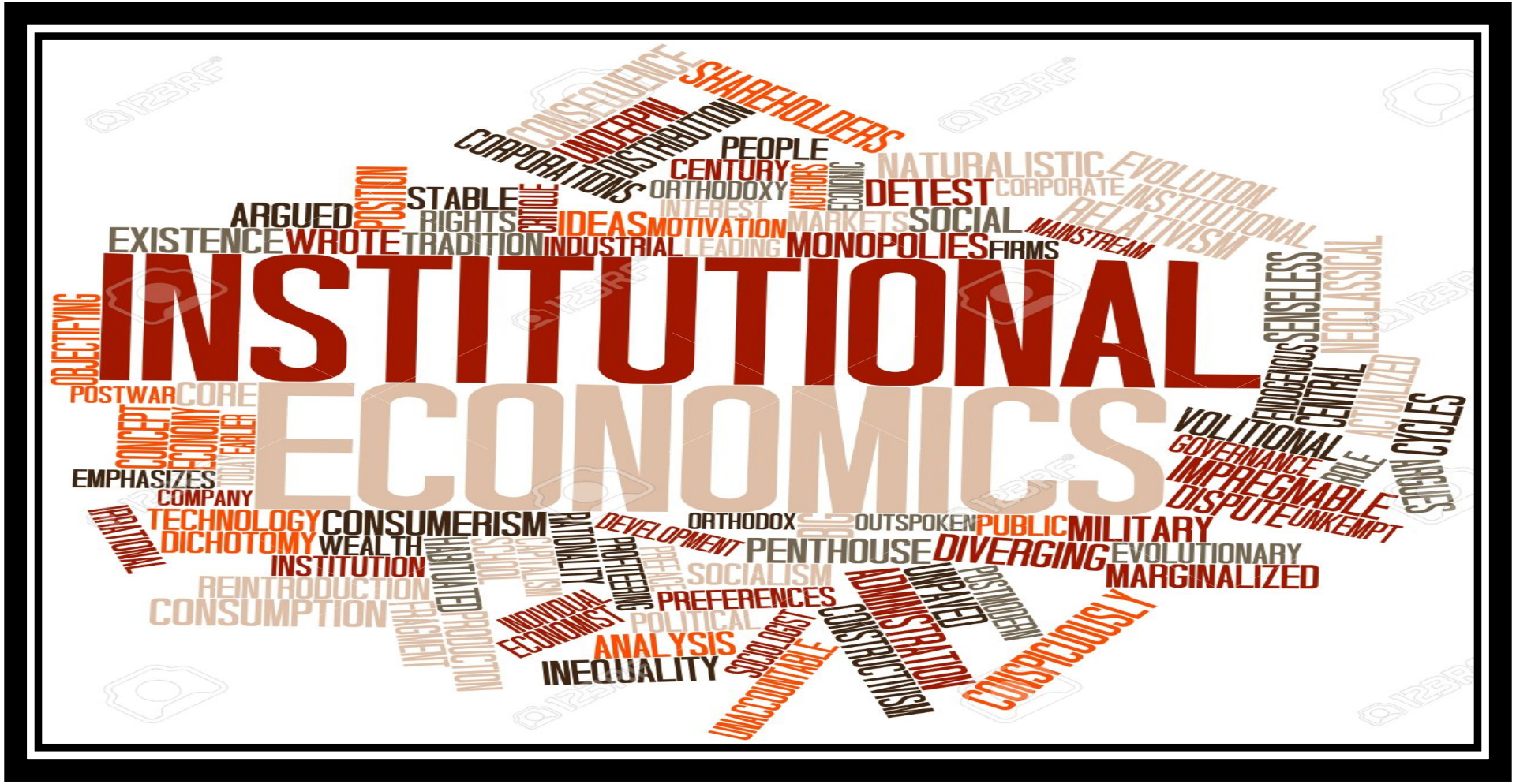


Socrates Majune
skmajune@uonbi.ac.ke

Lecture Three: Contracts

Order of presentation

1. Announcement
2. Recap
3. Contracts

Contracts

Journey to Mission MarsInsEcon2023

- Flight is MarsInsEcon-2023
- Vessel id is Mars-Ins-Econ-2023
- Currently in the 3rd week of our flight

Contracts: Introduction

- Contract is a promise or set of promises, for breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty
- Others consider it as "an agreement between two or more persons to do or forbear something" "covenant" etc.
- These words suggest mutuality, participation and action
- Ronald Coase (1937) developed a contractual approach to the firm; Oliver Williamson (1975, 1985) developed a contractual approach to the governance of transactions
- Their efforts – together with those of other scholars closer to the neoclassical approach who were seeking to renew the theory of prices – led to renew economics

