



Institutional Economics (HU) Questions & Answers

Institutional Economics and Political Economy I: Basic Concepts and Applications
(Humboldt-Universität zu Berlin)



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Section 1.1: Introduction, Background and Basics

1. What is the difference between normative approaches and positive approach in economics? Please give an example of each and justify the example.

Normative Analysis: evaluate (gives value to) real or theoretical phenomena.

- Normative or prescriptive theories **prescribe optimal behaviour**. Dedicated to perfecting the intelligence of human action by imagining that **action stems from reason** and by improving the technology of decision.
- is the study of what could be
- Normative economic statements are **opinion based**, so they cannot be proved or disproved.
- **subjective and value based**
- **Example:** the statement, "government should provide basic healthcare to all citizens" is a normative economic statement. There is no way to prove whether government "should" provide healthcare; this statement is based on opinions about the role of government in individuals' lives, the importance of healthcare and who should pay for it.

Positive Analysis: explains processes in reality and makes prognoses about future developments

- Descriptive or behavioural theories describe **actual behaviour**. Dedicated to perfecting the **understanding of human action** by imagining that action makes sense.
- the study of what is and how the economy works (pure science)
- abstract thinking is about abstract problems which might some day have relevance
- Positive economic statements do not have to be correct, but they must be **able to be tested and proved or disproved**.
- objective and fact based
- **Example:** The statement, "government-provided healthcare increases public expenditures" is a positive economic statement, because it can be proved or disproved by examining healthcare spending data in countries like Canada and Britain where the government provides healthcare.

The art of economics is **applied economics**, which relates the lessons learned in positive economics to the normative goals determined in normative economics. Art of economics is **contextual** and as much dependent on non-economic political, social, institutional and historic judgements.

2. What are the key assumptions of neoclassical economics and the model it creates?

Neoclassical Economics is a **predictive/normative way** to analyse the allocation of goods and services in exchange. It is a **model of social behaviour to determine prices**.

Market Attributes & Institutional Set-up:

Neo-classical Economics analyses the **basics of economic efficiency** under **ideal-typical conditions of perfect information and foresight**. It emphasises the important role of relative prices in economic decision making and focused on the **material world** (the production, consumption and exchange of tangible goods and services) for people **maximising their well being**, defined according to stable preferences, constrained by resources and technology.

Anything that cannot be explained by nature and technology was ascribed to **differences in preferences**, that are **stable and exogenous**. Thus the market in the neoclassical theory deals with:

- homogeneous goods
- spot market with no accessing limitations and dominating competitor
- full market transparency, no information costs and instantaneous
- all players in the market comply, no externalities (fully specified property rights)
- firms are places of production and serve a production function (production in a black box with homogeneous technologies). They operate in perfect (spot) input and output (factor) markets and their main goal is profit maximisation.

The model assumes that **actors have rational capacity** (rational actors) and thus make parametric decisions under **certainty**. Rationality is viewed as the terms of choices it produces. Perfect individual rationality implies that all decision makers have **consistent and stable preferences**. A perfectly rational actor can **foresee everything, evaluate and optimally choose** among available alternatives in the blink of an eye and with no costs. Actors:

- rank order outcomes
- have stable and transitive preferences e.g. they chose the highest ranked option without being influenced by emotions or a mental process
- in case of uncertainty & risk they maximise the expected utility

3. What are the differences in assumptions between the neoclassical economics and new institutional economics and what are the implications of these differences with regards to the core questions of the respective theories? What are the core questions.

Neoclassical Economics	New Institutional Economics
<p>Core Question:</p> <p>Analyses the basics of economic efficiency under ideal-typical conditions of perfect information and foresight</p> <ul style="list-style-type: none"> important role of relative prices in economic decision making focused on the material world - the production, consumption and exchange of tangible goods and services for people maximising their well being, defined according to stable preferences, constrained by resources and technology. <p>→ anything that cannot be explained by nature and technology was ascribed to differences in preferences, that are stable and exogenous</p>	<p>Core Question: How do institutions affect the behaviour of individuals?</p> <p>People do something for a reason and are irrational → assumes intelligent foolishness & ambiguity</p> <ul style="list-style-type: none"> need for collective action (to establish and enforce institutional norms) → instrumental role of morality and ethics <ul style="list-style-type: none"> the maximand: individuals pursue their own interests as they perceive them and maximise utility subject to the constraints established by the existing institutional structure → utility maximisation is extended to all individual choices (contrary to neo-classical). Individuals make their own choices and pursue their own goals.
Logic	
<ul style="list-style-type: none"> Logic of instrumentality: Large prior probability that people have consistent utility functions and in fact maximise utilities in an objective sense to reach a specific means to an end. 	<ul style="list-style-type: none"> Logic of social appropriateness: High prior probability that actors use the same basic processes in making decisions as have been observed in other human cognitive activities and that these are observable → looks at the decision mechanisms and processes and seek to determine the "frame", how it arises and how reason operates within that frame
Institutions	
<ul style="list-style-type: none"> institutionally neutral: no institutional constraint due to perfect and complete information there is no need for institutions because decision makers understand the conditions of the system and act with perfect rationality. 	<ul style="list-style-type: none"> central message: institutions matter for economic performance (endogenisation = beliefs & values are part of institutions)
<p>Important hypotheses:</p> <ul style="list-style-type: none"> Rationality, completeness: agent's have complete information and can rank decisions, choosing the highest ranked option that will maximise their utility/ preferences. Zero transaction costs: assumes perfect foresight, complete contracts enforced with absolute precision, costless acquisition of perfect information Transitive Preferences are stable, tastes are absolute, relevant, stable, consistent, precise and exogenous (March) 	<p>Important hypotheses:</p> <ul style="list-style-type: none"> Methodological individualism: people are different and have different and varied tastes, goals, purposes and ideas. Hence the society, state or firm cannot be understood as collective entities and behave as individual agents. Positive transaction costs are involved: real resources are required to create and operate an institution, operating the market and costs of administrative coordination. Constitutive (individuation): many choices play back on a person's preferences affecting his/her goals. Preferences/tastes can shift over time and are subject to learning, inconsistent, conflicting preferences, can also make decisions that do not follow their preferences/tastes. Thus humans: <ul style="list-style-type: none"> manage their preferences construct preferences treat preferences strategically (outsmarting ourselves) confound (pair) our preferences (want and do not want the preference) avoid our preferences expect change in our preferences suppress our preferences

Neoclassical Economics	New Institutional Economics
<p>Rationality is viewed as the terms of choices it produces</p> <ul style="list-style-type: none"> perfect individual rationality: consistent and stable preferences, can foresee everything, evaluate and optimally choose among available alternatives in the blink of an eye and with no costs. 	<p>Rationality is viewed in terms of the processes it employs</p> <ul style="list-style-type: none"> individual rationality: imperfect individual rationality, preferences of the decision makers are incomplete and change over time. Acquisition of unlimited knowledge is too expensive and individuals have restricted ability to handle data and formulate plans. → Bounded rationality
<ul style="list-style-type: none"> Only coalitions are considered that operate as to produce Pareto improvements and the members are adhering to the principle of voluntary association and voluntary exchange. Competition and free choice are assumed to dominate. Rules out the occurrence of pressure groups, physical force or compulsion. Metaphor of the invisible hand: harmony between individual actions because enforcement is seen as automatic in a zero-transaction cost world (no need for collective action) 	<ul style="list-style-type: none"> Economic Society: Involve individuals and a set of rules or norms that assign sanctioned property rights to each member of the society <p>(property rights=embrace the right to use and gain benefits from physical objects & intellectual work and the right to demand a certain behaviour from others)</p>

4. Discuss assumptions concerning full rationality - why does neoclassical economics presume full rationality?

The neo-classical theory has taken the assumption that agents are rational to be the **defining characteristic of the discipline** and have made it central to their thinking. The neo-classical view sees rationality as an instrumental understanding of human action.

An agent's rationality is assessed only with reference to his or her effectiveness in achieving a goal (logic of instrumentality).

In order to make rational decisions agent's need to have:

- complete information:** be able to compare and analyse all options available to them.
- maximises his objectives** to reach his most preferred outcome.

Important, because it expresses the **economist's understanding** of how agents are motivated and provides **normative criteria**, e.g. Pareto efficiency, that have no appeal unless agents are assumed to **seek what is good for them**. (consistency in choice).

- rationality as consistency:** conditions under which an agent's choice does not change. This means e.g. when a feasible set of options is reduced in size, the outcome would not change if it was a member in both sets. (Property alpha Theory by Sen)

► Rationality may thus be defined as a consistency between preferences and choices.

Actors **rank available** alternatives and choose the highest ranked option available, which implies **completeness and transitivity**. So and instrumental action must be directed towards a **goal and maximise utility/preferences** of the individual.

In order to make normative statements, neoclassical economists often use the Pareto criterion (a move from one state to another is only recommended if it makes no one worse off and makes at least one person better off). It is dependent on the assumption of rationality.

5. What is the main critique concerning the rational choice approach? To what extent and under which conditions would you consider rational choice to represent choice behaviour as we find it empirically?

Critique of the assumption of rational choice:

- relational concepts** e.g. envy, guilt, revenge etc influence decision making, but are **ignored** in the model
- preferences are not stable:** they are managed and altered depending on the outcome of a decision
- incoherence** between socially constructed desires, imposed desires & individual desires
- inconsistency between actions & preferences**
- instrumentality:** human goals are often inaccessible to reason, actions can be constructive rather than instrumental; people are incapable of full instrumental rationality and frequently use **rules of thumb or heuristic procedures**
- underlying reason for behaviour:** decisions can be disputable and the reasons for the dispute become significant
- it does not have a **sufficient scope** to explain all economic behaviour

- it involves two **guesses**: (1) the **future consequences** of the actions and (2) guesses about **future preferences** for those consequences. → Under uncertainty these become increasingly complicated.
- viewing **institutions as neutral** means that it does not matter

6. What are the foundational assumptions of new institutional economics?

NIE assumes that people **do something for a reason** and are **irrational** and thus assumes intelligent foolishness & ambiguity.

1. It amplifies the **need for collective action** to establish and enforce institutional norms, which attributes an instrumental role to **morality and ethics**.
2. It believes in the maximand and that individuals **pursue their own interests** as they perceive them and maximise utility subject to the constraints established by the existing institutional structure. Utility maximisation is extended to all individual choices (contrary to neo-classical). Individuals make their own choices and pursue their own goals.

Thus New institutional economics:

- focuses on the interdependence of actors e.g. conflict, cooperation & coordination
- transactions as a unit of analysis/observation
- institutions safeguard against opportunistic behaviour e.g. contracts/collective agreements
- institutions coordinate problems, determine actors' roles, its organisation and outcome

Foundational assumptions of NIE:

- Individuals are **boundedly but intendedly rational**. Rationality is viewed in terms of the processes it employs. It assumes imperfect individual rationality since the preferences of the decision makers are incomplete and subject to change over time. Acquisition of unlimited knowledge is too expensive and individuals have restricted ability to handle data and formulate plans. (**Bounded rationality**)
- they are interested in means to **achieve a desired outcome**
- individuals engage in **opportunistic behaviour**
- **Transaction and information costs** and a variety of goods and services exist (measuring costs). Positive transaction costs are involved and real resources are required to create and operate an institution and there are costs involved in operating the market as well as costs of administrative coordination
- **Economic Society**: Involve individuals and a set of rules or norms that **assign sanctioned property rights** to each member of the society
- **Methodological individualism**: people are different and have **different and varied tastes**, goals, purposes and ideas.
- **Preferences/tastes can shift over time** and are subject to learning, inconsistent, conflicting preferences, can also make decisions that do not follow their preferences/tastes. Thus humans:
 - manage their preferences
 - construct preferences
 - treat preferences strategically (outsmarting ourselves)
 - confound (pair) our preferences (want and do not want the preference)
 - avoid our preferences
 - expect change in our preferences
 - suppress our preferences

→ institutions are needed to overcome information costs and safeguard against opportunistic behaviour

Bounded Rationality: more realistic way of rational choice behaviour and is the foundation of NIE. It entails that:

- humans are **procedurally rational** and use whatever reasoning power they have; they can never be fully (substantively) rational
- actors have **limited cognitive competence** due to a lack of information and time
- **uncertainty cannot be eliminated** and the availability of information will not solve the problem because it is influenced by external events
- **actors satisfy**: an outcome is good enough because the costs of collecting further information is too high. It is influenced by:
 - **mental accounts** (choice among limited alternatives) --> **selective perception**
 - **lexicographic choice**: focus on the most important features (preferences)
 - **habits & standard operating procedures**: actors like to behave similarly than in a previous case (subjective similarity)
 - **sub-goals**: people can have more than one goal and an action and a final goal sometimes can't be linked
 - **calculated maximisation**

7. How are substantive and procedural rationality different? Define the two concepts according to Herbert Simon and use an example.

