

Alternative Microeconomics

Six Chapter

The Rules of the Game and Economic Systems

I INTRODUCTION TO THE RULES OF THE GAME

The nature and structure of the "rules of the game" help to determine the characteristics of a society's economic system.

Whether a society emphasizes the use of exchange, reciprocity or eminent domain to allocate resources, "Any economic system requires a set of rules, an ideology to justify them, and a conscience in the individual which makes him strive to carry them out." (Robinson, p 13) This set of rules includes informal institutions and values held by individuals as well as formal law. The structure of the rules of the games shapes the society's economic system. Neoclassical microeconomics does not often explicitly consider the nature of these rules and their relation to economic behavior.

ECONOMIC SYSTEMS

Societies that fail to meet minimum subsistence requirements for its members become relics of the past. Ideally, an economy will produce more than necessary for subsistence and apply the additional output to improving the lives of the members of society through development and/or economic growth. The ideas of "progress," economic development and economic growth came with the development of the commercial world that replaced the feudal society of the medieval world.

An economic system is a matrix of institutions, agents, organizations and society..

An economic system consists of a matrix of social institutions (law, political institutions, religion, etc), agents (individuals or actors), organizations (corporations, unions, charitable org, not-for-profit firms, etc) and society. The principles, beliefs and values held by individuals are included in the structure of society. The function of an economic system is to coordinate the activities of agents in the processes of provisioning and allocation. Nonmaterial characteristics of life (social stability, low crime rates, a sense of community, etc) are related to the economic processes and should be included.

Robert Heilbroner identifies economic systems as:
1) **Traditional**,
2) **Command**
3) **Market**
Mixed economies are a mixture of the three

Robert Heilbroner identifies three basic types of economic systems. These are classified as markets, command, and tradition. In practice, most economies are a mixture that includes elements of all three. However, the economic system is usually classified by the dominant approach. Markets and command exist in traditional economies. Tradition and markets exist in command economies. Western industrial societies categorized as "market-oriented" economies rely primarily on exchange, but contain elements of tradition and command. In market economies tradition is important to such decisions regarding values, expectations about behavior (trust, loyalty, etc.), fashion, preferences about housing, choices about occupations and geographic preferences. Command is also found in market economies as regulations and laws regarding the allocation of resources and goods.

TRADITIONAL ECONOMIES

Traditional economies tend to be based on kinship and reciprocity. They tend to be static and maintain the *status quo*.

Traditional economic systems are based the repeated use of solutions that have worked in the past. Solutions to problems in the processes of production, distribution and consumption are embedded in the customs, mores and cultural patterns of social life. These solutions have been established through trial and error; those activities that result in adequate production and an acceptable distribution are retained and used often without question. Agents in traditional societies may engage in exchange transaction but these are peripheral to the provisioning and allocation problems.

Traditional economies are often subsistence economies.

The traditional economic system tends to be found in non-industrial societies that are engaged in hunting, gathering, pastoral, or basic agriculture. Often these are subsistence economies; there is little or no growth or progress. The aboriginal culture in Australia is an example of an economy that has flourished for thousands of years (40,000 years by some estimates) as a traditional economy.

Traditional economies depend on institutions that have worked in the past.

Traditional economies tend to depend upon a deontological ethic. Duties to other members of the family, tribe or clan and "reciprocity" are the primary allocative mechanisms. The forms of production that individuals engage in are based on the processes that have worked in the past. Social institutions, such as religion, may evolve to reinforce the traditional ways.

Story telling and myths are important ways to communicate expectations about behavior.

These societies must communicate behavioral expectations to each new generation. The most important form of knowledge may be contained in stories and myths. Mythology and story telling are important aspects of the creation and communication of cultural values. *Webster's Encyclopedic Unabridged Dictionary of the English Language* gives one of the definitions of myth as:

"an unproved collective belief that is accepted uncritically and is used to justify a social institution."

Keen and Valley-Fox describe myths as:

"... an intricate set of interlocking stories, rituals, rites and customs that inform and give the pivotal sense of meaning and direction to a person, family, community or culture." (Keen, p xii)

Mythology is one of the processes by which cultural values and expectations about behavior are transmitted from generation to generation. Even in modern societies, stories are fundamental to the process of creating, and perpetuating culture in societies.

Reciprocity is another important element of traditional economies.