Contracts: Introduction

- Contracts spells out mutual expectations and obligations for each party in such exchange
- They can either be formal such as a sale agreement drawn by lawyers about land sales, or informal relying on social relations between the contracting parties. For instance, most dowry and bride price and general marriage contracts are informal
- Enforcement of informal contracts is challenging. Hence, informal contracts are often build on trust, reputation and referral systems

Economic Aspect of Contract – A Mechanism for Exchange

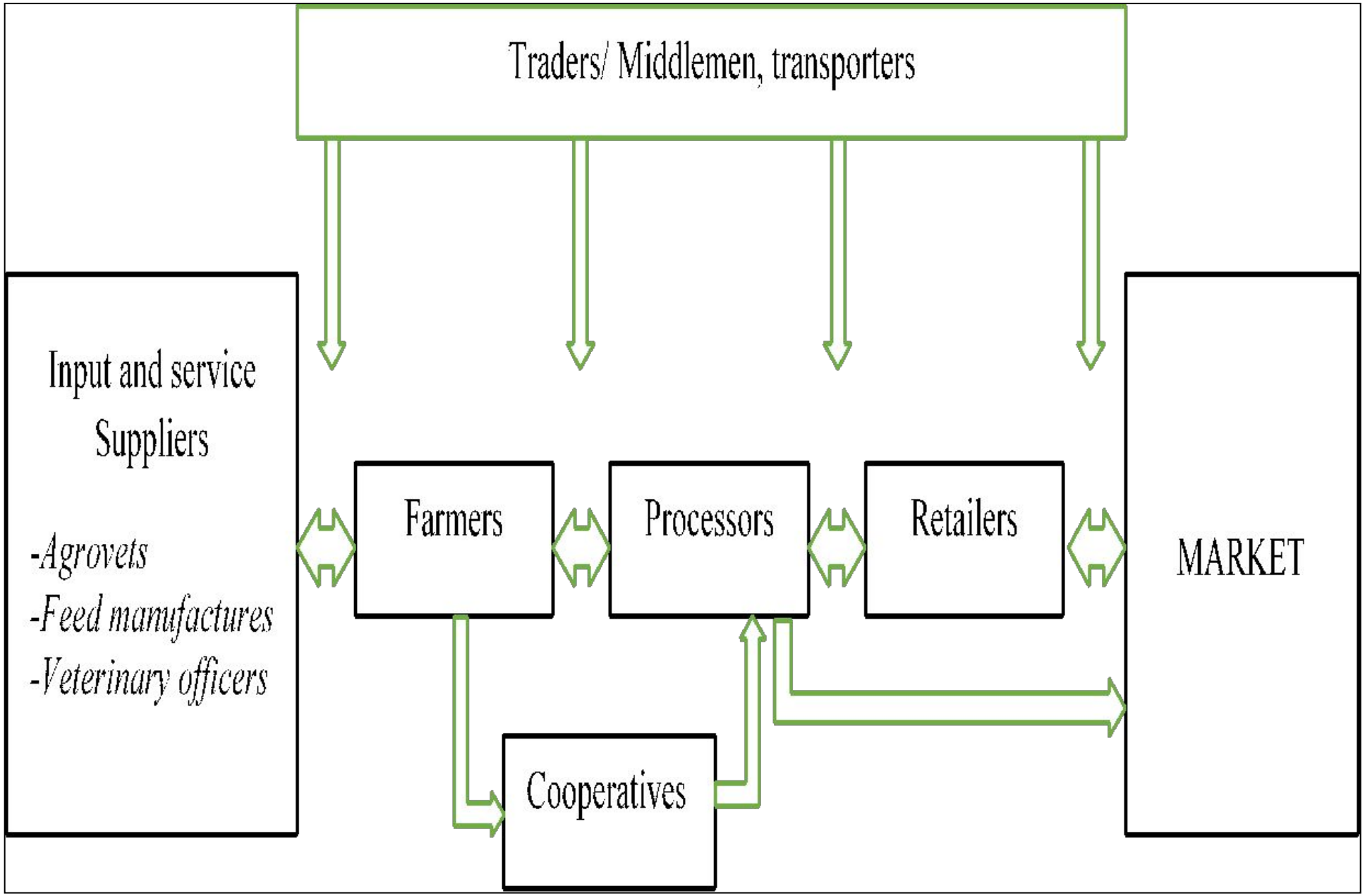
- To an economist, a contract is an agreement through which the parties make reciprocal commitments in terms of their behavior—a bilateral "coordination" arrangement
- Therefore, a contract specifies actions and conditions of the agreement
- Actions typically relate to the performance of services, delivery of goods and monetary payments
- Conditions include uncertain contingencies, past actions of the parties, specialized information and messages communicated by them
- However, a contract is not an instrument by which the parties collectively may achieve such a commitment. Rather, their individual commitments, and perhaps explicit and implicit enforcement, guarantees it