Substantive rationality views rationality in terms of the choices it produces.

- the decision maker's **computational powers are unlimited**
- **no distinction** between the real world and the decision maker's perception of it
- we can **predict the choices** that will be made by a rational decision maker entirely from our knowledge of the real world and without the decision maker's perceptions or modes of calculation.
- always reaches the decision that is objective, or substantively, **best in terms of the given utility function**
- **no** empirical analysis on (1) the process on how values are formed, (2) how particular aspects of reality come to the actor's attention, (3) how a choice situation is formed and (4) how reasoning processes are applied.

Procedural rationality views rationality in terms of the processes it employs.

- knowledge and computational power of the decision maker are **severely limited**
- **distinction** between real world and the actor's perception and reasoning about it
- construct a theory of the **processes of a decision** and the processes that generate the actor's subjective representation.
- actors are **procedurally reasonable** in the light of the available knowledge and means of computation
- the goal is to understand processes that an actor employs in making decisions and observing these processes directly (while they are going on)

Example Executives:

a manager will be hired on the basis of his past performance or productivity (substantive) or certain qualities that make them suitable for the position (procedural).

Example: Buying a Flood Insurance

Substantive rationality: a property owner would buy flood insurance if the expected reimbursable damage from the floods was greater than the premium he has to pay the insurance company.

Procedural rationality: assumes that most people buying flooding insurance are those that already experienced a flood or who have friends and family who experienced a flooding event. It entails that the property owner's attention to flood insurance was triggered by certain circumstances and that a process of deciding was involved.

8. What is opportunistic behaviour and how is that related to differences between neo-classical economics and new-institutional economics?

People engage in opportunistic behaviour by following their self interest with the help of guile, for example lying or cheating, and taking advantage of information asymmetries.

- It is the conscious policy and practice of taking **selfish advantage of circumstances** – with little regard for principles, or the consequences for others.
- Guided primarily by **self-interested motives**.
- **Not all human qualities are attractive or praiseworthy** and they can engage in dishonest behaviour in the sense that they disguise preferences, distort data or deliberately confuse issues.

Importance: bounded rationality **prevents the writing of complete contracts** and there could be a **reliance on incomplete contracts** → if economic agents were wholly trustworthy. can be very costly to distinguish opportunistic from non-opportunistic actors.

Neoclassical theory assumes **hyperrationality and ignores most of the hazards related to opportunism**.

- self-interested individuals will **rationally maximise their pleasure** and minimise their pain.
- This kind of rational self-interest is expressed in markets that allocate material benefits so that **economic efficiency and the greatest social satisfaction** are served.
- It takes its self-interested behaviour to be **socially integrative**, thus ignoring the concept of opportunism which would be self-interested behaviour that is not socially integrative.
- It promotes an **egoistic, hedonistic and autonomous individualism** and couples this sense of self with rationality, efficiency and social integration.

9. What are institutions according to NIE? Why are institutions important for the study of economics according to New Institutional Economists?

Institutions make up the stuff of social life and much of human interaction and activity is structured in terms of **overt and implicit rules**. They come into being because they are **consistent with the beliefs and values** of the people who use them and are then held in place by those beliefs and values.

Definition:

- Durable systems of established and embedded social rules that structure social interactions. (Hodgson)
- Institution is a special type of social structure that involves potentially modifiable and (evidently or imminently) normative rules of interpretation and behaviour. (Searle)
- assumes that institutions can exist only if people have particular and related beliefs and mental attitudes.
- Institutions can be defined as the sets of working rules and are the outcome of human interactions and aspirations.

What do institutions do?

- provide **moral or cognitive templates** / constrain and enable behaviour
- provide strategically-useful information, they also **affect the very identities, self-images and preferences**.
- affect behaviour by providing greater or lesser degrees of **certainties** about the present or future behaviour of other actors
- **provide information** relevant to the behaviour of others, enforcement mechanisms for agreements, penalties for defection etc.
- **affect individual action** by altering the expectations an actor has about the actions that others are likely to take in response with his own action.
- emphasises the extent to which individuals turn to **establish routine of familiar patterns of behaviour** to attain their purposes & emphasise the degree to which the choice of a course of action depends on the interpretation of a situation
- enable **ordered thought**, expectation and action by imposing **form and consistency** on human activities.
- institutions lead to **regularities of behaviour**, concordant habits are laid down among the population, leading to **congruent purposes and beliefs**.
- every formal institution creates an informal counterpart (or grey market), because they can turn entire social groups into potential criminals e.g. the poor, (banning burkas in public places???)

Institutions can either **arise spontaneously** on the basis of the self interest of individuals (Hayek: evolutionary rationalism) or be the **product of deliberate design** (with unavoidable incompleteness due to bounded rationality). The only way we can observe institutions is through manifest behaviour.

- The development of a particular organisational form can be explained as the result of an effort to **reduce the transaction costs** of undertaking the same activity without such an institution.
- Institutions can be **facilitated or sabotaged by cultural beliefs and values** and can thus arise through conflicts among political groups over the distribution of resources.

Institutional change can be the result of institutional instability or a **bad design** or because of **economic, technical, intellectual or cultural shifts**. Rationally designed formal institutions have to leave room for the development of informal arrangements.

Organisations are special institutions that involve (1) criteria to establish their boundaries and to distinguish their members from non-members, (2) principles of sovereignty concerning who is in charge, and (3) chains of command delineating responsibilities within the organisation.

→ if institutions are the rules of the game, organisations and their entrepreneurs are the players. Made up of individual actors often with conflicting objectives.

10. How are rules, norms and strategies/conventions different? Use examples of each.

Not all social structures are institutions.

Formally Sanctioned Rules: Broadly understood as a socially transmitted and customary normative injunction or immanently normative disposition, that people in situation X do Y.

→ a rule may be considered, acknowledged or followed

Immanently Normative: if a rule is scrutinised or contested then normative issues will arise.

Socially transmitted: the replication of such rules depends upon a developed social culture and some use of language. They:

- Combine a certain situation with an act that is required or forbidden and which is **governed by third party sanctioning**.
- are the product of **explicit agreements**

The main function of rules is to solve situations with conflicting interests.

- Rules include norms of behaviour and social conventions as well as legal rules.
- Rules are potentially modifiable and members of a relevant community share tacit or explicit knowledge of these rules.
- the set of possible rules can be enlarged by technological and other institutional developments.
- e.g.: property law, liability law, water pollution

People obey laws not simply because of the sanctions involved but also because legal systems can **acquire the force of moral legitimacy** and the moral support of others. Legal systems are inevitably incomplete to give scope for custom and culture.

Norms: arise from socially or culturally transmitted dispositions and develop behavioural regularities that people of a certain group follow.

- **informal understandings** that govern individuals' behavior in society
- regarded to exist as **collective representations of acceptable group conduct** as well as individual perceptions of particular group conduct.
- involve a **network of mutual beliefs**
- combine a certain situation with a required act or solution in order to support an underlying value

The main function of a norm is to **simplify life in a complex world**, create regularity, solves coordination problems, protect the identity of human values, encourage proper human relations e.g. through guilt or external sanction (it may replace rules).

- e.g.: greeting, birthday gifts

Conventions: combining a certain situation with a certain act or solution.

- Set of agreed, stipulated, or generally accepted standards, norms, social norms, or criteria, **often taking the form of a custom**.
- Certain types of rules or customs **may become law** and regulatory legislation may be introduced to formalise or enforce the convention (for example, laws that define on which side of the road vehicles must drive). In a social context, a convention may retain the character of an **"unwritten law" of custom** (for example, the manner in which people greet each other, such as by shaking each other's hands).

The main function of a convention is to **simplify life in a complex world**, create regularity, solves coordination problems, identity protecting of human values, proper human relations, guilt or external sanction (it may replace rules)

- e.g.: language, dress code

Informal rules for social action can **reduce uncertainty** and may or may not become social norms or ethical systems.

Social Capital: Those features of social organisation, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions. Social agreements are typically harder to change than individual decisions.

Conclusion: legal or formal institutions that do not have strong informal supports are unsupported legislative declarations rather than real institutions and they become important by becoming incorporated in custom and habit.

11. Can we think of institutions at different levels of social aggregation? How many levels does Oliver Williamson distinguish and how are they different? Use examples.

Level 1: Embeddedness (informal institutions, customs, tradition, norms, religion)

Belongs to the Social Theory and is often mono-calculative and spontaneous.

- mostly taken as given. Institutions at this level change slowly (arise spontaneously)
- different kinds: cognitive, cultural, structural political
- Involve individuals and a set of rules or norms that assign sanctioned property rights to each member of the society (property rights=embrace the right to use and gain benefits from physical objects & intellectual work and the right to demand a certain behaviour from others)



Level 2: Institutional Environment (formal rules of the game esp. property (policy, judiciary, bureaucracy) —> product of evolutionary processes)

Based on Economics of Property Rights, Positive Political Economy to get the institutional environment right (first order economising)

- defined as a set of formal and informal rules including their enforcement arrangements
- legal system to define property rights and arbitrate disputes
- purpose: steer individual behaviour in a certain direction
- it provides structure to everyday behaviour and thus reduces uncertainty --> define the incentive structure of societies and specifically economies



Level 3: Governance (play of the game esp. contract: aligning governance structures with transactions)

Based on Transactions Cost Economics to get the governance structure right (second order economising)

- property rights configuration is determined and guaranteed by a governance structure or order
- governance is an effort to craft order and thereby mitigate conflict and realise mutual gains.
- reshapes incentives
- system of rules plus the instruments that serve to enforce the rules.
- restricts the possible behaviour of individuals through the use of sanctions. The sanctions are established either by law or by custom.



Level 4: Resource Allocation & Employment (prices & quantities, incentive alignment)

Based on Neoclassical Economics/ Agency Theory to get the marginal conditions right (third order economising)

- level at which neo-classical analysis works: typically described as a production function and adjustments to prices and output occur more or less continuously

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The solid arrows signify that the higher level imposes constraint on the level immediately below. The reverse arrows (dashed) signal feedback. The NIE is mainly concerned with levels 2 and 3.

Section 1.2 Game Theory and Institutions

1. Please distinguish cooperative and non-cooperative games.

Cooperative games: players can make costless, fully binding and enforceable commitments

Any interaction in which **one player is affected by the action of another** player and these actions and the players' concerns are subject to **binding (costless enforceable) agreement** is called cooperative interaction.

→ refers to the institutional arrangements governing their actions and are often highly conflictual

Non-cooperative games: players cannot make costless, fully binding and enforceable commitments

→ something about the interaction is not subject to binding agreement

Impossibility of writing or enforcing relevant contracts.

Noncooperative interactions may have sharply conflicting interests or share common objectives but the interaction is not fully covered by a binding agreement.

