collective acts of economic organizations are at times more powerful than the collective action of the political concern, the state (Commons 1931: 650). An institution is "collective action in control, liberation and expansion of individual action" (Commons 1931: 651). Analysis of these collective sanctions provides the correlation of economics, jurisprudence, and ethics which is prerequisite to a theory of institutional economics. An area of considerable interest in NIE literature concerns collective action.

Indeed,Schmid (2000) goes as far as to argue that “the main agenda of institutional economics is collective action.” Collective action arises when people collaborate on joint action and decisions to accomplish an outcome that involves their interests or well-being (Sandler 1992). Collective-action problems are typically characterized by interdependency among the participants, so that the contributions or efforts of one individual influence the contributions or efforts of others, no wider benefits are produced, and all are worse off if they each act to maximize their own narrow self-interests.

The economic theory of collective action is concerned with the provision of public goods (and other goods and services that are collectively consumed) through the collaboration of two or more individuals and with the impact of externalities on group behavior. Although there are many instances in which individuals would be better off if they cooperated, collective action often does not emerge. Problems typically arise over imbalances among contributions to the effort and the distribution of benefits from the creation of public or collective goods, known as the free-rider problem. The foundation of this work was Olson’s (1965) book The Logic of Collective Action. The theory of collective action is a useful tool to analyze how to overcome free-rider problems and fashion cooperative solutions for the management of common resources or the  In the analyses of economics and political science, free riders are actors who take more than their fair share of the benefits or do not shoulder their fair share of the costs of their use of a resource, involvement in a project, or the like. The free-rider problem is the question of how to prevent free riding from taking place, or at least limit its effects. Provision of public goods. Collective action differs from other coordination mechanisms in that it involves pooled decisions within a group, whereas in hierarchies (such as firms) delegated decisions are made, and individuals operate in terms of independent decisions.

An important field of investigation in the theory and application of collective action concerns the use of common-pool resources, such as water, land, fisheries, and forests. In the past, the solution to the so-called tragedy of the commons was the establishment of enforceable property rights over the resources. However, recent work by Ostrom (2005b) and others has shown that local institutional arrangements, including customs and social conventions designed to induce cooperative solutions, can overcome the difficulties of collective action and help achieve efficiency in the use of such resources (Nabli and Nugent 1989). The key distinction here is between commons (or common-property resources) and open-access resources.

Collective action can be understood as an action taken by a group of individuals to achieve common interests (Marshall 1998). Collective action can be voluntary or obligatory for specific persons, e.g. in water users associations where all land owners in an irrigation scheme are obliged to join an association for collective action. However, we exclude hired labor and forced labor from analysis of collective action, because the incentive structure is very different. A group deciding to hire laborers, and raising the resources to hire them would be considered collective action, but the hired laborers themselves would not necessarily be participating in collective action. Members can act directly on their own or through an organization. In the next sections below, we first consider the circumstances that give rise to collective action and the different types of collective action most relevant to poverty alleviation, and then consider the supporting institutions that govern collective action.

In many communities throughout the world, people work together to provide local goods and services they would not be able to provide as single individuals or that the government is not providing. They build and maintain local parks, religious buildings and community halls, operate volunteer fire control groups, and implement rules for local natural resource management. Sometimes local groups share responsibilities for provision with local or central governments, such as in supporting schools and health services (McCarthy 2004). Collective provision of goods and services is particularly important for the poor, who are often less served by government services, and may even provide a vehicle for poverty reduction programs, such as through community driven development (CDD).

Collective action can also be used to substitute for missing markets. Self-help groups and other mutual insurance mechanisms are examples of substitutes for imperfect credit markets. For example, where people cannot access loans individually (for instance, due to lack of sufficient collateral), groups can form to collectively secure loans. Many micro-finance programs are geared towards small groups that can rely on social sanctions to enforce reciprocal obligations among group members to assure repayment of loans (Wydick 1999). Given asymmetric information, monitoring by group members is generally more cost-effective than monitoring by the lending agency. In such cases, collective action can have the double benefit of substituting for a missing market and also allowing poor people to build assets through access to credit.

Third, collective action can be use by people to increase their access to higher level institutions and as well as their clout in those institutions. For example, people can come together to demand specific government services or insist on enforcement of their property claims. Alternatively, collective action allows groups to increase their bargaining power vis-a-vis local authorities. Finally collective action can enable local groups to benefit from knowledge/resources of other groups through federated structures, e.g. in order to influence policy decisions undertaken at higher levels of government.

Moreover, collective action is often exercised to regulate access, use and maintenance of common pool resources, and often includes undertaking such specific activities as devising rules, monitoring use, devising enforcement mechanisms and implementing sanctions. The role of collective action in natural resource management is probably the well-studied context of collective action. However, collective action can also be exercised to create institutions discussed above, e.g. Parent-teachers associations, burial societies, self-help groups, civic movements, as well as resource management groups.

# 1.2. the Supporting Institutions that govern Collective Action

 Dear learners, can you list the Supporting Institutions that govern Collective Action?

Collective action is often considered narrowly in terms of activities undertaken through formal organizations, but many formal organizations exist “on paper” only, and do not foster any real collective action, whereas much collective action occurs informally through social networks or even through people coming together temporarily for specific short-term purposes. Thus, as with property rights, it is essential to look at both formal and informal institutions that govern collective action. The exact role of these governance structures depends on the nature of the collective action or good(s) involved, but in general they play a key role in coordinating the actions and contributions of members. This can include setting of rules, monitoring, and sanctioning, which reduce the incentives for people to break the rules or free ride, and also provides assurance to other members that others will also be contributing. Collective action governance structures do not exist in isolation, but co-exist with and complement other governance structures, such as local and national government agencies and markets. Often, these different governance structures are not exclusive, but they may be overlapping or complementary.

# 1.3. The Determinants of Collective Action

 Dear learners, can you list the Supporting Institutions that govern Collective Action?( Please write your response on the space provide below)

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According to Olson (1971), important determinants of success in collective action include the size, homogeneity, and purpose of the group. Building on this observation, Gaspart and Platteau (2002) argue that the success of collective action depends on two sets of factors: 1) Characteristics of the people concerned: the size of the group, the extent of heterogeneity in the group, and social capital in the group (specifically, the tradition of cooperation in other areas) and 2) Characteristics of the environment that bear on the enforcement costs of a collective scheme: technical characteristics (including the physical attributes of the resource and its location), economic characteristics (especially market conditions), and political characteristics (the role played by state institutions). TCE also provides a useful tool to evaluate collective schemes by assessing monitoring and enforcement costs and aspects of market power. Gaspart and Platteau’s (2002) study of collective schemes in the Senegalese fishing industries show how an assessment of the rate of infraction of the rules adopted versus rule abidance can also predict the success or failure of collective action.