Economic Aspect of Contract – A Mechanism for Exchange

- Contracts can be considered in two ways in Economics:

1. Contracts can be considered as analytical tools

- Can focus on transactions between firms or any relationship with entities
- Agree on the goals, roles, tasks, quality, direction etc.
- Example: Assemblers and their sub-suppliers in the automobile industry
- First-tier suppliers that produce major parts and components
- Second-tier: That produce and sell smaller parts and components


Traders/ Middlemen, transporters
Input and service Suppliers
-Agrovets
-Feed manufactures
-Veterinary officers
Farmers
Processors
Retailers
MARKET
Cooperatives

Economic Aspect of Contract – A Mechanism for Exchange

- Regulations (Daily Industry Act CAP 366)
- Inspection, Licensing and Quality surveillance: milk handling premises though out the daily value chain
- Comply with hygienic and operational requirements
- Include: premises, equipment, personnel, record keeping, waste management, utilities, management, operations, rodent and vermin control

Economic Aspect of Contract – A Mechanism for Exchange

2. Contracts can be considered as actual means of coordination and organization among agents

- Firms will have different policies related to the following: anti-corruption policy, quality policy, board charter, code of conduct and ethics, whistle blowing policy, board risk committee charter, conflict of interest policy, CSR policy, gender mainstreaming policy, memorandum and articles of association , board audit committee charter

Legal Perspective of a Contract – A Law Enforcing Mechanism

- An agreement enforceable by law is a contract
- Thus for the formation of a contract there must be (1) an arrangement and (2) the agreement should be enforceable by law
- "Agreement" is defined as "every promise and every set of promises forming the consideration for each other"
- And a "promise" is defined as an "accepted proposal"
- "A proposal, when accepted, becomes a promise"
- Thus, concisely, a contract is an agreement; an agreement is a promise; and a promise is an accepted proposal
- Every contract is an agreement, but every agreement is not a contract
- An agreement becomes a contract when the following conditions are satisfied: (1) there has been some consideration of it, (2) the parties are competent to make the contract, (3) their consent is free, (4) their object is lawful
- Hence, an agreement becomes a contract if it imposes upon the parties legally binding obligations

Legal Perspective of a Contract – A Law Enforcing Mechanism

- Accordingly, the law -“an obligation backed by state sanction”-that governs such agreements is critical to the functioning of free-market economies
- This formulation not only touches the legal concept of a contract as a promise but also surpasses it through extending remedies for any violation, disputes or breach of contract
- While the law of property determines the boundaries of our lawful possessions, the law of torts defends individuals against the violation of those boundaries as well as against the violations of their physical persons by protecting those entitlements from involuntary encroachment and expropriation

A summary of the Law of Contract

- A contract comes into existence when an offer by one party is unequivocally accepted by another, both parties must have the requisite capacity and some consideration must pass between them. The parties must have intended to create legal relations and the purpose of the agreement must have been legal. Any requisite legal formalities must have been complied with
- Elements of a contract:

1. Offer (offeror and offeree): nature, rules, termination
2. Acceptance: External manifestation of assent by the offeree ***(Consensus ad idem)***
3. Capacity: Legally recognized right of a person to enter into a legally binding agreement
4. Consideration: Something which is of some value in the eye of the law, moving between parties
5. Formalities: For an agreement to constitute a valid and enforceable contract it must have been entered into in the form, or **manner**, if any, **prescribed** by law
6. Illegality
7. Intention: Parties thereto must have intended it to have legal consequences
8. Terms of the contract
9. Vitiating elements in a contract
10. Discharge of a contract
11. Remedies for breach of contract

Economic Analysis of (Contract) Law

- Economic analysis of law, in principle, is concerned with two basic objectives: (a) determination of the effects of the legal rules (i.e. a predictive approach), and (b) evaluation of the desirability of the effects of legal rules with respect to well-specified definitions of social welfare (i.e. an efficiency oriented approach)
- The orientation of the economic analysis of contract law deals with the enforcement of contractual agreement
- Under economic analysis, contracts that are written are not interpreted as detailed promises that parties truly want to keep, but rather as "incomplete promises" that are only rough guides for parties' behavior, and that the parties do not want to govern when performance would be very difficult through "damage payments" by the party which commits the breach to the victims of the harm