A **non cooperative coordination game** may involve common interest and conflict, there is a benefit for individuals from coordinated strategies (resolve dilemma). There is no single Nash equilibrium that is socially optimum e.g.: prisoner's dilemma (Nash equilibrium but N not SO), assurance, battle of the sexes, chicken etc.

2. What difference does infinite repetition of the prisoner's dilemma make? What will be the outcome of this coordination game in this case and why, explain.

If the game is going to be **played just one time**, the **strategy of defecting**, in the prisoner's dilemma example confessing, seems to be the reasonable one.

Playing a game **repeatedly** with the same players opens up **new strategic possibilities**. If your opponent decides to defect in one round you can defect in the next round to **"punish" him**. In each game the player has the opportunity to establish a reputation for cooperation and thereby encourage the other player to do the same.

You can either repeat a game for a fixed amount of times or indefinitely:

- **Fixed number of games:** each player will choose the dominant strategy in the last round and defect (confess). If there is no way to enforce cooperation on the last round, there is no way to enforce cooperation on the next to the last round, and so on.

→ Players cooperate because they hope that cooperation will lead to future cooperation. The prerequisite is future play.

- **Indefinite number of repetitions:** players do have a way of influencing their opponent's behaviour. If he refuses to cooperate this time, you can refuse to cooperate the next time. As long as both parties care enough about future payoffs, the **threat of noncooperation** in the future may be sufficient to convince people to play the Pareto efficient strategy.

"Tit for Tat" in an infinite repetition of the prisoner's dilemma: In the first round you comply (deny). On every round thereafter, if your opponent cooperated on the previous round, you cooperate. If your opponent defected on the previous round you defect. The strategy does very well because it **immediately punishes defection**. On the other hand, it is **forgiving because it punishes the player only once**. If he falls into line and cooperates he will be rewarded with immediate cooperation.

→ good mechanism for achieving efficient outcome.

Conclusion: If the prisoner's dilemma is repeated indefinitely, then it is possible that the Pareto efficient outcome may result from rational play.

3. Provide empirical examples of the prisoner's dilemma, a pure coordination game, a pure conflict game, an assurance game, a chicken game, a battle of the sexes' game.

Prisoner's dilemma	Two fishers share a lake and catch fish for their own consumption. There is a lot of fish in the lake so that more fishing would always yield more fish for the two. However, the more one catches the fewer the other catches. For each there is a option that would yield higher payoffs when taken, in this case to increase their hours of fishing a day. However, this would make the outcome worse for both by overexploiting the resources.
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Pure coordination game	A firm consists of an employer and an employee. If the firm succeeds both win (1) if they fail both lose (0). The probability of success depends on their actions (employer: invest, employee: work hard). The firm will definitely succeed if the employer invests and the employee works hard. If only the employee works hard or the employer invests the firm will survive with a probability of p_1 or p_2 .
Pure conflict game	A dollar is to be divided between two individuals; without prior communication they claim an amount. If they amount to more than 1 each gets 0.
Assurance game	Farmers in a rural area sow their crops several weeks after the optimal sowing date at which yield could be maximised. The reason is that farmers do not want to be the first to sow because the seeds could quickly be eaten by birds. The optimal situation would be if all farmers sow their seeds early, because every farmer would increase their yield. Another Nash equilibrium would be that all farmers sow late, this is however not a social optimum as the yields are reduced. Only one farmer planting earlier would lead to most seeds being eaten and a bad crop production in that year for that specific farmer.
Chicken game	Two people in their cars are sitting in their cars facing each other. They start driving towards each other until one person "chickens out" and swerves.
Battle of the sexes'	A boy and a girl want to go to the movies together. The guy prefers to see an action and the girl an art movie, but they both prefer to see a movie together. Both forgot their cell phone and have no option to coordinate their date night.

4. Describe pure conflict and pure coordination games and provide examples. Compare key features of the two kinds of games referring specifically to the two concepts of social optimum and the Nash equilibrium.

Pure coordination game: a game in which the payoffs to only one of the strategy profiles is Pareto optimal (SO=N) and the payoffs associated with all strategy profiles can be Pareto ranked.

- these are games where the **payoff** to the player are **highest when they coordinate** their strategies.
- **one outcome is better** than all the other outcomes for at least one participant and not worse for any other participant
- there is a **second best outcome** that is Pareto inferior to the first, but that is Pareto superior to all the rest.
- as a result **conflict** among the players is entirely **absent**
- the problem is to develop mechanisms that enable this coordination
- **Examples:** battle of the sexes', prisoner's dilemma, assurance games

Pure Conflict Game: a game where possible outcomes are Pareto optimal.

- **zero-sum games:** the payoff to one player is equal to the losses of the other e.g. most sports
- **competition is fierce** in such games because the players' interests are dramatically opposed.

	Pure Conflict	Pure Coordination
Nash Equilibrium If each player has chosen a strategy and no player can benefit by changing his or her strategy while the other player keeps his unchanged, then the current set of strategy choices and the corresponding payoffs constitute a Nash equilibrium. (self-enforcing)	Often used in sports: payoffs in every cell amount to 0, thus the players have diametrically opposed goals . Row wants to maximise payoff and column wants to minimise row's payoffs. Kicking and defending is assigned different probabilities . Can be expressed as linear functions. The best payoff for row is the minimum payoff for column. The q that is optimising (0.7) is the Nash equilibrium. In equilibrium, row scores 62% of the time and fails to score 38% of the time.	Multiple pure strategy Nash equilibria in which players choose the same or corresponding strategies. Coordination games also have mixed strategy Nash equilibria. In the generic coordination game, a mixed Nash equilibrium is given by probabilities. Unlike the pure Nash equilibria, the mixed equilibrium is not an evolutionarily stable strategy (ESS). The mixed Nash equilibrium is also Pareto dominated by the two pure Nash equilibria (since the players will fail to coordinate with non-zero probability).
Social Optimum $\max. U_a + U_b$	From column's viewpoint, it is the maximum of the two lines that is relevant, since this reflects row's optimal choice for each move of q . However, row is always worse off. No social optimum.	These games have a dominant strategy equilibrium, namely a single Pareto-optimal outcome . Thus the Nash Equilibrium is the Social Optimum,

5. What is the invisible hand game and what is its outcome, what type of constellation does it entail? Please, give an example.

1. An invisible hand process is one in which the outcome is produced in a **decentralised way**, with no explicit agreements between the acting agents.
2. The second essential component is that the process is **not intentional**. The agents' aims are not coordinated nor identical with the actual outcome, which is a byproduct of those aims.

The process should work even without the agents having any knowledge of it.

→ This is why the process is called invisible.

The system in which the invisible hand is most often assumed to work is the free market. Adam Smith assumed that consumers choose for the lowest price, and that entrepreneurs choose for the highest rate of profit. He asserted that by thus making their excess or insufficient demand known through market prices, consumers "directed" entrepreneurs' investment money to the most profitable industry. Remember that this is the industry producing the goods most highly valued by consumers, so in general economic well-being is increased.

In the Invisible Hand Game **self interested actions of both players have outcome which maximises the well being of each**. This is illustrated in the example of producing corn or tomatoes by two farmers. If player one grows tomatoes and player two grows corn, they each receives five, which is Pareto optimum and a Nash equilibrium. It is a symmetric two person game with two strategies (2x2 game).

3. What is the difference between pure strategies and mixed strategies?

Pure strategy is used when a player continuously uses the same strategy.

- each agent is chasing one strategy once and for all → each agent is making one choice and sticks to it

Mixed Strategy: the choice of strategy is determined by probability over some or all of the pure strategies in the set.

- allows the agents to **randomise their strategies** to assign a **probability** to each choice and to play their choices according to those probabilities.
- a Nash equilibrium of unmixed strategies refers to an equilibrium in which an agent chooses the optimal frequency with which to play his strategies given the frequency choices of the other agent. → a Nash equilibrium always exists.

4. What does "cheap talk" in the case of the prisoner's dilemma mean?

Cheap talk is **communication between players**, which does not directly affect the payoffs of the game. This is in contrast to signaling in which sending certain messages may be costly for the sender depending on the state of the world. Cheap talk can, in general, be added to any game and has the **potential to enhance the set of possible equilibrium outcomes**.

It is not guaranteed, however, that cheap talk will have an effect on equilibrium payoffs. In the Prisoner's Dilemma the only equilibrium is in dominant strategies. Any pre-play cheap talk will be ignored and players will play their dominant strategies (Defect, Defect) regardless of the messages sent.

5. What is the institutional conundrum (problem) in a) the prisoner's dilemma, b) the assurance game, c) the battle of sexes' game, d) the chicken game? Each time, illustrate your explanation relying on a game representation in normal form and referring to the concept of dominant strategies, Nash equilibria and Social Optimum.

Constitutional Conundrum

► is the challenge of ensuring that the pursuit of individual interests **does not lead to "outcomes that none would have chosen"**.

- These undesirable outcomes are called coordination failures (= occur when noncooperative interaction of two or more people leads to a result which is not Pareto optimal).

Core Question of the Constitutional Conundrum: how can social interactions be structured so that people are free to choose their own actions while avoiding outcomes that none would have chosen?

The conundrum is relevant for environmental protection on a global scale, the determination of work effort, the production and distribution of information and the formation of neighbourhoods.

Prisoner's Dilemma	A dominant strategy equilibrium exists but it is Pareto inferior . A coordination failure exists because the harm inflicted on the other by one's defection is not reflected in the payoffs of the defector. So neither prisoner takes adequate account for their actions' effect on the other. Here the undesirable outcome is the only Nash equilibrium.
Assurance	The assurance game payoff matrix is such that there is more than one equilibrium, one or more of which may be Pareto inferior . Assurance games coordination failures occur because of generalised increasing returns or what is sometimes called strategic complementarity (=individuals payoffs are increasing in the number of people taking the same action). Because strategic complementarities can lead to multiple equilibrium the outcome is path-dependent. A Pareto optimal Nash Equilibrium exists.
Battle of the sexes'	The payoff is higher when players coordinate their action than when they don't. This game has three Nash equilibria (both choose action, both choose art, or earth chooses his preferred option) .
Chicken	The chicken game has two pure strategy Nash equilibria (either party swerves). Each equilibrium is better than a crash. Thus if both players choose the same strategy they are worse off, no dominant strategies.

6. In relation to the previous question: how can the conundrum be overcome in each of these cases referred to? Refer to several options for each case.

<p>Prisoner's dilemma: Here the undesirable outcome is the only Nash equilibrium. The only way that any of the other outcomes can be supported is by a permanent intervention to change the payoffs or the rules of the game.</p> <p>→ how to get there and how to stay there.</p> <p>Another way out of the prisoner's dilemma is to enlarge the game by adding new choices. In infinitely repeated games prisoners' can reach effective outcomes by applying tit for tat, in which players are rewarded for cooperation and punished for a lack of cooperation through their future actions. Another way to solve the dilemma is through contracting. Both players could sign a contract that they will stick with the cooperative strategy.</p>	<p>Assurance Game: A desirable outcome is an equilibrium. The challenge to governance is limited to the less challenging "how to get there" problem rather than also having to solve the more demanding "how to stay there". Assurance problems can be reasonably well addressed by one-time rather than permanent intervention. One way to achieve assurance is for one player to move first (sequential).</p> <p>Battle of the Sexes': Solutions can be found outside the formal descriptions. For example, by using a focal point e.g. the location of the movie theatre.</p> <p>Chicken: the most important strategy is commitment. For example, if one party has a locked steering wheel the other party will choose to swerve.</p>
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Summary: Assurance, the battle of sexes' and chicken can be resolved by having **one player move first and committing** oneself. The other player can then observe the choice and respond accordingly. Instead of sequential moves, **repetition and contracting** are major ways to "solve" the prisoner's dilemma.