Reciprocity is often a key element in traditional economies. Remember that reciprocity is based on duty and involves obligatory gift giving; I do you a favor and both you and I (and other members of society) expect that you will return some unspecified favor at some unspecified time in the future. It requires a sense of duty, social values and a community to enforce reciprocation. Social institutions give structure to the values, duties and expectations about economic behavior.

In many societies, reciprocity becomes an important element of the social process. In a ranching community Rancher Smith goes to the other ranchers and says; "I need some help branding my calves next Tuesday, I'd appreciate some help." On Tuesday, the ranchers show up at Rancher Smith's place and help with the task. If Rancher Jones does not come to help, it may be for a good reason. However, if he or she is perceived as shirking his or her duty, it may be difficult for Jones to get neighbors to help with future tasks. Similarly,

Reciprocity not only is an allocative mechanism but an element of the society.

if everyone helps Rancher Smith but then at some point in the future Rancher Smith does not reciprocate by helping someone else fix his or her fence, then Rancher Smith may find it difficult to get anyone to help in the future. There is a community that expects that the other members will help when needed and will reciprocate in the future. The community must communicate the willingness of its members to participate in mutual aid and to sanction members who do not fulfill their obligatory duties.

Notice that the substance of the event is different if Rancher A says; "I'll pay you \$10 per hour to help me brand my calves." Shifting the process from reciprocity to a market exchange significantly alters the relationships and the nature of the event. In the case of reciprocity, there is a sense of community. The relationship between the members of the community may be of value in and of itself. Blood and organ donations are examples. Moving a good or activity into a market transaction may significantly alter its meaning or value. A market exchange can take place between anonymous individuals.

Complex societies may find traditions less useful as an allocative mechanism.

As communities become larger, more complex and social relationships are altered; tradition may be less useful as an allocative mechanism. It is more difficult for the members of the community to communicate the extent to which the members fulfill their duties. Social pressure to enforce obligations of reciprocity and duty may become less effective since each person has more relationships that may be more valued.

Traditional economies are less capable of adapting to environmental and technical change.

Another weakness of a traditional economy is that it does not adapt quickly to changes in technology or the environment. So long as there are no (or few) changes in the environment, technology or external forces, the traditional economy is stable or static. However, if there are sudden changes in the environment, the traditional solutions may no longer suffice. Droughts, desertification, over hunting specific animals are examples of events that traditional societies may not be able to deal with. Native Americans in the plains developed societies that were dependent upon the bison. Their economies, social structure, politics and religions were based on bison. With the advent of Europeans, firearms, railroads and a demand for hides, the bison were hunted almost to extinction. Many of the native societies found it difficult to adapt to a system without bison. Whaling, fishing, hunting, agriculture based on single (or limited) crops are other examples of the difficulty that traditionally based economies have in adapting to change.

COMMAND

Command economies rely on eminent domain.

Eminent domain is the primary allocative mechanism used in a command economy. An economic system based on command requires an agent or organization with the authority to make allocation decisions. This authority may be based on religion, military strength, political position, birth or wealth.

It is usually necessary that there be an authority with power to redistribute resources and goods.

Command economies often rely on traditions as part of the allocative process. This traditional process is subordinated to eminent domain. The Roman society is an example of a command economy. Fascist Germany, the former Soviet Union and Maoist China are other examples of attempts to use command. These economies are often thought of as "planned economies." During World War II many allied countries relied on command systems to coordinate the war effort.

In both traditional and market economies command may play a significant role. In modern, market economies there are regulations and laws that mandate particular actions, behavior, production techniques and/or characteristics of

products.

Multinational corporations often behave as planned or administrative command economies.

A command economy requires an overall objective or goal for the governing body; individuals' goals become subordinate. Since command economies are often represented by nation states, these can be thought of as national goals. Some organizations act as small communities with organizational goals and use command and eminent domain as the primary allocative mechanism. During the medieval era, the Church and the secular state both operated as command economies that were interrelated. In the modern industrial world, the multinational corporation uses a command system internally; its decisions are made administratively. Goals may include;

Individual objective must be coordinated with the system objective.

- economic growth,
- full employment,
- industrialization,
- military strength,
- conquest,
- acquisition of specie (gold/ silver),
- land,
- political control
- religious conversions
- control over markets where they sell,
- control of resources,
- or any thing else that the governing authority chooses.

Individual objective must be coordinated with the system objective.