Principles of Contract Design

1. *Informativeness principle*

- Particularly helpful in the absence of full information
- By this principle, any measure of performance that reveals the performance level chosen by the agent should be included in the compensation package
- This removes randomness in the agents income. In this case, fluctuations in the agent's income fall under his/her control, improving ability to bear risk
- This also improves incentive to perform

Principles of Contract Design

2. Incentive-intensity principle

- Setting incentives which are as intensive as possible is not always optimal from the point of view of the Principal
- Optimal intensity of incentives depends on FOUR factors:

1. Incremental income generated by additional effort
2. The precision with which desired activities are assessed
3. The agents risk tolerance
4. The agents responsiveness to incentives or the incentive elasticity of effort

Principles of Contract Design

3. Monitoring - intensity principle

- This principle is complementary to the second one in that when the optimal intensity of incentives is high, the optimal level of monitoring is also high. This means that employers have to choose from a menu of monitoring/incentive intensities

4. Equal-Compensation principle

- Activities that are highly valued by the Principal should be equally valued in terms of compensation to the employee

Normative and Positive Economic Analyses of (Contract) Law

- The traditional legal theorists view the law as being mainly concerned with goals of fairness and justice
- However, economic analysis of the law often takes two varieties: positive and normative analyses
- The positive variant aims to provide an economic explanation of the law and to provide an effect-analysis of legal sanctions, that is it explains the consequences of legal sanctions on agents' behavior
- Positive analysis relies on the assumption that people respond to legal sanctions rationally. For example, positive analysis may ask questions like: How will changes in tort rules affect the accident rate? Does the expectation damage remedy induce an efficient breach?

Normative and Positive Economic Analyses of (Contract) Law

- Normative variant investigates which type of legal sanctions is the most efficient or optimal, that is it suggests how the legal system can be made more efficient
- The latter variant is called normative because there is usually an implicit assumption that an efficient legal system would also be desirable
- However, either type of analysis hinges on the assumption that "efficiency" is an object that the law should reflect, and that legal rules should be modified when they fail to achieve it

Economic Theory of Contract and Law of Contract

- The theory of contract rationalizes the fundamental link between contract design, on the one hand, and contract enforcement, on the other
- Ideally, the analysis of contract law and its enforcement presupposes a theory of contracting behaviour, and vice versa
- **Economic theories of contracting give little explicit attention to enforcement issues,** the presumption being that courts will see to it (and subject themselves only to verifiability constraints) that whatever terms contracting parties arrive at are automatically satisfied
- Indeed, in mainstream contract theory the **court's only function is to enforce contracts as written therein**
- This judicial deference to contracts in economic theory contrasts with the far more intrusive role of courts in economic analyses of contract law, in which courts are called on to **adjudicate disputes, fill gaps and devise and implement default rules**

Why do we need contracts?

- Providing incentives that motivate the economic agents when making choices is a fundamental problem of economics
- In the basic competitive market model, as well as in others, private property rights and prices are two main instruments for providing incentive
- In a neoclassical exchange economy of the sort analyzed by Walras (1874) or Arrow–Debreu (Arrow & Debreu, 1954; Debreu, 1959), economic agents come to the market for purposes of exchanging their goods and services with others; buyers and sellers can exploit all the gains from trade through spot transactions and thus receive adequate incentives
- The First Welfare Theorem establishes a competitive equilibrium with complete markets to be Pareto-optimal. This paradigm however ignores the hazards of real-world trading (contracting), and as a result misses a lot of the institutional details by treating the firm as a black box
- In any real economy, the markets are often not perfect (not complete) and there exists imperfect information between the agents

Why do we need contracts?

- Economic agents expose themselves to various kinds of trading hazards especially in situations when a party needs to "delegate" a task to another party(ies) and thereby invoke a "commitment" to execute the task by providing the right incentive
- This delegation becomes even more challenging when the informational asymmetry prevails either between the parties themselves or between the parties and the court or both
- The "incentive problem" arises when the individuals/firms are not rewarded for what they do, or when both parties have different objectives in mind regarding the means of execution, or when they do not have to bear the full costs or consequences for what they do

Why do we need contracts? Examples

1. Trade with small number of agents

- When agents engage in a relationship and make a relationship-specific investment they enter some sort of small-number bargaining situation often called a “thin” market e.g. a bilateral monopoly bargaining
- Goods and assets traded in thin markets or those especially requiring transaction-specific investment, have weaker market sanctions. Does non-competitive contracting among some agents necessarily give rise to inefficiencies?
- Based on Coarse the answer is no. On the basis of Coarse Theorem, in the absence of ‘transaction costs’ the outcome of private bargaining is Pareto efficient. The idea is that parties will always implement mutual beneficent exchanges. This theorem can be viewed as a definition of transaction costs. The numerous sources of transaction costs have been suggested, but they can all be classified into two broad categories: **incentives and bounded rationality**
- **Contract theory studies contracting under transaction costs**