A common problem to averting coordination failures (conundrum) is to implement policies or constitutions that change the payoff matrix in such a way that a prisoner's dilemma becomes an assurance game by making the mutual cooperate outcome a Nash equilibrium.

7. What are policy implications of different game constellations, compare prisoner's dilemma and, for example, assurance game.

<p>Assurance Policies:</p> <p>The desirable outcome is the equilibrium (two or more symmetrical pure strategy equilibria) so the focus is on how to get to the equilibrium. The individual payoffs increase with the number of people taking the same action which increases the path of dependencies (strategic complementarity).</p> <ul style="list-style-type: none"> • sequential gaming that enables learning • commitment to choice • additional information or focal point 	<p>Prisoner's Dilemma Policies:</p> <p>In the prisoner's dilemma the undesirable outcome is the Nash equilibrium. It requires a permanent intervention e.g. a permanent sanction or compensation to find a way to get and stay there.</p> <ul style="list-style-type: none"> • Binding Contract: sign a contract that they will stick with the cooperative strategy; pay a fine or be punished when broken; rely on the existence of a legal system that will enforce such contracts. <u>Purpose:</u> establish rules that either guarantee compliance or establish penalties or sanctions for noncompliance. Actors can be more confident that their compliance will not meet with a defection response. Facilitates the mutually beneficial outcome. • Repetition to solve dilemma (iteration) coupled with Tit for Tat
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8. What are the consequences of applying a Tit for Tat rule to the chicken game and the prisoner's dilemma?

Prisoner's Dilemma "Tit for Tat":

In the first round you comply (deny). On every round thereafter, if your opponent cooperated on the previous round, you cooperate. If your opponent defected on the previous round you defect. The strategy does very well because it immediately punishes defection. On the other hand, it is forgiving because it punishes the player only once. If he falls into line and cooperates he will be rewarded with immediate cooperation. → good mechanism for achieving efficient outcome.

Chicken:

The consequences of applying a tit for tat rule would be punishment (non-cooperation).

The tit for tat rule will worsen the situation of the punishing e.g. if you go straight I will go straight on the next round which could increase the chances of a crash. However, it is not necessarily a credible threat because if in the first round A goes straight, B would not go straight as well in the next round because the payoff is so low.

9. What is the role of conventions in coordination games such as the battle of sexes', chicken or assurance?

Game of chicken:

- Two individuals disputing about which of them should take something they both want.
- Each has a choice between two (pure) strategies, and aggressive one and a conciliatory one ("hawk" and "dove"). The intuitive idea is that to play hawk is to hold out for all the goods at the risk of deadlock or conflict. To play dove is to seek compromise but to be ready to back down at the slightest sign of determination by the opponent.
- The crucial assumption is that if you knew your opponent would play aggressive, it would pay you to be conciliatory.

Games like chicken or the battle of the sexes' cannot be solved by assuming that players are rational, have perfect information and thus reach the same conclusion. **For rational players conventions would be useless.**

If we assume that A plays dove the rational assumption will be that B plays hawk and vice versa. The **concept of prominence** ("salience" or the idea of a focal point) assumes that some ways of coordinating behaviour seems to strike people more than others. If people can coordinate their behaviour without communicating they must be **drawing on some fund of ideas** that they have in common. **Source: common experience.**

To coordinate on one equilibrium depends on the **ability to focus on something** in their environment that will facilitate coordination. Over time a **regularity in behaviour** will be established, which can serve as a guide to coordinated action. But this depends on the actors' initial ability to focus on a salient difference (focal point).

10. Does a convention help resolve the prisoner's dilemma? Please, explain your answer.

The Prisoner's Dilemma has no coordination equilibrium. Yet Sugden argues that following a **"tit-for-tat" strategy might emerge as a convention** when players repeatedly play Prisoner's Dilemma over some indefinite period. You co-operate as long as your opponent cooperates; if your opponent defects, then you defect for some prescribed number of rounds as retaliation before cooperating again; if your opponent cooperates but you defect by mistake, then accept your opponent's punishment in the next rounds without retaliating.

11. What is the function of a focal point in coordination games? What qualities does it require to orient coordination?

- may **label players** ("you may do i" and the other player "may do j" with a specific probability). → information is shared but uncertainty is created.
- the signal can be influenced by **existing information** e.g. from past experience. Solution that people will tend to use in the absence of communication.
- necessary to establish conventions which can solve coordination failures in coordination games.

In situations of a coordination failure the key is to discover something in the environment that will catch the attention of enough actors so that they can establish a common action; a standard behaviour that will later be imitated by other members of the community.

- **regularities of behaviour** develop in accordance with these focal points.
- all actors prefer to coordinate on one of the proper equilibria, the existence of this focal point leads to a common outcome and therefor to a **self-enforcing solution**.
- prerequisite: decision makers **share not only basic cognitive structures** and dispositions but also a **common body of background** knowledge and information that leads them to interpret the problems in similar ways.

Schelling's focal-point effect enables us to better understand how the cultural environment can affect rational economic behaviour, even when people in different cultures have the same individual goals and desires. Different kinds of social relationships, individual reputations, and social positions can be understood as alternative equilibria in an economic model.

12. What is an Evolutionary Stable Strategy (ESS) and how does it relate to Nash equilibria and Pareto optimal outcomes of coordination.

Conventions are not rational. They are the **product of evolutionary processes**. Random players with no information on probable strategies can gravitate to successful strategies through a process of **trial and error and imitation**.

- leads players to **gravitate towards successful strategies** (human analogue of mutation and natural selection).

► **An ESS is a pattern of behaviour such that, if it is generally followed by the population, any small number of people who deviate from it will do less well than others (majority adheres).**

- **Imitation leads to convention** in pure strategies. A convention is any ESS in a game that has two or more ESS's. A convention is one of two or more rules of behaviour, once they are established they become self-enforcing.
- **Evolutionary stability is a stronger criterion than the Nash Equilibrium.**
- **Conventions can be evolutionarily stable even if they are not Pareto-Efficient. An inefficient convention may be more prominent than an efficient one.**

Example: Chicken Game

- 3 Nash Equilibria (1. A:hawk, B:dove; 2.A:dove; B:hawk, 3: A&B:hawk). Any strategy that does not correspond with a Nash equilibrium cannot be evolutionary stable.
- Strategy 3 is not evolutionary stable, because the deviants will do slightly better than the rest of the population and a tendency to imitate the deviated strategy will arise. The more the strategy is played, the greater the incentive to play it.
- evolutionary processes will produce conventions that exploit asymmetries between the players.

13. Why do two identical players fail to reach an equilibrium in the absence of a focal point or a signal in the case of battle of sexes', chicken and assurance.

Effect of convention on resolving the prisoner's dilemma:

- Convention may counter rational choice and self-interest, e.g. if a convention that furthers solidarity has moral force, and allow players to achieve the Pareto efficient outcome.
- It may help know what to expect of the other player, e.g. if I'm in prison with another person from my gang and I know that it is a convention within this gang not to tell on the other (defect) in such cases, it is more likely for both of us to "stand united" (cooperate).
- Does a convention help? Yes.

Alternative answer

The PD is an abstract game and part of neoclassical Microeconomics/Game Theory. In a strict sense, conventions are not part of this theory. In Game Theory we are mainly interested in analyzing theoretically what a homo economics would do. At this level, this has not much to do with empirics or conventions. The example of your convention of the gang does not change the game. So for a homo oeconomicus gang member there is no reason to deviate from the decision to defect even if she expects the other to cooperate. This would be different if some rule of the gang would punish defectors etc. But then we would play a different game and would actually have a transformation of payoffs. To cut it short, what we have learned about conventions was meant as a more realistic, empirically and evolutionary grounded extension of Microeconomics -- another way to think about certain games. It has not really much to do with the microeconomic analysis in Game Theory as such and the two things should not be mixed too easily. (Jens Rommel)

14. When does a convention emerge and how, and why to conventions turn to norms or informally sanctioned rules?

Convention:

► **"General agreement or consent**, deliberate or implicit, as constituting the **origin and foundation** of any custom, institution, opinion etc. or is **embodied in any accepted usage**, standard of behaviour, method of artistic treatment, or the like"

► **"a rule of practices** based upon general consent, or accepted and **upheld by society** at large; an arbitrary rule or practice recognised in any particular art or practice." (OED 1971)

- Some forms of coordination are more prominent than others and people have a **prior expectation**.
- But conventions are not chosen, they **evolve**. Several conventions may start to **evolve simultaneously**, each corresponding with a different set of expectations.
- Convention emerges as soon as some people believe that **others are following it**. This process is **self-reinforcing**, because following a convention pays off. Some conventions are spread by **analogy**: common knowledge that a particular convention is followed in one situation acquires importance for other analogous situations.
- **Similarity and analogy are subjective**: different people may draw different analogies.
- Conventions they do not necessarily favour rules that are Pareto-efficient.

Conventions can become norms or sanctioned rules. Following the convention becomes the expectation and people not conforming to it are sanctioned.

- The mechanism that transforms conventions into norms is the **human desire for the approval** of others: one person's state of mind, as interpreted by another person, can influence the other person's happiness or utility (don't want to be the focus of another person's ill-will or anger).
- Each person has a **well-grounded expectation** inducted by experience and given this expectation the person finds it in his interest to follow the convention. Anyone who is favoured by a convention views a breach of the latter as an
→ breach is harmful to all that follow the convention (**indirect threat to himself.**)

15. Please describe a prisoner's dilemma and draw the corresponding normal form representation. Please, describe a way to restructure the setting by means of introducing a sanction. How high does the sanction need to be in the example chosen? If you introduce the sanction, in what way do you influence the game. What is the implication if the sanction is only applied in one round and subsequently it was not applied anymore?

The prisoners dilemma is a particular game in which the **Pareto efficient outcome is strategically dominated by an inefficient outcome.**

Situation: two prisoners who were partners in a crime are being questioned in operate rooms. Each of them has to choose between confessing (and thereby implicating the other) or denying a crime. If only one confesses, the other goes free and the other would have to serve the prison sentence (6 months). If both denied they would be held for technically for 1 month and if both confessed they would both serve a 3 month sentence.

		B	
		i	j
A	i	Confess	Deny
	j	Confess	Deny
	i	-3, -3	0, -6
	j	-6, 0	-1, -1

In each cell: utility that each of the agent assigns to the various prison terms. **Both players confessing** is not only a Nash equilibrium, it is a **dominant strategy equilibrium**, since each player has the same optimal choice independent of the other player. The strategy **deny-deny** is **Pareto efficient**, there is no other strategy choice that makes both layers better off, while the strategy **confess-confess** is **Pareto inefficient**. **The problem is that there is no way for the two players to coordinate their actions and they can't develop trust.**

Confessing s a dominant strategy, even though coordination (both deny) is far superior in total payoff. Coordination would allow the prisoners to choose the best payoff, not possible in one shot games.

Way the game is transformed:

- The payoffs are changed so as to make the prisoner's dilemma an invisible hand game
- **Necessary level of sanctioning:** Sufficiently high to break up the dominant strategy of "free-riding" / defaulting (in this case sufficient to choose to clean if the other Ap cleans)
- **Implication of applying the sanction in only one round and no longer in subsequent rounds:**
 - Tenants of Ap 1 and 2 will cooperate in first round
 - If the situation continues indefinitely, reasonable tenants will "clean" in the following round and then choose to do whatever the tenants of the other Ap did in the last round (Tit for Tat)

16. Please, provide points of critique of applying game theory to the analysis of empirically observed game constellations?