Goals of command economies may be chosen in a variety of ways.

One of the important questions in a command economy how the overall objective is selected. It may be an administrative choice. The authority may simply select the objective. If this is the case, the intentions of the authority become crucial; are they benevolent or not? In some cases, it may be possible to have the objectives of the members of the community reflected in the overall objective. Market socialism in the former Yugoslavia is an example.

The task of the command system is to coordinate individual behavior with the national or organizational goal. A command system relies on administrative decisions that flow from the authority down. This requires that the decisions be communicated to the individuals and enforced. This may require a complex system of rules and institutions to communicate and create the appropriate incentives to act on that information.

The authority that is responsible for the administrative decisions that are imposed on the members of the organization or state, must have information about the goals, the members of the community, the availability of inputs, all potential technologies, all alternative outputs and potential distribution patterns. This is an enormous information requirement that was debated in the "socialist calculation debate."

Command economies can shift objectives quickly concentrate on the achievement of goals.

One of the strengths of a command system is that it can alter its objectives quickly. In a wartime economy, it may be useful to be able to command the allocation of resources into the development and production of munitions and military hardware.

The weakness of a command system is that the authority would need an enormous amount of information about individuals' preferences and the production requirements of all goods and services. Command systems may also

be flawed by the nature of the authority that may or may not be benevolent. Another major problem of a command system is the loss of individual autonomy.

MARKET

Market economies are based on exchange or contracts among individual agents on a *quid pro quo* basis.

Market based economies depend on individual exchange contracts that occur in the context of a social contract. An exchange contract is based on *quid pro quo*, "I will give you this if you give me that!" The nature of the goods (include money) to be exchanged as well as the conditions and time is clearly specified. It is necessary that both parties engage in the contract or exchange voluntarily.

If the exchange is voluntary, the presumption is that a person would engage in the exchange if and only if they are better off or no worse off after the exchange. Therefore, a voluntary exchange results in Pareto improvements and ultimately a Pareto superior solution to the allocation problem.

Adaptability is an advantage of market systems and is related to the availability of information and incentives of exchange.

Neoclassical microeconomics uses "supply and demand" as a representation of a market. The demand function represents the behavioral patterns of the buyers (both actual and potential) of a specific good. The supply function represents the behavior of actual and potential sellers (producers) of a good.

The strength of market system is that is capable of quickly adapting to changes in preferences and technology. The information required by any one agent is minimal. The weakness is that when exchanges are not voluntary or property rights are attenuated (weakened), outcomes may be less than optimal.

Neoclassical microeconomics tends to be a study of contracting and voluntary exchanges between individuals. The context in which these contracts occur is usually "the market." The structure of the markets is perceived to influence the behavior or the individuals who participate in voluntary exchanges or contracts.

Market structures influence the behavior of both buyers and sellers in a market.

In its most ideal form, the market is characterized as "pure competition." In pure competition, there are a large number of buyers and sellers, none of which can influence the price or the behavior of others; they can only contract to exchange goods (and money). The purely competitive market is characterized by goods that are homogeneous; i.e. buyers perceive these goods as identical or perfect substitutes. Buyers have no preference for one seller's good over another's. The exchange or contract is made on the basis of price. In this way, sellers compete for buyers by lowering the price to the minimum they will accept. Buyers compete to purchase by offering the highest price they are willing to pay. In a market such as this the equilibrium price; the price at which the last (or marginal) unit is exchanged will optimize the welfare of the buyers and sellers. In the least desirable market form, a seller has a monopoly where there is only one seller of a good. The effects of market structure on the behavior of buyers and sellers are an important topic in neoclassical microeconomics that is covered in Part II of this text.

The social and legal context is often implicit in economic analysis.

Social infrastructure is important to the operation of markets.

The social context of economic behavior is often not made explicit. People perceive that individual exchange in competitive markets is the only consideration. This leads to the perception that the government and community have little or no role in economic activity. Many *laissez faire* advocates fail to recognize that economic behavior is a part of social behavior. Friedrich A. Hayek (1899-1992) is a well-known advocate of the market system. He identifies the social infrastructure that must exist to support individual market exchange. The following quotes are long because they are important and must

be considered in the context of Hayek's ideas;

Property rights and rights to contract are fundamental to market economies.