Why do we need contracts? Examples

2. Incentives

- Assuming there is a state contingent delivery contract that obliges a seller to deliver a high quality good in those states in which his/her costs is low. The contract may not be implemented when either the state of the world or the quality of the delivered good is, while privately observed by the seller , not contractible e.g. because it is not observed by anybody else
- This situation is called asymmetric information
- First the cost is only observed by the seller, he/she may have the incentive to misrepresent the state-say the cost is high and not deliver even when the actual cost is low
- When the quality of the delivered good is only observed by the seller, he/she may have the incentive to deliver a low quality good instead of a high quality good

Why do we need contracts? Examples

- Thus, asymmetric information creates incentive problems of two kinds:
  a) Hidden information (moral hazard): Agents may not deliver on their promises (effort/action) due to imperfect monitoring. One of the contracting parties may change its behavior (ex post) to the detriment of the other, once the contract is signed. In the context of the principal-agent model, moral hazard arises because the incentives to the principal and the agent may not be perfectly aligned

Why do we need contracts? Examples

b)Hidden cost (adverse selection): One party may already have the information which is not available to the other, or the information accrues to her subsequent to contract formation. In either case she may not reveal the state truthfully. Or it could simply be a failure of the parties to communicate meaningfully all the relevant information. A contract in these circumstances tries to elicit the agents' information

Examples of Asymmetric information problems

1. Taxation and welfare systems: individuals may claim their ability to produce is low, and may work less hard than socially optimal, so as to reduce tax payments and or increase welfare assistance.
2. Monopolistic price discrimination and auctions: buyers may claim to have a lower willingness to pay so as to pay a lower price.
3. Regulation of natural monopoly: the monopoly may claim high costs or under invest in cost reduction, so it can charge a high price
4. Employee compensation: employees may represent their ability or may engage in low effort
5. Financial structures of firms: managers may misrepresent their abilities or their firm's potential or fails to act in the interest of their shareholders.

Why do we need contracts? Examples

- All these factors hinder the optimal ex ante contractual designing and the eventual attainment of the ex post allocative and the ex ante investment efficiencies, thereby resulting in a hold-up and other problems
- Thus the contracting becomes worthwhile when: there is a temporal element to economic exchange; trading involves certain kinds of goods which are not readily available in the market; or when there are some elements of hidden action and/or information
- Transacting in such situations requires rigorous effort by the trading parties in terms of searching for a partner then fixing the different aspects of trading, that is bargaining on the quantity, quality and price of the special commodity concerned, and so on
- To cope, the parties may try to form a bilateral relationship through some contract

Why do we need contracts? Principal-Agent/ Agency problem

- Arises because information is usually asymmetric in the sense that one party may have information that the other party does not have
- The party holding private information may have an incentive to miss-represent the facts. For example, in a trade situation, if the vendor has private information about the thing being sold, she/he may have an incentive to sell low quality for high quality
- The principal agent problem arises because one party (Principal) wishes another party (Agent) to undertake an activity which is primarily in the interest of the Principal
- If we assume that Agent has private information while what the Principal knows is public, then the Principal has to *Screen* different agent and induce them to sign-up contracts that are appropriate to their type
- This is particularly relevant in insurance markets where different insurance seekers face different likelihoods of encountering unhappiness during the time when the insurance contract is in force. There is also screening in credit markets because different borrowers have different appetite for risk

Why do we need contracts? Principal-Agent/ Agency problem

- If we assume that it is the Principal that has private information not shared with the Agent, the Principal is this case is forced to *Signal* his/her type through the design of the contract.
- Signaling is common in the market for second hand cars where dealers distinguish themselves by the type of guarantees they offer on their second hand cars
- Notice that both Screening and Signaling are strategies used by Principals because most activities that bring together principals and agents are particularly beneficial to the principal but costly to the agents
- In this case, the principal has to create an incentive to encourage the agent to undertake the activity that is in the interest of the principal. The incentive package necessitates the preparation of a contract
- Although the Agent knows his/her ability very well and motivation level, the Principal may have no clue about the ability or even the motivational levels of the Agent, either because it is impossible or very costly to get such information
- Therefore there is information asymmetry
- In such an environment, information is incomplete for purposes of preparing a contract and asymmetric in the sense what the Agent knows is infinitely different from what the Principal knows