- the **reality is far more complex** than the game with more strategy sets and participants.
- **2x2 games are only metaphors.** Relevant numbers involved in many social interactions are much greater and the strategy sets far more complicated.
- there need to be **more assumptions** behind the games; in reality games are overlapping and people are learning throughout the games.
- the **outcome** of one game **may change the payoffs** or the structure of another game (ecology of games)
- actors are **not rational**
- the main solution concepts, the Nash equilibrium and dominant strategies, are intended to supply the standard reasonable ways that the game would be played, but they are **not entirely adequate as a guide** to what will happen.
- **narrow scope:** society is not well-modemed as a single game or one with an unchanged structure. In reality people are part of many distinct types of social interactions and they are often driven by their preferences.

Section 1.3.: Transaction Costs

1. Please, define what an economic transaction is according to Williamson and what an economic transaction is according to Commons - what are the differences between the two definitions and what are the implications of either definition for the study of economics? (slides)

NIE believe that economic transactions are a special kind of social transaction. Social actions are necessary for the formation and maintenance of the institutional framework in which economic activity occurs.

<p>Williamson:</p> <p>"A transaction occurs when a good or service is transferred across a technological separable interface. One stage of activity terminates and another begins." (Williamson 1985, p.1)</p> <ul style="list-style-type: none"> situations in which resources are actually transferred in the physical sense of "delivery" within firms or across markets Transactions require coordination because they are interdependent but technologically separable activities <p>→ they pose an elementary coordination problem</p> <ul style="list-style-type: none"> Costs emerge from the coordination of activities (change of assumption from neoclassical economics) Economic transactions can be both economic and political transactions and have three features: <ol style="list-style-type: none"> 1. uncertainty 2. the frequency in which transaction costs occur 3. the degree to which transaction-specific investments are involved. <p>→ originate from a lack of coordination between different production stages.</p>	<p>Commons:</p> <p>"A transaction is the alienation and acquisition between individuals of the rights of future ownership of physical things." (incl. service and knowledge) (Commons 1935)</p> <ul style="list-style-type: none"> A transaction is the transfer of property rights <p>→ deals with the transfer of resources in the legal sense</p> <p>TC can be described as the costs that arise from the establishment, use, maintenance and change of:</p> <ol style="list-style-type: none"> 1. institutions in the sense of law 2. institutions in the sense of rights <p>→ created when some property (goods, services or knowledge) change the owner.</p>
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Examples of Transaction Costs:

- costs of resources utilised for the creation, maintenance, use, change etc. of institutions and organisations.
- costs of defining and measuring resources or claims plus the costs of utilising and enforcing right s(with regards to property and contract rights). e.g.: costs of using the market (market transaction costs) and costs of excising the right to give orders (managerial transaction costs) → for each of these it is possible to recognise fixed and variable costs.

Market transaction costs consist mainly of information and bargaining costs.

2. Please, indicate which of these transactions are transactions according to Commons, and which ones are transactions according to Williamson, and which ones are both or no transactions at all.

- A farmer harvests hay and brings it into his warehouse to dehydrate it:** This is a transaction according to Williamson, because the dehydration of the harvest is another stage in the production cycle.
- A farmer sells corn to a buyer:** This is a transaction according to commons, since the ownership of the corn is transferred from the seller to the buyer.
- A farmer applies fertiliser to his land:** Transaction according to Williams, no ownership rights are transferred instead it is just another step in the production cycle.
- A farmer rents his land to another farmer:** Transaction according to Commons, the right of ownership is temporarily transferred to another person for a specified amount of time and monthly rent.
- A farmer buys drought insurance for this harvest:** This is a transaction according to both Williamson and Commons, because it represents a measure to minimise costs in the production and thus, directly impacts the production. On the other hand a service is purchased and thus property rights/ownership transferred.

3. Please, define transaction costs. What are the direct types of transaction costs, what are indirect transaction costs, what are variable transaction costs, what are fixed transaction costs? Please, provide several examples for each category? (slides)

Transaction Costs:

- resources spent on initiating, negotiating, safeguarding, monitoring, enforcing and adjusting transactions. (Dahlmann 1979)
 - costs of establishing, using, maintaining and changing institutions. (Richter and Furubotn 1996)
 - costs incurred for running the economic system and utility losses due to transaction failures. (Arrow 1969)
- **costs of setting the institutions right or utility losses from not doing so**

Fixed Transaction Costs are the investments needed in **setting up and maintaining** a certain institution agreement.

→ costs associated with the establishment or change of a system's basic political organisation

Variable Transaction Costs depend on the **size and the frequency** of a certain interaction

→ depend on the volume

Direct TC: Resources spent on initiating, negotiating, safeguarding, monitoring, enforcing and adjusting transactions. (no good source available)

Indirect TC: Costs of running the economic system. (no good source)

4. What are factors that influence the amounts of transaction costs of different types, ex-ante and ex-post?

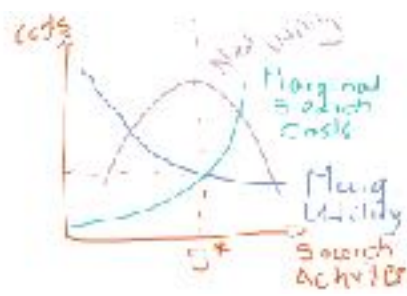
Ex-ante Transaction Costs (incurred before the transaction):

• Search and information costs

- Costs of searching e.g. for supplies, customers, products, technologies etc. or finding information on qualities, prices, features etc.
- The costs are influenced by the distribution of information and the information & communication technology available

• Negotiation and decision making costs

- costs of **negotiating and balancing** diverse interests
- involves decision making costs, time and resources spent on making a decision and the costs of making wrong decisions (due to bounded rationality)
- the costs are influenced by the differences in preferences, the number of people involved and the decision making rule involved



Example: The longer a person spends with searching for goods/services or information, the more costs he will incur (marginal search costs increase). As the costs of searching increase the utility of the continued search will decrease. The net utility of searching is thus maximised where the marginal search costs and the marginal utility intercept (equilibrium).

Ex-post Transaction Costs:

• Monitoring and enforcement costs

- Costs of monitoring and identifying non-compliance with the rules as well as the costs of enforcing institutions and sanctioning non-compliance.
- The costs are influenced by the measurability and verifiability of activities and the monitoring and enforcement technology

• Adjustment Costs:

- Costs of **adjusting the rules** to changing environmental circumstances and the **costs of maladaptation** e.g. incurred losses or indirect transaction costs
- The costs are influenced by the environmental uncertainty and the flexibility of rules

(Graph similar to the one above just substitute search for monitoring)

5. How does the proposition of achieving optimal search and monitoring activities relate to other ideas about how institutions structure human interaction, e.g. bounded rationality? (slides)

- points to the role of institutions as devices that can either reduce the searching/monitoring costs (i.e. increasing the return for the same marginal searching/monitoring costs) or minimise the risk of potential contract failure
- actor will search for information as long as the marginal costs of getting information are smaller than the marginal benefit he will get out of the good referred to
- case of monitoring: when an employer does not know whether he is confronted with "shirking" by his employees he will monitor them until the marginal costs of monitoring (including cameras, searching costs etc.) are less than the marginal productivity of a worker (the change in output created by one additional hour of work)
- in reality it is sometimes not possible to be able to receive all information one needs or to monitor an employee 100 % => situation of asymmetric information which finally leads to inefficiencies; Institutions could help to reduce or to avoid these inefficiencies by for example introducing laws

6. Please, provide examples of categories of transaction costs, i.e. market, firm's and political transaction costs? How do they interrelate, if they do? Do they depend on each other? Why? (slides, Furubotn et al. 2003)

Market Transactions Costs:

- **Costs of market organisation** and involves searching and information costs for preparation, bargaining and decision-making as well as supervising, monitoring, controlling, enforcing and adjusting.

• Three costs of using the market exist:

1. **Search and Information costs:** costs of preparing contracts e.g. the search for a suitable party with whom to deal → the search inevitably results in costs
2. **Bargaining and decision costs:** the costs of concluding contracts e.g. when a contract is written and parties bargain and negotiate over its conditions
3. **Supervision and enforcement costs:** costs of monitoring and enforcing the contractual obligations e.g. monitor the agreed upon delivery times, product quality and amounts

Transactions Costs in Firms (Managerial Transaction Costs):

- **Fixed transaction costs** are the costs of a firm's organisation and change, personnel management, investments in information technology, lobbying, PR etc.
- **Variable transaction costs** are the costs of running and organisation. It involves information costs for e.g. decision-making, monitoring and the execution of orders as well as coordination costs of transferring semi-finished products within a firm.
- In general managerial TC are **costs of implementing the labor contracts** that exist between a firm and its employees. They consist of:
 1. the costs of **setting up, maintaining, changing** and organisational design
 2. the costs of **running** an organisation
 - information costs
 - costs associated with the physical transfer of goods
- Transactions are responsible for most **overhead costs**.

Political Transaction Costs:

- **costs of supplying public goods** e.g. costs of establishment and maintenance of a political order (legal framework, administrative structure, judiciary etc.) and the **costs of running a polity** e.g. costs of implementation, administration, enforcement by administration and also the costs of political parties, labor unions, employee associations, pressure groups etc.
- deals with the **local, national or international organisation of the political economy**
- costs of acquiring information about revenue sources, constituent behaviour and agent behaviour and the costs of enforcing compliance with the policy
- **costs of supplying public goods by collective action and can be analogous to managerial transaction costs.** These costs are:
 1. **The costs of setting up, maintaining and changing a system's formal; and informal political organisations.** e.g.: costs of the establishment of the legal framework, administrative structure, military, educational system, judiciary but also costs of political parties and pressure groups
 2. **The costs of running a policy:** the costs of measuring, monitoring, creating and enforcing compliance, incl. costs of running organisations that participate in the political decision making process

7. Why do we want to measure transaction costs? (slides)

50-60% of all costs in a modern market economy are transaction costs and the share is increasing. The costs are increasing, because:

- **costs of specializing and dividing labour increase,**
- **increased number of transactions,**
- more attention is paid to information instead of a relationship of trust
- more reliance on an ad hoc way of resolving conflicts.

Increasing transaction costs can result from:

- consumers who require **more advice** before the purchase of long-term, expensive goods and services
- suppliers who have **increasing marketing costs**
- firms who incur **internal management costs**, which are usually included in the overhead costs together with other costs such as depreciation, repair and insurance costs.
- **countries: transaction cost sector vs. production sector (???)**
- governments who incur TC when making policies

From a market perspective it is important to measure transaction costs, because they **affect the existence and the intensity of exchange**. From a perspective of policy making it is relevant, because high transaction cost policies may have to be further **scrutinised, investigated and perhaps adjusted**.

8. How can we measure transaction costs? Please, explain direct and indirect ways to measure transaction costs and use examples. (slides)

Transaction costs are not easily distinguished from production, transport or any other costs. The magnitude of transaction costs can be analysed by looking at the spread between

- factory and retail prices
- interest paid on bank loans and the amount paid on bank deposits
- overhead costs of firms
- expenditures of the state for its basic tasks etc.

Indirect measurement by calculating the difference

- between the **buying and selling price**. Example: if you buy a stock of a certain company and resell the stock again after a certain time the money lost can be traced back to transaction costs
- **production costs per unit and the selling price**.
- between the **prices across countries** for the identical product.

Direct measurement:

- **performed at an aggregate level:** distinction between transaction sectors (e.g. banking, real estate, legal, technical, information management services etc.) and production sectors.
- **micro level: market prices** for legal/financial/accounting and information management services, the **price of information** (e.g. commercials, contact databases etc), **interviews** with contracting parties/employers/employees, experiments, **budgets** of an organisation with a focus on specific accounting lines that are associated with TC as well as **costs of entry or setting up** a business can be evaluated.

9. What may be problems of taking the difference between buying and selling price (e.g. for product that is marketed by a retailer) as transaction costs? (slides plus your own well justified arguments)

Williamson suggests that researchers may be able to measure TC indirectly by difference between buying and selling price. Example of SO₂ permits there are many things not included in taking the difference of buying and selling price:

- time spent within the firm, nor monitoring and enforcement costs borne by the government
- enactment or design costs (McCann et al 2005, p 535).