While it would be an exaggeration, it would not be altogether untrue to say that the interpretation of the fundamental principle of liberalism as absence of state activity rather than as a policy which deliberately adopts competition, the market, and prices as its ordering principle and uses the legal framework enforced by the state in order to make competition as effective and beneficial as possible-and to supplement it where, and only where, it cannot be made effective-is as much responsible for the decline of competition as the active support which governments have given directly and indirectly to the growth of monopoly. It is the first general thesis which we shall have to consider that competition can be made more effective and more beneficent by certain activities of government than it would be without them. With regard to some of these activities this has never been denied, although people speak sometimes as if they had forgotten about them. That a functioning market presupposes not only prevention of violence and fraud but the protection of certain rights, such as property, and the enforcement of contracts, is always taken for granted. Where the traditional discussion becomes so unsatisfactory is where it is suggested that, with the recognition of the principles of private property and freedom of contract, which indeed every liberal must recognize, all the issues were settled, as if the law of property and contract were given once and for all in its final and most appropriate form, i.e., in the form which will make the market economy work at its best. It is only after we have agreed on these principles that the real problems begin. (Hayek, pp 110-111)

Property and contract law must evolve as circumstances change.

Hayek continues;

If I am not mistaken, the main headings under which the measures required to insure an effective competitive order ought to be considered are the law of property and contract, of corporations and associations, including, in particular, trade-unions, the problems of how to deal with those monopolies or quasi-monopolistic positions which would remain in a otherwise sensibly drawn-up framework, the problems of taxation, and the problems of international trade, particularly, in our time, of the relations between free and planned economies.

The meaning of Property and contract law are complex. The content and structure are important and should not be ignored.

As far as the great field of the law of property and contract are concerned, we must, as I have already emphasized, above all be aware of the error that the formulas of "private property" and "freedom of contract" solve our problems. They are not adequate answers because their meaning is ambiguous. Our problems begin when we ask what ought to be the contents of property rights, what contracts should be enforceable, and how contracts should be interpreted or, rather, what standard forms of contract should be read into the informal agreements of everyday transactions. (Hayek, pp 112-113)

Adam Smith also saw a positive role for government. As implied in the quotes from Hayek, it is the content of the laws of property and contract that is crucial. It is important to identify the role of the state in structuring the allocative process that society depends upon.

ROLE OF GOVERNMENT

There are different ideological approaches to questions about the proper role of government in an economic system.

One of the major controversies is the proper role of government (and the use of command) within a market based economic system. Many of the issues in this controversy are ideological in nature and result in the existence of different "schools of economic thought." The Chicago School and the Austrian School of economic thought argue that the role of government in the economy should be minimized. (Hayek taught at the University of Chicago and was an Austrian economist.) The American or "Old" Institutionalists and much of Neoclassical microeconomics (in the Cambridge tradition) sees a more positive or active role for government in many areas.

Many pro market advocates perceive that there is a minimal role for government in an economic system.

The French Physiocrats [led by Francois Quesnay, 1694-1774] advocated a minimal role for government. Jacques Claude Vincent de Gournay [1712-1759] is usually credited with the phrase *laissez faire, laissez-passer!* Some advocates of an extreme *laissez faire* doctrine argue that there is no or almost no role for government. Most argue for limited government action in the economy. Others, such as Adam Smith and F. A Hayek (above) see a positive role for social institutions and government participation. Adam Smith [1723-1790], who was familiar with the work of the Physiocrats, advocated a social system based on ethics, markets and jurisprudence with a minimal role for government.

There are many arguments about the proper role of government. Some of the arguments are based on ideology while other disagreements arise on pragmatic grounds. Here are several possible roles for government:

Government may define and enforce property rights.

Property Rights

One of the functions of government is to define and protect property rights. John Locke [1632-1704] argues the social contract is for the purpose of protecting property rights. Such diverse writers as Adam Smith [1723-1790] and Karl Marx [1818-1883] argue that this is one of the primary functions of governments.

Property rights may be defined and enforced through informal means.

Property rights may also be defined and enforced by informal rules such as social institutions, civility, tradition, custom, mores and systems of ethics.

Domestic justice is an important role for government.

Domestic Justice

Adam Smith included the enforcement of property rights under the establishment of domestic justice when he defined the role of government. Domestic justice is broader and includes "*protecting, as far as possible, every member of society from the injustice or oppression of every member of it. . .*" (Smith, *Wealth of Nations*, p 669)

Most writers argue that national defense is a function of government.