Why do we need contracts? Principal-Agent/ Agency problem

- This problem is overcome by attempting to create incentives that make the Agent perform in accordance with the interests of the Principal
- In game theoretic terms, the solution is to design rules of game in a way that aligns the interest of the Agent with those of the Principal
- **This is done through designing an appropriate contract**
- **Nevertheless, the agent still faces two problems, namely**

1. **The participation or rationality problem**: The contract must provide for a reservation compensation for the Agent, simply because the agent is likely to have other alternative activities that provide him/her with a reservation compensation. Unless the compensation package in the new contract meets this reservation compensation, the agent is unlikely to make a move
2. **Incentive compatibility problem**: Even after signing up the contract, the agent remains free to act in ways that maximize personal utility. This is the incentive compatibility problem

Why do we need contracts? Principal-Agent/ Agency problem

- Generally, asymmetric information generates incentive problems of two kinds

1. Hidden Information or Adverse Selection Problem: an ex ante problem encountered before the event or signing of the contract. An agent may have incentives for not being truthful in revealing his/her true attributes/inclination necessary for the design of a contract

- The contract in these circumstances would seek to elicit as much information on the agent as possible. Examples can be found in insurance markets where high risk insurance seekers present themselves as low risk seekers to make use of lower premiums extended to low risk customers. The insurance company faces the risk of selecting insurance buyers with an above average probability of making claims (high risk clients) while financial institutions issue credit to customer who are more likely to default (high risk customers). The principal (issuer of insurance or financial services) has to incur cost in screening and discriminating potential clients

Why do we need contracts? Principal-Agent/ Agency problem

2. Hidden Action or Moral Hazard Problem: This is an ex-post problem encountered after signing of a contract. Actors take actions that are not observable or verifiable ad therefore could not be contracted. Where the Principal is the one with the private information, then it is possible to signal difference from other Principals, such as in the second hand car market. Buyers would end up offering prices between that of a lemon and a cherry. In response, sellers would offer fewer than optimal number of cars because the price is low, but offer more lemons than cherries because they get a better price for the lemons. However, car sellers can distinguish cherries from lemons through signaling. This is done through extension of expensive guarantees which cannot be emulated by sellers of lemons

- The contract itself can change the behavior of one party (the Agent) to the contract to the detriment of the other party (the Principal). For example, crop insurance gives farmers an incentive not to invest in crop failure but rather depend on the cash income from the insurance proceeds from a failed crop. Livestock insurance creates incentives for livestock farmers not to spend money on improved animal husbandry such as dipping. Moral hazard is an *ex post* problem

Types of Contracts

- Complete contracts vs Incomplete contracts
- Complete contracts (Arrow-Debreu contracts i.e. contracts that condition on every possible state of the world). They are optimal such that they anticipate and control for all possible ex post strategic behaviors leading to "first best" solution
- Complete incentive contracts
  - Incentives helped in the understanding of coordination mechanisms at the micro-level
  - It attempted to characterize optimal contracts, controlling ex ante for the complex strategic games among parties

Types of Contracts

- Comprehensive Contracts: Contracts that make optimal use of all commonly observable information. Second-best contracts under moral hazard and adverse selection are comprehensive
- The theory points to complexity of optimal contracts
  - Which have to anticipate and control for all possible ex post strategic behaviours
  - And their sensitivity to the context (nature of information asymmetries, to the number of players, to the observation capabilities of the enforcement device, to the degree of competition among potential contractors etc)

Examples of complete/comprehensive contracts

- For example, if a seller S of an input has private information about his/her costs, then an optimal contract between S and a purchaser P will make the quantity of input to be traded and the price to be paid a function of S's announced costs
- In order to encourage truth-telling by S, the contract will typically involve some production inefficiency, that is, it will be "second-best“

Examples of complete/comprehensive contracts

- Good world: cost is not an issue, plan for, write down provisions, parties trading can have a 'comprehensive contract'
- It would specify precisely what each of their obligations is in every conceivable state of the world
- Under these conditions, there would never be any reason for the parties to modify or update their contract since everything would be anticipated and planned for in advance
- Nor would any disputes ever occur since an outsider (for instance, a court) could (costlessly) determine whether one of the parties has been in breach of contract and impose an appropriate penalty

Incomplete contracts: Economic and Legal Views

- Legal scholars consider a contract as complete if (1) parties can write a contract specifying the "Pareto-optimal" actions for each of the parties and each of the potential or imaginable contingencies that may arise, and (2) courts can costlessly enforce them
- Conversely a contract remains incomplete if its obligations are not completely specified (Ayres & Gertner, 1992), for example a contract that fails to specify the price, quantity or time of delivery