10. What may be problems in observing behaviour and deriving transaction costs from this observation? How to reach a cost category based on observation? (slides plus your own well justified arguments)

Maybe it is because it is highly subjective? and that observed transaction costs might not be the actual TC? and that some TC's might not be observable in behaviour?

11. What are problems of transaction costs measurements? (slides, McCann et al 2005, Benham et al 2001)

- problem of **several different definitions:** no standard terminology; not translated into accepted operational standards
- **separation:** difficult to separate from other costs e.g. production & transportation costs, which are jointly determined. Changes in production costs have an impact on transaction costs → difficult to differentiate from administrative, production and abatement costs.
- **missing observations:** very high TC are often not observable; mistaken for ex-post sunk costs and depend on the existing institutions.
- **subjectivity:** measure real or perceived TCs → matter of perception. Detailed data is difficult and costly
- **measurement costs:** precision vs. the cost of measurement (distinction between accuracy and precision)
- factors influencing transaction cost measurements **vary across different countries** (formal and informal rules of the game vary) and **across individuals and groups** (face different costs of exchange depending on transportation and opportunity costs of time).
- **larger framework** of the overall costs/benefits of a policy: make a distinction between decreasing TC and increasing efficiency. → viewed in the context of what costs would be incurred in the absence of the policy being evaluated
- **learning:** the measurements may vary between the implementation of a new policy and after some years. TC vary over the life cycle of a program and may decrease with time due to learning. Thus, fixed or sunk costs at the beginning of older programmes is ignored, which makes an efficient new policy seem more costly than an inefficient program that was set a long time ago.
- **who bears the TC:** different from who pays the costs

12. How do transaction costs change production and market transaction costs in the neoclassical model? Please use graphs to convey your explanation. (slides, Furubotn et al 2003)

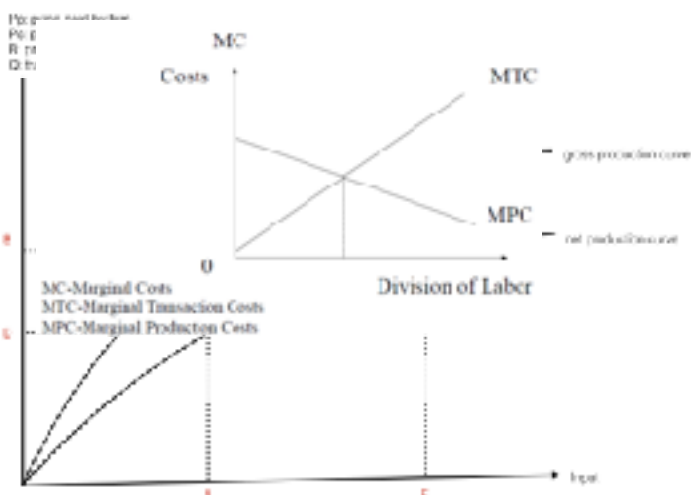
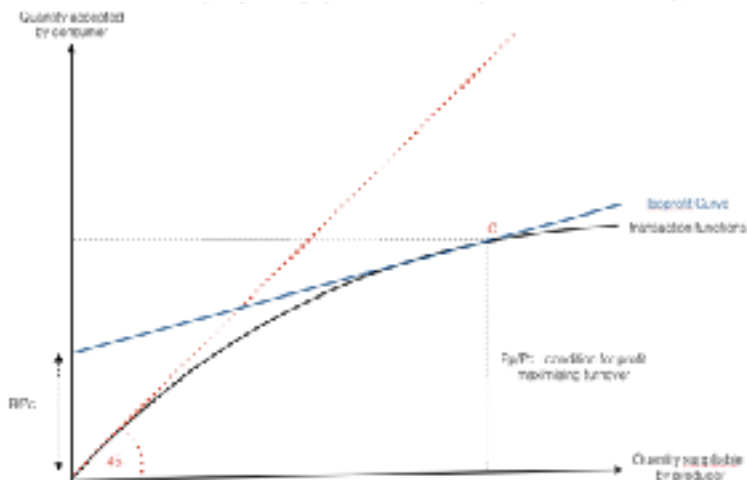
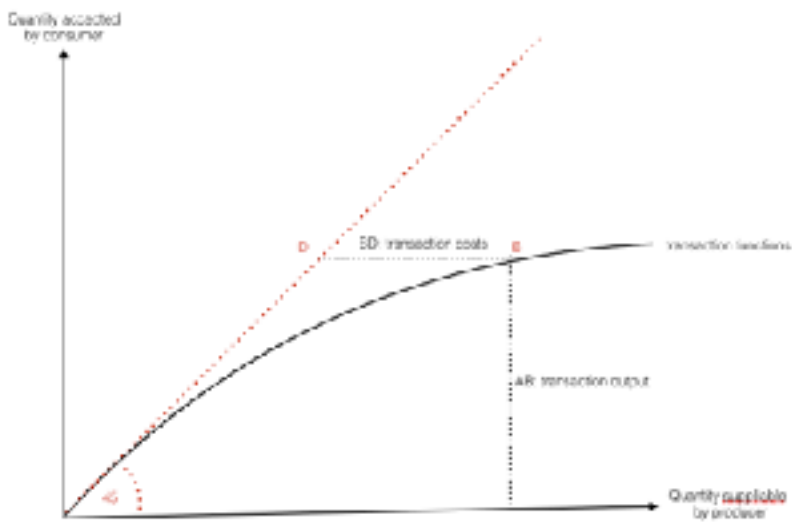
In the neo-classical model transaction costs are included in the standard model of perfect competition by adding the activity "transactions" to the system as though it were analogous to the activity "production".

- helps to explain the **spread between the producer's price for a commodity and the final price** paid by the consumer (trade margin) or the **difference between interest on bank loans and deposits** (interest margin).
- It disregards the link between transaction costs and the information status of decision makers.

Example: If we consider two individuals - a producer and a consumer- who trade a commodity for money the initiation, conclusion, monitoring and enforcement of this purchase contract produces transaction costs. The activity "transaction" can be represented by a transaction function.

The distance from the origin to A is the amount of the commodity sold by the producer also called transaction input. The distance AB is the corresponding amount purchased by the consumer, the transaction output. The transaction costs are represented by the distance BD. The transaction curve must lie below the 45 degree line if there are positive TCs. The slope of the transaction curve is the marginal productivity of the transaction process. The marginal productivity declines as the volume of transaction increases.

Graph 2: it is assumed that a special transaction firm (a commercial enterprise) buys the commodity from the producer and sells it to the consumer.



The graph shows that the consumer pays more than the producer receives. The difference is due to transaction costs. The decreasing returns to scale of the activity "transactions", there exists an optimal size for the individual transaction firm.

Graph 3: The activity "transaction" could also be integrated into the production firm or into the household of the consumer. The situation can be assessed by deducting the appropriate transaction costs from the maximum gross product achieved by the firm. The curve of net production would lie below the gross production curve. This is always the case when you have positive TC. It implies that the producer who wants to sell OB units cannot achieve this goal if he produces only OA units (O=origin). This is because he has to spend BD units on transaction costs. This means that the producer has to produce OE units to be able to deliver OB units. The slope of the net curve (net marginal productivity) at each input Z is smaller than the corresponding gross marginal productivity. The net production curve lies further below the gross curve the less efficient the coordination of economic activities in society is.

13. How are transaction costs and division of labor related to each other? Using a graph is encouraged but not necessary. (slides, Furubotn et al 2003)

According to Williamson's definition transaction costs are restricted to situations in which resources are actually transferred in the physical sense of "delivery" within firms or across markets. This can be seen as a result from the division of labour. Thus, transaction costs are essentially the costs of specialisation and the division of labour. In market transaction the division of labour is limited by the extend of the market and transactions occur accordingly.

14. How are neo-classical economics and institutional economics approaches to the study of transaction costs different and why (assumptions)? (slides, Allen 2000)

Institutional Economics	Neo-classical Economics
Background: <ul style="list-style-type: none"> defines TC more narrowly and models them more explicitly and often analytically identical to transportation costs and taxes. issues examined: the effect of transaction costs on the <u>volume of trade, abilities to arbitrage, the bunching of transactions, intermediation and the existence of efficiency</u> transaction demand for money: there are frictions in the economy and these apply to buying and selling capital assets yielding positive returns → treat transaction costs as the costs of production Arrow-Debreu: complete contingent markets, trades only take place once 	Background: <ul style="list-style-type: none"> basic elements: (1) all methods of allocating resources have costs and benefits and no single mechanism works for free and dominates all the others (all allocation mechanisms are second best) (2) rules, organisational forms and methods of payment are subject to economic analysis. positive TC are necessary for an explanation of the firm e.g. contract choice depends on the TC of the different contracts internal and not just market costs connection between TC and property rights (Coarse Theorem: In the absence of TC, the allocation of resources is independent of the distribution of property rights)
Definition: the costs resulting from the transfer of property rights	Definition: the costs establishing and maintaining property rights (when property rights are incomplete, individuals are always in the process of maintaining their existing property rights and attempting to establish new ones)
Characteristics: <ul style="list-style-type: none"> TC consist of those costs that occur between firms or individuals from the process of market exchange. never analyses questions of economic organisation outside of the choice of medium of exchange. most analyses show that the presence of TC reduces the frequency and volume of trade TC enter and yield results which are somehow predictable non-existence of explicit TCs in equilibrium 	Characteristics: <ul style="list-style-type: none"> include any direct costs as well as inefficiencies in production or misallocation that resulted from them no boundaries between firms, markets, households or any other theoretical constructs. When property rights are protected or maintained in any context, TC exist. TC arise through changes in incentives and manifest in changes in values in different property rights distributions TC problem requires (1) the presence of uncertainty, (2) the ability of the individual to change his behaviour without costless detection. The firm can't observe behaviour: implies that individuals become careless; alters the marginal rate of substitution. the introduction of costly information leads to preferences no longer being fixed or exogenous. many property rights models have no actual resources used to establish and maintain property rights in equilibrium → TCs are lost gains from trade that result from the incomplete contract
Hypothesis: every distribution of property rights has with it a set of production costs and a set of transaction costs. The distribution of property rights maximises the gains from trade net of all costs is the optimal distribution. → no single allocation mechanism dominates.	Hypothesis: Because parties must find one another, communicate & exchange information they need to inspect and measure goods, draw up contracts, consult with lawyers or other experts. Transaction costs can take one of two forms, inputs or resources -including time- by a buyer and/or a seller or a margin between the buying and selling price of a commodity in a given market.