National Defense

While leaders and policy makers may argue about the level and nature of national defense, there are few who would argue that there is no reason for the state to provide protection from attack by other nations. The debate takes the form of the nature and extent of that national defense. National defense is one of the best examples of a public or collective good. In the case of a public good, it is impossible to exclude a person from the consumption of the good and the marginal cost of an additional user is zero. In these conditions, the state often provides the good.

Provision of collective or public goods

Public goods are often provided by government.

Public goods are those goods whose property rights are not exclusive; it is not possible to exclude anyone from their use and the additional cost (marginal cost) of an additional user is zero. National defense is a case of a public good. If a baby is born in the country, it is not necessary to increase national defense. Clean air is another example of a public good.

Other collective goods and quasi-public goods are provided by governments at many levels.

Adam Smith included other public goods in this category. He referred to them as public institutions and public works. In the terminology of modern economics, these goods are often called quasi-public goods; the marginal cost of additional uses may be zero, but it is possible to exclude users. Roads, bridges, canals, navigational devices and the like could be paid for by tolls or financed by government.

Smith includes education in this category of activities. He discusses specifically education of youth. He also says;

Smith's warning about the excesses of specialization.

"In the progress of the division of labour, the employment of the far greater part of those who live by labour, that is, of the great body of the people, comes to be confined to a few very simple operations, frequently one or two/ But the understandings of the greater part of men [sic] are necessarily formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations, of which, the effects too are, perhaps, always the same, or very nearly the same, has no occasion to exert his understanding, or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become." (Smith, Wealth of Nations, p 734)

Smith continues on the next page;

"But in every improved and civilized society this is the state into which the labouring poor, that is the great body of the people, must necessarily fall, unless the government takes some pains to prevent it."

The role of government in the provision of education and arts for individuals in society is controversial. Currently, there are a variety of debates ranging from voucher systems to the appropriate level of funding for English as a second language and special education.

Promote Competition

Governments may try to balance the role of competition in society.

The models of purely competitive markets show that the behavior of the individual sellers (and buyers) will be consistent with social welfare in the long run. When there are impediments to competition, the prices are distorted and incorrect signals encourage behavior that is less than socially optimal. As a result, governments often try to regulate the behavior or to promote competition. Most industrial nations have laws that make monopolization of markets, price fixing, collusion, tying contracts and other anti-competitive practices illegal. The Sherman Antitrust Act of 1890, the Clayton Act of 1914 and the Robinson-Patman Act of 1936 are examples.

Information is important to any allocative system. It is necessary for

One element in promoting competition is to prevent falsification of information, fraud, deceit, etc.

agents in a market exchange to have information to value goods and negotiate contracts. Most societies see that one of the roles of government (if not a moral system) is to prevent fraud, deceit, and other methods of distorting information provided by buyers and sellers. The Securities Exchange Commission attempts to regulate financial information provided to the financial markets, insider trading is illegal, there are truth in advertising laws and agencies that regulate the content and quality of goods (food, drugs, etc.). The development of policy and law in these areas is often controversial and vested interests attempt to manipulate the regulations in their favor. (Remember George Stigler's capture theory of regulation.)

Most individuals believe that there are some members of society who should be cared for.

Safety Net

Most civilized societies try to provide a safety net for individuals who are unable to care for themselves. There are many disagreements about the criteria to be used to decide which people should be included in this group.

II PROPERTY RIGHTS

The concept of property rights is essential to any economic system. The analysis of property rights is complicated by several factors.

Most people think of private property rights when discussing property rights.

First is the fact that when the term "property rights" is used, the listener usually subconsciously inserts the word "private." In addition to private property, rights there are also public property rights and common property rights. Private property rights, in theory should apply to individuals but often private property rights is applied to publicly chartered organizations.

Property rights may be justified by natural rights or through logic for pragmatic reasons.

Second, property rights can be justified by "natural rights" or by logic and pragmatism. John Locke [1632-1704], a natural law philosopher argues that humans have a natural right to the ownership of private property. This natural right to property stems from the fact that the individual has a right to their own labour and therefore a property right to the fruits of that labour when mixed with un-owned resources. Labour is the justification for property. Locke places two limitations on this right. He argues that the individual has a right to acquire property so long as nothing is wasted and there are sufficient resources left for others. (Locke, pp 115-126) The emotional context of property rights associated with the natural rights approach that also complicates the discussion and analysis of the structure of property rights in a social system.