Incomplete contracts: Economic and Legal Views

- Economists (e.g. Hart & Moore, 1988) consider contracts as incomplete, particularly when the relationship is long term, even if the parties fully specify the contracting parties' obligations and even if they are "insufficiently state contingent", that is, it fails to make the specified exchange contingent on all the payoff-relevant information available to the contracting parties
- The legal definition operates to define an incomplete contract in those circumstances in which an issue of "gap filling" can arise and thus is well suited to the lawyer's purposes
- The economic definition, in contrast, includes the contracts that do not pose any opportunity for the gap filling and thus gives the parties an inducement to renegotiate or breach the original contractual terms to achieve the additional gains from trade
- An incomplete contract has gaps, missing provisions, and ambiguities and has to be completed (by renegotiation or by the courts) with strictly positive probability in some states of the world

Sources of contractual incompleteness

1. The ex ante cost of "writing" a contract – which is not the cost of paper and ink, but the cost of the efforts of settling an agreement and designing coordination rules – may prevent the parties from establishing a complete contract. *Inadvertent gaps* arise when parties in a contract are unable to foresee all possible risks far ahead and write them in. If the possibility of a risk is rather remote, then a gap not covering this risk is called the deliberate gap
2. The ex post costs of having the parties comply may lead us to exclude from the contract requirements which would be more costly to enforce than the benefit they would bring to the parties
3. Bounded rationality: Parties cannot write long-term state contingent contracts. Cannot foresee all possible future states
4. Non-verifiability: Some information observable but not verifiable vis-a-vis court and mechanism cannot be used (for instance, because information concerns quality attribute that is hard to measure)

Residual right of control

- If there is an incomplete contract, there must be a mechanism by which the gaps can be filled in as time passes
- Example 1: A supply of a major parts of a car bodies for an automobile manufacturing plants in Thika
- Demand rises and the Auto plc wants to increase the supply for this parts (This was not in the agreement)
- That is, the status quo point in any contract renegotiation will be where you do not provide the extra supply; in other words you possess the residual rights of control in this case

Residual right of control: Example

- Example 2: I rent a house from you
  - My friend comes to live with me and she does not like the colour of the bedroom
  - The decision to repaint would presumably be mine, not hers
  - That is, I would have to persuade her to repaint the room; I could not force you to do so (so in this example, you possess the residual rights of control)

- Suppose that the power plant needs the coal to be pure but that it is hard to specify in advance what purity means given that there are many potential impurities. Imagine that ten years into the relationship, ash content is the relevant impurity and that high-ash-content coal is more expensive for the power plant to burn than low-ash-content coal but cheaper for the coal mine to produce. Given that the contract is incomplete, the coal mine may be within its rights under the contract to supply high-ash-content coal
- The power plant and coal mine can, of course, renegotiate the contract. **However, the coal mine is in a strong bargaining position**. It can demand a high price for switching to low-ash-content coal. The reason is that the power plant does not have a good alternative: it may be very expensive for the power plant to transport coal from a different coal mine given that it is located next to this one
- Economists refer to this situation as the **"hold-up"** problem. The coal mine can hold up the power plant because the power plant, by locating next to the coal mine, has become dependent on it. The next point to realize is that although it may be impossible to write a contract that is complete enough to avoid hold-up, this does not mean that the parties will be unable to anticipate hold-up

Consequences of contractual incompleteness

1. Many contracts leave room for re-negotiation
2. Long term transacting relationships become important even where markets are competitive because such relationship yield information on the reliability and credibility of each party
3. When exchanges become durable and personalized, the actual motive for exchange goes beyond self interest to such things as trust and fairness
4. One or more parties to the exchange could advance their interests by exercising authority over others

Consequences of contractual incompleteness

- Third party enforcement for incomplete contracts problematic because:

1. Such enforcement requires that all information be made available to both parties and be recognizable in court. This not always possible
2. For some transactions, there are no judicial apparatus capable of enforcing the relevant contracts. Many international transactions are of this nature

Approaches to contracts

- The transaction cost approach to contracts assumes that everyone is risk neutral, and relies on a trade-off between different incentive margins to explain contractual terms
- Principal-Agent (P-A) approach which assumes contracts are designed to balance risk against moral hazard incentives

Contracts as a tool to control transactional hazard

- Control of transactional hazards
  - Parties exchange promises
  - Take time before promise is delivered
  - Risks
    a. Agents can refuse to honour the promise or deliver less than expected (better prices by other agents)
    b. Change of situation (seasons, better prices)
- Credibility can be ensured since:
  - Possible if the cost of not fulfilling the obligation is higher than the cost of fulfilling the promise.
  - How to do this:
  - Other party (third party)-means to retaliate (hostages) (Lobby groups)
  - Third party can be granted the power to the responsibility of enforcing the agreement (Courts e.g. workers and employers)