Section 1.4 Collective Action and Cooperation: The basic dilemma and the diversity of failure and solutions in different situations

- Which economic categories of goods can be distinguished and which criteria are used for this purpose? Use examples. (slides)

		Rivalry	
		Low	High
Exclusion	Difficult	Public Goods	Common-Pool Resources
	Easy	Private Goods	Club Goods

Types of Goods

(adapted from Ostrom and Ostrom 1977)

Public Goods <ul style="list-style-type: none"> • are not divisible and not excludible • marginal cost of provision are zero • example: natural landscape, biodiversity, earth's atmosphere → pay attention to impure and contestable public goods	Common-property and common pool resources <ul style="list-style-type: none"> • are subject to depletion • exclusion mechanisms are lacking • distinguished by physical, legal and governance structures • examples: aquifers, fisheries, forests (Elinor Ostrom: "Governing the Commons")
Club Goods <ul style="list-style-type: none"> • are not subject to depletion • exclusion mechanisms are available • examples: tennis club, guarded beach, brand label → how much of the public good should be provided (the level) & in what way (which mechanisms)	Private Goods <ul style="list-style-type: none"> • have the properties of divisibility (rivalness, deplete ability) and excludability. • marginal cost of providing and additional unit to another user is greater than zero. • example: bread, sausage, ice cream (Bratwurst "you won't eat the same one as me", you have to pay for another unit)

(Mistake in graph: swap private goods and club goods)

2. Can we consider an aquifer that is barely used a common-pool resource? Do you think air quality (e.g. appropriate concentrations of CO2 in the atmosphere) is in public or CPR? Please reason your answers. (slides)

Yes because subjected to depletion –Exclusion mechanisms are lacking

3. If we did not know how to construct fences would pastures be a CPR? Is a fishing ground that is successfully governed by a local community a CPR anymore? Please reason your answers with regard to the role of technology vs. institutions and the typology of goods. (slides)

1. **Exclusion:** the goods individuals value differ in terms of how easy or costly it is to exclude or limit potential beneficiaries (users) from consuming them.
 - For CPR this is a nontrivial problem because of the sheer size or the physical attributes e.g. fencing an entire fishing area or ocean.
 - Additional benefits from exclusion are **often less than the costs** of implementation and in some cases constitutional, **legal or institutional considerations** limit excludability.
2. **Subtractability (Rivalry):** the goods individuals value differ in terms of the degree of subtractability/rivalness of one person's use from that available to be used by others. Example: if one fisherman lands catches a ton of fish, those fish are not available for others.

Public goods : Are not excludable, and not depletable. –Marginal cost of provision are zero.

4. What are common pool resources (CPR) and what is meant by the tragedy of the commons? (slides, Hardin 1968)

Tragedy of the Commons:

Imagine a pasture as a common pool resource. Each herdsman will try to keep as many cattle as possible on the common pasture. This may work if natural selection (wars, diseases, poaching etc.) keep the stock below capacity. However, in times of social stability the so called "tragedy" may emerge, because as a rational being **each herdsman seeks to maximise his gain**. This can have a positive and negative result:

- **positive:** if a herdsman adds one animal he receives all the proceeds from the sale and his positive utility is +1.
- **negative:** the effects of overgrazing of the additional animal is carried by all herdsmen. The negative utility for any decision making herdsman is a fraction of -1.

Thus, the decision by the herdsman is to add one animal (his best choice given the positive and negative results). This conclusion, however, is reached by every single herdsman. Each herdsman is **locked into a cycle** that compels him to increase his herd without limit, in a finite world.

Common pool resources

▶ are resources where excludability is difficult, but rivalry exists.

The social dilemma can make the management, use, enforcement and protection difficult.

If CPR are overused it means it is open access and not restrained by property rights. Whether a resource is used today or tomorrow depends on the opportunity costs (benefits of the 2nd best alternative). There may be group rules for a resource use.

Hardin's "**Tragedy of the Commons**"- where people thinking only of their own self-interest, deplete a shared resource , e.g.the overgrazing of pastures. He saw two solutions to this problem; 1) resource regulation through government intervention and 2) privatization.

Ostrom challenged Hardin's approach to the "Tragedy of the Commons", arguing that individuals and communities could manage their own collective resources. Developed 8 design principles which can support effective mobilization for local management of common pool resources (CPR) in a variety of areas. She argued that common resources are well managed when those who benefit from them the most are in close proximity to that resource. For her, the tragedy occurred when external groups exerted their power (politically, economically or socially) to gain a personal advantage. She was supportive of the "bottom up" approach to issues; government intervention could not be effective unless supported by individuals and communities.

5. Please describe the debate on the tragedy of the commons (i.e. the traditional vs. conventional perspectives over it). (slides, Ostrom 2002)

Panaceas for CPR's: "Tragedy of the Commons Debate":

- Hardin envisioned helpless resource users to prevent resource destruction must impose government ownership or private ownership
- Community control now proposed by some as a solution to resource destruction
- All 3 panaceas: government, private or community control work in some settings and fail in others. They depend on the match of the specifics as well as how implemented

1. Challenge 1: The Panacea Trap (panaceas =policy advice for the best way to govern and manage)

- CPRs: assuming that there is **one simple cure**, all for multiple ecological systems
- scholars and policy makers fall into panacea traps even when they assume an uncertain world
- derived from **basic failure** to recognise the differences among CPRs in diverse sectors, at multiple spatial scales and over time

2. Challenge 2: Accepting rather than Rejecting Complexity

- scientific progress involves understanding complex, decomposable, multi-tier
- interactions are rarely linear additive
- cannot assume away complexity and be successful in remedying problems
- must dig into complex systems that are partially decomposable e.g. levels, units (How to analyse despite the complexity? Decompose, analyse, determine interactions etc.)

3. Challenge 3: Recognise value of Institutional Diversity

- panaceas thinking focuses on simplified policy solutions: private, governmental, communal ownership (reality: much more institutional solutions)
- research finds vast numbers of specific rules used ins sustainable systems tied to specific variables of a resource system and its units
- scientists recognise and want to protect biological diversity (then best protected against shocks)
- to achieve sustainability we must recognise and understand institutional diversity rather than trying to eliminate it as "too confusing"

Tragedy of the commons can be avoided without either privatisation or government bureaucracy. People can solve their problems by crafting rules and forming organisations.

6. "Common Pool Resources" is a concept based on the physical attributes of a natural resource that needs an institutions design for its use. Does this mean that common pool resources must always be institutionalised as common property? (slides)

Larger regimes can facilitate local self-organisation by:

- providing **accurate information** about natural resource systems
- providing **arenas** in which participants can engage in discovery and conflict-resolution processes
- providing **mechanisms** to back up local monitoring and sanctioning efforts.

The probability of participants adapting more effective rules in macro-regimes that facilitate their efforts over time is higher than in regimes that ignore resource problems entirely or, at the other extreme, presume that all decisions about governance and management need to be made by central authorities..

- With the legal autonomy to make their own rules, appropriators face substantially **lower costs** in defending their own rules against other authorities.
- More likely to agree upon rules whose operation they **understand from prior experience**, than upon rules that are introduced by external actors and are new to their experience.

Diversity is important for Sustainability: Both biological and institutional diversity. Simple institutional blueprints are frequently recommended e.g. government ownership, privatise land and co-management. Importing blueprints can reduce institutional diversity. Variations of all three options can fail.

7. Which ecological conditions are supportive for cooperative governance of natural resources? Cite three of them and give reasonable justification of why those conditions contribute to cooperation. (Agrawal 2001)

1. Stationarity and Storage:

- refers to whether a resource is **mobile**; storage: the extent to which it is possible to **collect and hold** resources.
- greater mobility and storage problems make it **more difficult for users to adhere to institutional solutions** to CPR dilemmas because of their impact on the reliability and costs of information needed for such solutions.
- **Examples:** wildlife is mobile and cannot be stored; Groundwater is stationary and can be stored.

2. Unpredictability and Riskiness

- the extant to which the resource availability is **predictable**
- unpredictability affects the **ability of users to allocate** available resources & undertake activities that augment supply.

3. Well-defined boundaries

- resources that have well-defined boundaries are likely **better managed** as common property
- boundaries should be well defined when flow of benefits is **predictable** and groups relying on them are **stationary**
- unpredictable and mobile groups: the resource boundaries **should be fuzzy** as to accommodate variations in group needs and resource flows.
- small-scale systems with clear (spatial) boundaries are “researcher-friendly”: a local irrigation system, fish in a lake, common pastures in a village, community forests
- whether or not such boundaries exist, depend on **nature related transactions**

8. Which social conditions are supportive for cooperative governance of natural resources? Cite three of them and give a reasonable justification of why those conditions contribute to cooperation. (Agrawal 2001)

Resource users often create institutional arrangements and management regimes that help them allocate benefits equitably, over long time periods and with only limited efficiency losses. All common resource users are confronted with the problem of how to reduce or eliminate externalities related to resource management.

1. Size

- smaller groups are more likely to engage in successful collective action
- the impact of group size on collective action is usually mediated by many other variables e.g. production technology, excludability, jointness of supply etc.

2. Heterogeneity

- most resources are managed by groups **divided along multiple axes** e.g. ethnicity, gender, religion, wealth and caste
- example gender**: women often play an important role in gathering and harvesting products from CPR. The relative marginality to which they are involved in decision making, ownership of assets and exercising political power does not reflect this. (invisible to the margins)
- heterogeneity of groups can be pernicious and can have **multiple and contradictory effects** on the possibilities of collective action.

3. Power Relations, Poverty & Distribution of Benefits

- better-off group members are often likely to **gain a larger share** of benefits from a resource
- relationship between the **poverty and exploitation** of CPR: either poverty leads to greater reliance on the commons and their degradation or increasing wealth lead to increased use of the commons
- fairness** in allocation of benefits from the commons would lead to more sustainable institutions arrangements. However, hierarchical social, political organisation and institutional arrangements specify asymmetric distribution of benefits.

9. Which institutional conditions (i.e. institutional design principles) are supportive for cooperative governance of natural resources? Cite four of them and give reasonable a justification of why those conditions contribute to cooperation. (slides, Ostrom 2005)

Enhance the likelihood of appropriators organising themselves to avoid the social losses associated with open access common pool resources → increased likelihood that self governing associations will form. Ostrom's Design Principles:

Design Principle	Explanation	Contribution to Cooperation
1. Clearly Defined Boundaries	Individuals or households with rights to withdraw resource units from the common pool resource and the boundaries of the CPR itself are clearly defined.	If a group can determine their own members , include those who agree to adhere to the rules and exclude the others; large step towards limiting access and developing greater trust & reciprocity.
2. Congruence	<ul style="list-style-type: none">The distribution of benefits from appropriation rules is proportionate to the costs imposed by provision rules.Appropriation rules restricting time, place, technology, and/or quantity of resource units are related to local conditions.	If they want to use a resource in the long-run they must implement rules (how much, when & how to harvest) & assess the costs of operating the system. If the distribution of benefits and costs is consistent; more willing to keep the resource well-maintained and sustainable.
3. Collective-Choice Arrangements	Most individuals affected by operational rules can participate in modifying operational rules.	As environments change over time being able to craft local rules is important because officials far away <u>don't know the change</u> . When a local elite is empower at a collective-choice level, policies primarily benefit them.
4. Monitoring	Monitors, who actively audit CPR conditions and appropriator behaviour, are accountable to the appropriators.	With local monitors, users are assured that someone is generally checking on the conformance of others to local rules; can continue their own cooperation without constant fear that others are taking advantage of them.

Design Principle	Explanation	Contribution to Cooperation
5. Graduated Sanctions	Appropriators who violate operational rules are likely to receive graduated sanctions from other appropriators, from officials accountable to these appropriators, or from both.	A person who breaks the rules is notified that others took notice of the infraction but the individual learns that others basically continue to extend their trust and want only a small token to convey a recognition that the mishap occurred.
6. Conflict-Resolution Mechanisms	Appropriators and their officials have rapid access to low-cost, local arenas to resolve conflict among appropriators or between appropriators and officials.	By devising simple, local mechanisms to get conflicts aired immediately and resolutions that are generally known in the community, the number of conflicts that reduce trust can be reduced.
7. Minimal Recognition of Rights to Organize	The rights of appropriators to devise their own institutions are not challenged by external governmental authorities .	Unanimity as a decision rule for changing rules imposes high TC and prevents a group from searching for better matched rules at a relatively low cost.
For common-pool resources that are part of larger systems: 8. Nested Enterprises	Appropriation, provision, monitoring, enforcement, conflict resolution, and governance activities are organised in multiple layers of nested enterprises	Can be used to effectively overcome the weakness of relying on only large-scale or small-scale units to govern complex resource systems, by nesting small-scale organisations into larger ones.

The effectiveness of the design principles depends on the larger regimes, which can be either facilitating or hindering.