A pragmatic justification of property rights is based on defining property rights to achieve an objective. That objective could be an optimal allocation or to maximize the monetary value of assets. Property rights justified on natural rights tends to be static while pragmatism tends to justify property rights that evolve to meet the needs of changing circumstances (population, technology, environment, etc.). Hayek, a market oriented economist, seems to focus on a pragmatic approach to property rights:

Simplistic concepts of property rights do not apply to all things.

Where the law of property is concerned, it is not difficult to see that the simple rules which are adequate to ordinary mobile "things" or "chattel" are not suitable for indefinite extension. We need only turn to the problems which arise in connection with land, particularly with regard to urban land in modern large towns, in order to realize that a conception of property which is based on the assumption that the use

of a particular item of property affects only the interests of its owner breaks down.

Chattel property is not the same as intellectual property.

The problem of the prevention of monopoly and the preservation of competition is raised much more acutely in certain other fields to which the concept of property has been extended only in recent times. I am thinking here of the extension of property to such rights and privileges as patents for inventions, copyright, trademarks, and the like. It seems to me beyond doubt that in these fields a slavish application of the concept of property as it has been developed of material things has done a great deal to foster the growth of monopoly and that here drastic reforms may be required if competition is to be made to work. (Hayek, pp113-114) . . .

Private property rights of individuals are not the same as private property rights for legal entities such as corporations.

It seems to me that, in general, the freedom of the individual by no means need to be extended to give all these freedoms to organized groups of individuals, and even that it may on occasion be the duty of governments to protect the individual against organized groups. It appears to me also as if historically in the field of the law of corporations we had a situation rather analogous to that in the field of the law of property to which I have already referred. As in the law of property the rules developed for ordinary mobile property were extended uncritically and without appropriate modifications to all sorts of new rights; and thus the recognition of corporations as fictitious or legal person has had the effect that all the rights of a natural person were automatically extended to corporations. (Hayek, p 116)

Hayek is quoted at length because he is a market-oriented economist who recognized that property rights must evolve with changes in the economy and technology. He also recognizes that the form the property rights laws take is crucial to the operation of a market system.

PROPERTY RIGHTS AND MARKETS

Nonattenuated property rights facilitate the operation of the market.

The operation markets and market exchange is facilitated by strong or "nonattenuated" property rights. The benefits and costs of exchange and use of resources and goods affect only the parties to the exchange. The welfare of individuals who are not engaged in the transaction or use of economic goods is not altered.

Furubotn and Pejovich define property rights as:

Property rights are sanctioned behavioral relations among the members of society

Property rights are understood as sanctioned behavioral relations among men [sic] that arise from the existence of goods and pertain to their use. These relations specify the norms of behavior with respect to goods that each and every person must observe in his daily interactions with other persons, or bear the cost of non-observance. The term "good" is used here for anything that yields utility or satisfaction to a person. Thus, and this point is important, the concept of property rights in the context of the new approach applies to all scarce goods. The concept encompasses both the rights over material things (to sell my typewriter) as well as 'human' rights (the right to vote, publish etcetera). The prevailing system of property rights in the community is, then, the sum of economic and social relations with respect to scarce resources in which individuals stand to each other. (Furubotn, p 3)

These "sanctioned behavioral relations" include both the formal sanction of legal

Property rights may be sanctioned by legal systems or social institutions.

systems and informal sanctions of social institutions. A sense of community, social values, religion, politeness and respect for others are probably more efficient ways to enforce property rights than the enforcement of laws by the state. Property rights may be “private” property rights or “public” property rights.

Strong or nonattenuated property rights that facilitate the effective use of market exchange have three basic characteristics:

Nonattenuated property rights are:

1. exclusive
2. enforceable
3. transferable

- Exclusivity
- Enforceability
- Transferability

Exclusivity

It is impossible for the property rights to any good or resource to be completely exclusive. However, the greater the exclusivity the more likely market exchanges will produce improvements to the welfare of society. An exclusive property right is one where all the benefits and cost associated with a choice fall on the person(s) making the choice. If Nigel drinks a cup of tea, the costs and benefits of that act fall (for the most part) on Nigel. A case of nonexclusive property rights occurs when Harold smokes a cigar in church. The smoke may impose significant costs on other members of the congregation. It might be possible that Aunt Mabel and others in the congregation could contract (or pay) with Harold not to smoke. If a voluntary contract is made, Harold is better off because he prefers the payment to smoking. Aunt Mabel and the congregation are better off because they were willing to pay Harold not to smoke. This assumes that Harold had a property right to smoke. An alternative view is to ban smoking in the church by assigning the property rights to smoke free air to Aunt Mabel and the others. If Harold wanted to smoke, he would have to contract with the congregation for the right to do so.