From contracts to their institutional framing

- The third party needs to be an individual or organization with enforcement services and may have a component of institutional environment based on the ‘rule of law’. (1)
  1. The citizens fundamental rights are upheld
  2. Cost of enforcement can be shared by the citizens
- These enforcement capabilities can be described in terms of costs:
  1. Costs for observing compliance to commitments
  2. Costs for making decisions
  3. Costs for exercising constraints
- These costs affect the level of sanctions and complying on the commitments
- In addition, the quality of the institutional environment affects the degree of credibility, security of exchange and transaction costs

- Institutional environment: It also binds agents' capability to act and therefore affects the nature and level of hazards agents have to deal with (2) (Lobby groups)
- Contracts are embedded because the institutional framework set the endowment of agents in terms of right of decisions (3) (Courts). Not only does it fix the set of assets, of which use may be decided by agents, but it also delimitates these rights of decisions (and therefore of contracting)

Principal-Agent problems in firms

- Principal-agency theory is grounded in the study of information asymmetries
- The primary reason for doing so is that the agent has an advantage in terms of expertise or information
  - ✔ Corporate management (agent) and shareholders (principal)
  - ✔ Politicians (agent) and voters (principal),
  - ✔ brokers (agent) and markets (buyers and sellers, principals)
- How can a principal be sure that the agent has acts on her best interests?

Example 1

- Spence and Zeckhauser (1971) on insurance
- Risk-averse homeowner
  - Facing a ten percent chance of a $100,000 loss
  - Willing to pay more than $10,000 to be insured against the loss.
- Risk-neutral insurance company
  - Willing to accept any premium larger than $10,000 to cover the loss
  - Both sides could be made better off by shifting the risk to the insurance company for the appropriate premium; failure to make the trade would be a manifestation of inefficient risk-bearing

- However there are potential obstacles to this efficient trade
- If individual is insured: no reason to avoid actions that may actually increase the probability of the loss-Moral hazard
- If the company: Monitor or not monitor the individual for moral hazard
  - When this is impossible or too costly, then the insurance company may have to refrain from fully insuring the homeowner, thereby forcing the homeowner to face the loss as an incentive to discourage moral hazard
- The insurance company will have to turn down a full insurance contract that would make both it and the homeowner better off-(Second best option)
- This is an example of market failure in the market for risk

Example 2

- The problem of balancing incentives and efficient risk-bearing transfers neatly and quickly to employment relationships
- The sales agent/homeowner is risk averse than the employer/insurance company
- The agent would prefer a smaller, fixed wage over a risky commission with a higher average payoff—and the employer would prefer the smaller fixed wage as well

- Efficient risk-bearing would require that the employer insure the employee against the risk by paying the flat wage (First-best option)
- But as in the insurance industry, the problem is moral hazard: the flat wage leaves the agent with no incentive to avoid behaviours that increase the risk of a “bad month” for auto sales
- Nor can anyone work backward from the outcome to deduce the agent’s effort level

- When a month with low car sales occurs, the sales agent can blame those external conditions that are known to impact sales
- Efficiency in incentives must be traded off against efficiency in risk-bearing
- The flat wage contract has insufficient incentives for effort, but contracts that provide incentives for agent effort are more costly to the employer
- For firm settings in which agent action is costly to monitor, the best solution is one in which agents are paid based on an outcome-based commission, and allowed to go their own way without much hierarchical supervision
- Chapter 14: Handbook of NIE

The governance approach to contracts

- Formal contracts and relational governance are complements. Rather than hindering or replacing relational governance contracts may promote the formation of long-term, trusting exchange relations
- Engaging the parties on various paths of relations is dependent on the implemented contract that sets:

1. A regime of decision: by allocating decision rights to one of the parties, to a third party, or by setting a negotiation procedure
2. A regime of risk-sharing: the rules according to which the surplus will be shared establish either a regime in which risks are borne by the parties or only by one of them
3. A way to recourse to external resources, and, in particular, to institutions to guarantee the mutual promises or to resolve disputes they might generate

The governance approach to contracts

- Contracts cannot be analyzed in abstract outside their institutional contexts
- Since they are imperfect and costly to manage, contracts should be considered as tools complementary to mechanisms that are relied on to reduce the costs of contracting – for example enforcement may rely on the enforcement mechanisms provided by the state (i.e. the judiciary) because it is less costly and more powerful than a mutually agreed upon and mutually run enforcement mechanism

Key Scholars of Contract Theory

Oliver Hart (1948-): Nobel in 2016

Bengt Holmström (1948-): Nobel in 2016

Jean Tirole (1953-): Nobel in 2014

Stanford Grossman (1953-)

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THANK
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