Nonattenuated property rights are:

1. exclusive
2. enforceable
3. transferable

Externality

The failure of exclusive property rights results in three problems in the market. First is the problem of “externalities.” The example of second hand smoke in the previous paragraph is an example. Pollution from a steel mill or odor from a pig farm are other examples. A negative externality results in “too much” or over use of a resource or good since the marginal costs to society exceed the marginal cost to the economic agent who makes the decision. The Environmental Protection Agency was created to deal with many of the problems of negative externalities.

Externalities occur when costs of benefits affect individuals who are not a part of the economic activity (exchange, production or consumption).

Externalities may also be positive. The marginal benefits to society are greater than the marginal benefits to the decision maker or economic agents engaged in an exchange. If I landscape my front lawn, it may increase the property values of my neighbor. The benefits to my neighbor are not taken into account by my decision. In general, the market signals an under utilization of goods and resources that have positive externalities

Public Goods

A second problem is that of “public goods.” A public good is one in which the marginal cost of an additional user is zero and it is

It is impossible to exclude individuals from the use of a public good and the marginal cost of an additional user is 0.

Everyone has access to a common property resource but the user marginal cost is greater than 0. Rights to use are established by "capture."

Property rights can be enforced or protected by duty, respect for others or by the state

A shift of the economy to greater emphasis on information and intellectual property coupled with changes in technology make it more difficult (and costly) to enforce property rights.

impossible to exclude anyone from its use. National defense is often used as an example of a public good. There are other goods like roads, bridges, etc. that may be treated as public goods even though it is possible to exclude users. These are sometimes referred to as "quasi-public goods."

Common Property Resources

The third property rights problem is "common property resources." A common property resource is one where users are not excluded but the marginal cost of users is positive. Garret Hardin's 1968 article, "Tragedy of the Commons" argues that common property tends to be overused and can be driven to extinction. Passenger pigeons, whales, American bison, and fisheries are often cited as common property resources. The property rights for these common property resources are not clearly defined and are "fugitive" resources; whoever captures the resource has ownership rights. It is in the interests of the economic agents to capture as much as possible as quickly as possible. The result is the market signals an overuse of the resource. Treaties and government regulation may be used to establish property rights that will result in a more economic use of the resource. International treaty protects whales. State fish and game departments may sell license and regulate the capture of game.

Externalities, public goods and common property resources are fodder for debates between pro and anti market advocates. The economics of non-exclusive property rights will be covered in more detail in later chapters.

Enforceability

The establishment of property rights is fundamental to society. Social institutions and a sense of community (with a respect for others) establish the nature of property rights. John Locke, Adam Smith Karl Marx and many other writers have argued that one of the functions of government (or the "state") is to define and enforce property rights. In a world of chattel and real property, property rights can be defined and enforced. In a world of intellectual property rights, computers, copy machines and all manner of devices to copy and transmit intellectual property with 0's and 1's, the enforcement of property rights is more problematic. As the society has shifted to greater emphasis of an "information" economy, intellectual property has become more important. Music, computer software, books, and knowledge of how to do things has made the enforcement of property rights and market exchanges difficult in many cases. The development of technology to electronically copy and transmit information has increased the problems of enforcing property rights to that information.

Copyright and patent laws are examples of attempts to define and enforce property rights. Pharmaceuticals, DNA and knowledge are often the source of legal action. As the technology to develop, copy and transmit information improves, the enforcement of intellectual property rights will become more difficult and expensive to enforce. Many interesting economics questions will accompany these changes.

Transferability

It may be difficult to transfer property rights for social or physical reasons.

Neoclassical microeconomics is based on a consequentialist ethic called "utilitarianism."

In many cases, it is technically impossible to transfer property rights.

The property rights to a person's height or athletic skill cannot be transferred. I cannot become a professional basketball player by purchasing a player's height or skill. I might hire some one to coach me but there is no way to transfer property rights to height and skill. However, with the "advances" in science it may be possible to genetically modify a fetus with DNA from a person who has some physical characteristic that is desired.

Often society will choose to prevent the transfer of property rights by making an exchange illegal. Buying and selling children is technically possible but societies usually choose to make it illegal. The Organ Transplantation Act of 1984 is another example. While it is technically feasible to transplant organs (heart, kidney, lung, pancreas, liver, etc.), the law makes it illegal to sell an organ for transplantation. However, it is now possible to travel to other countries to "buy" a kidney. There is some evidence that a black market (or illegal market) has been developing. There are also advocates of creating a market for transplantable organs.

ISSUES IN PROPERTY RIGHTS

Property rights cannot be static and need to be structured to the type of property to which they apply.

Technological change and structural changes in the modern economy pose great challenges for society and the evolution of property rights. Conventional thought holds that the industrial economies are undergoing a structural change. There is a shift from manufacturing to information and services. This shift has implications for the way in which property rights are assigned. As Hayek has pointed out, property rights cannot be static; the property rights that apply to chattel property of individuals may not apply equally well to intellectual property. Property rights that work for individuals may not work for organizations such as corporations. The nature of property rights is a major concern for modern society.

Property rights provide a set of incentives to promote creativity.

Private property rights have long been seen as an important incentive for good stewardship. If chattel or land is "mine" I am more likely to use it wisely. This perspective is based on property rights that are exclusive and enforceable. A version of this view has been extended to intellectual property rights. If the property rights to ideas, inventions, patents, trademarks, copyrights are held privately, the owners will use them to the greatest advantage. These property rights also insure that individuals will have a strong incentive to create new ideas and inventions.

All ideas and inventions are the result of earlier ideas and inventions.

At the same time, all new ideas and inventions are founded on prior knowledge. The material in this text is a conglomeration of ideas that have been debated for as long as humans have communicated. There is little new material presented here. It consists of old ideas that have been restructured and combined with other ideas in new ways. Academic tradition and law provides for the use of these ideas. If authors do not appropriately cite sources of ideas, they are guilty of plagiarism. However, it is impossible to know the origins of all ideas that authors use.

The evolution and creation of knowledge and technology depends on the availability knowledge from the past. If intellectual property rights are not flexible enough that the existing ideas and knowledge cannot be used to create new knowledge, progress and economic growth are impeded. Lawrence Lessig

argues that property rights must be balanced between provision of incentives and to allow others to use intellectual property to extend knowledge. Culture and knowledge progresses by building on the past;

Property rights laws need to balance the incentives of private property with the source of creativity; the intellectual commons.

Creators here and everywhere are always and at all times building upon the creativity that went before and that surrounds them now. That building is always and everywhere at least partially done without permission and without compensating the original creator. No society, free or controlled, has ever demanded that every use be paid for or that permission for Walt Disney creativity must always be sought. Instead, every society has left a certain bit of its culture free for the taking—free societies more fully than unfree, perhaps, but all societies to some degree. (Lessig, Free Culture, p 29)

The questions become;

- What form should intellectual property rights take if creativity is to be promoted?
- How can property rights be structured to provide incentives for creators to continue to develop new ideas?

A free culture is not a culture without property; it is not a culture in which artists don't get paid. A culture without property, or in which creators can't get paid, is anarchy, not freedom. Anarchy is not what I advance here. Instead, the free culture that I defend in this book is a balance between anarchy and control. A free culture, like a free market, is filled with property. It is filled with rules of property and contract that get enforced by the state. But just as a free market is perverted if its property becomes feudal, so too can a free culture be queered by extremism in the property rights that define it. (Lessig, Free Culture, p xvi)

There is a history of just such a property system that is well known in the Anglo-American tradition. It is called "feudalism." Under feudalism, not only was property held by a relatively small number of individuals and entities. And not only were the rights that ran with that property powerful and extensive. But the feudal system had a strong interest in assuring that property holders within that system not weaken feudalism by liberating people or property within their control to the free market. Feudalism depended upon maximum control and concentration. It fought any freedom that might interfere with that control. As Peter Drahos and John Braithwaite relate, this is precisely the choice we are now making about intellectual property. We will have an information society. That much is certain. Our only choice now is whether that information society will be free or feudal. The trend is toward the feudal. (Lessig, Free Culture, p 267)

As changes in technology pushes us into the age of information, the question of property rights will become more difficult.