10. Which three ideas/images/concepts is early theory of collective action associated with. Explain them. (slides, Hardin 1968, Gordon 1954)

1. **Mutual Coercion:** arrangements that produce responsibility mutually agreed upon by the majority of the people affected
2. **Population Problem:** avoid overpopulation without relinquishing any privileges people now enjoy. "A finite world can only support a finite population." (Hardin) The optimum population is less than the maximum. Growth might mean that the optimum has not been reached, however some of the fastest growing populations are also the most miserable.
3. **Law of Diminishing Returns:** signifies that a zero limit is gradually approached → infinitely expandable production is not possible from a fixed common pool resource. Marginal productivity of some resources e.g. pastures to feed livestock decreases over time.

(Claudia's Study Group: Tragedy of the Commons, Rent Dissipation, Free Riding Behaviour)

11. What are collective action problems and which two types have been identified in the conventional CPR literature? (slides, Ostrom et al. 1994)

Collective action problems occur in situations in which the individual rationality leads to an outcome that is not rational from the perspective of the group. → **overdevelopment of a resource**.

Individuals in many situations communicate with one another and **establish agreed-upon rules** to avoid tragic outcomes and improve their joint outcome. In some situations the resource may be sufficiently large for all appropriators to pursue individual strategies. In Collective Action problems this is not the case.

1. Appropriation: the production relationship between yield from the CPR and the level of inputs required to produce that yield is supposed to be given.

- The problems to be solved relate to **excluding potential beneficiaries** and allocating the sub-tractable flow.
- **Appropriation externality:** relationship between one users increased appropriation reduces the yield from another appropriation activity. → can lead to a suboptimal allocation of inputs in the appropriation process
- efficient level of approbation deals simply with **equating the marginal cost of appropriation with marginal cost** of return from appropriation
- can lead to **assignment problems**
 - **spatial component:** one patch might have a better yield than another
 - **technological externalities:** use of one tech. increases the costs for users of other technologies.

2. Provision Flow: related to creating, maintaining or improving the production capabilities or avoiding the destruction of a resource.

- consider the **optimal size and nature** of the resource facility in **relation to the cost** of providing that facility and the set of beneficiaries to be included.
- focus on the behavioural incentives for appropriators to
 1. **alter appropriation activities** within an existing CPR that alters the productive capacity of the resource, **demand side provision**. **Solutions:** maximisation of the discounted present value of returns. In extreme

In Europe, the US and India economic, cultural and social systems differ substantially. They all have a common strong cooperative sectors. However in the post-socialist countries the cooperative sector remains comparatively undeveloped. Collective forms were previously forced on the people and thus have a bad image.

cases when the discount rate is sufficiently large, the extinction of an animal can result from an appropriation rate higher than the minimal safe yield.

2. contributes resources for the provision or maintenance of a CPR, **supply side provision**. → problems lies in the **individual's incentive to free ride** on the provision activities of others and it is difficult to monitor or prevent access.

12. Which policy prescriptions characterised early theory of CPR management? (slides, Ostrom 2002)

Theorists assume that regulators will act in the public interest and understand how ecological systems work and how to change institutions as to induce socially optimal behaviour. Until recently, the possibility that appropriators themselves find ways to organise themselves has not been seriously considered.

Policy prescriptions that characterised early theory of CPR management where:

1. Government ownership
 2. Privatisation (Private Property)
 3. Blueprints: blueprint thinking occurs whenever policymakers, donors, citizens or scholars propose uniform solution to a variety of problems
 4. Community organisation
- presumed that **external authorities were needed** to impose new rules onto this appropriators trapped into producing excessive externalities.
 - Ostrom argues that officials and policy makers have **different motivations** and thus won't succeed in finding the optimal policy because they are **not directly involved**. They also have **little capability to adapt and learn** in light of information about outcomes resulting from their policies.

13. What have been the main drivers of the cooperative movement historically and currently and how those drivers related to different types of cooperatives? (slides)

Modern cooperative history starts at the **end of the 18th century**. The "rules of the blood and religion" are replaced by **own will and freedom** by a process of individualisation. **Drivers** are poverty, wars, crises, famines and population pressures. How do they arrive at a useful organisation of the society when the individual emerges?

► A coop is a group of member owners. "A cooperative is a business. Co-ops range in size from small stroke-fronts to large companies. In many ways, they are like any other businesses, but in several important ways they are unique and different." (NCBA 2005)

Why did Cooperatives emerge?

- **poverty; insecurity and inability** of individuals to cover sudden expenditures e.g. burial cooperatives
- **covering basic needs, avoiding exploitation** e.g. housing cooperatives and consumer cooperatives
- **market integration**: still in developing countries
- **countervailing power on markets** e.g. agricultural marketing cooperatives for dairy and cereals
- **quality improvements** e.g. horticultural cooperatives
- **exploiting economies of scale** e.g. machine rings
- **transaction costs** e.g. credit cooperatives
- **lacking interest of firms** e.g. electricity coops

<p>Principles:</p> <p>Owners patronage:</p> <ul style="list-style-type: none"> when cooperatives add value to products, these earnings are returned to members in proportion to their use of the cooperative. Without the cooperative, these funds would go to other middlemen or processors. each year the earnings conducted on a cooperative basis are returned to the patrons (cash or equity) on the basis of how much business each patron did with the cooperative. (patronage refunds). Example: if a cooperative has earnings from business conducted on a cooperative basis of \$20,000 for the year, and Ms. Jones does 2% of that business with the cooperative, she receives a patronage refund of \$400 (\$20,000x0.02). <p>Design Principles:</p> <ul style="list-style-type: none"> essential principle: member promotion identity principle: member=owner=(customer) organisational principles: S-principles (self-help, self-responsibility, self-organisation) variable principles: rules of conduct e.g. voting, representation, openness, regionality 	<p>Attributes:</p> <ul style="list-style-type: none"> owned and democratically controlled by their members no outside investors coop members usually elect their board of directors from within the membership return surplus revenues (income over expenses and investment) → not proportionate to their “investment” or ownership share are motivated not by profit, but by service to meet their members’ needs for affordable and high quality goods exist to serve they members pay taxes on income kept within the coop for investment and reserves auditing is obligatory and demanded by cooperative law! <p>Cooperatives are established when the marketplace fails to provide needed goods and services at affordable prices and acceptable quality. → empower people to enhance their economic situation through self-help.</p>
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14. The design and behaviour of cooperatives is supposed to follow particular principles (i.e. set by the International Comparatives Alliance). Please discuss these principles and indicate how those principles are similar to Ostrom’s (1990) design principles. (slides, Ostrom 2005, ICA website)

The ICA defines cooperatives as

► “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise”

Reasons for the formation of a cooperative are (1) to strengthen bargaining power, (2) maintain access to the competitive market, (3) capitalise on new market opportunities, (4) obtain needed products and services on a competitive basis, (5) improve income opportunities, (6) reduce costs and (7) manage risk.

<p>Seven internally recognised cooperative principles (ICA):</p> <ol style="list-style-type: none"> voluntary and open membership: open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination. democratic member control: democratic organisations controlled by their members, who actively participate in setting their policies and making decisions; members have equal voting rights (one member, one vote). member economic participation: Members contribute equitably to the capital of their co-operative. At least part of that capital is usually the common property of the co-operative. autonomy and independence: autonomous, self-help organisations controlled by their members. provision of education, training and information: provide education and training for their members so they can contribute effectively to the development of their co-operatives. cooperation among cooperatives: serve their members most effectively and strengthen the co-operative movement by working together through local, national, regional and international structures. concern for the community: work for the sustainable development of their communities through policies approved by their members. 	<p>Ostrom’s Design Principles:</p> <ol style="list-style-type: none"> Clearly Defined Boundaries: Individuals and the boundaries of the common-pool resource itself are clearly defined. Congruence: benefits from appropriation rules is roughly proportionate to the costs imposed by provision rules.; restricting time, place, technology, and/or quantity of resource. Collective-Choice Arrangements: Most individuals affected by operational rules can participate in modifying operational rules. Monitoring: actively audit common-pool resource conditions and appropriator behavior, are accountable. Graduated Sanctions: Appropriators who violate operational rules are likely to receive graduated sanctions. Conflict-Resolution Mechanisms: Appropriators and their officials have rapid access to low-cost, local arenas to resolve conflict among appropriators. Minimal Recognition of Rights to Organise: The rights to devise their own institutions are not challenged by external governmental authorities.
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Similar to Ostrom’s design principles.

15. Which types of questions did neoclassical economics scholars addressed in the study of cooperatives? (slides, Ortman and King 2007)

In the neoclassical model (according to Helmberger and Hoos 1962) the cooperative’s optimisation objective is to **maximise benefits for members by maximising the per unit value of average price** by distributing all earnings back to members in proportion to their patronage volume or use.

- conception of the cooperative as a form of vertical integration, and a focus on the structural and functional relationships of members to their cooperative marketing organisation.
- A cooperative enterprise should be treated as a firm (a decision-making entity) or as an organisation (aggregation) of economic units.
- According to the theory each firm maximises its profits subject to its cost structure and product demand constraints. Transaction Costs are assumed to be zero and resources are privately held and fully allocated among alternative uses purely in response to financial incentives.
- **Limitations:** does not explain why the form exists in the first place, and how the resources within these organisations are employed, allocated, and motivated to achieve maximum profits.

16. Which are the problems identified by institutional economists vis a vis the sustainability of traditional cooperatives? (slides, Chaddad and Cook, Ortman and King 2007)

Agricultural cooperatives are facing survival challenges as a result of the agricultural industrialisation process.

- **Competitive strategies** in response to environmental and structural changes e.g. value added processing, brand name development and entry into new markets, **require substantial capital investments**.

Problems:

1. traditional coops are subject to **investment & governance constraints** → vaguely defined property rights structure
2. **proportionality strategies** discipline cooperative members to contribute equity capital in proportion to usage through cooperative policies (e.g. base capital plans) **narrowing product scopes and capital acquisition** on a business-unit basis.

The base capital plan is a comprehensive equity management technique, encompassing with acquisition and redemption of equity capital from member-users.

3. **Common Property Problem:** when property rights are not tradable or are not sufficiently well defined to ensure that individuals bear the full costs of their actions or receive the full benefits they create.
 - **internal free rider problem:** residual claims are linked to patronage instead of investment, new members receive the same patronage and residual rights as existing members although the new members are not required to make initial investments proportionate to their use. → disincentive of existing members to invest
 - **external free rider problem:** created whenever a cooperative provides its members with collective goods characterised by de facto unfeasibility of exclusion → no or suboptimal provision of goods
4. **Investment Constraints** arise as a **result of free rider, horizon and portfolio problems** → lacks incentives to invest → investment is illiquid and does not receive adequate returns, because risk bearing costs are simply too high
5. agricultural industrialisation exposes agricultural cooperatives to **increasing domestic and international competition** from other business forms
6. **Horizon Problem:** when a member's residual claim on the net income generated by an asset is shorter than the productive life of an asset. → likely to underinvest in that asset because the return he receives is less than the return generated by the asset. The benefits are thus limited by the time period (horizon). Managers are pressured into increasing current payments instead of investing in additional assets which will reduce retained earnings.
7. **Portfolio Problem:** members invest relative to their use → unable to diversify their personal investment portfolios according to their personal wealth and risk taking preferences. Members might pressure board members to reduce risk even if this lowers expected returns.
8. **Control Problem:** any organisation with separate ownership and control will experience **principle agent problems** (divergence of interest).
9. **Influence Cost Problem:** costs that arise from members trying to influence decisions that affect the distribution of wealth and benefits e.g. direct costs or the costs of poor decisions.

Section: 2.1 Property Rights as a Basis for Economic Exchange and Organisation

1. Define the concept 'property right' from a physicalist perspective and a social perspective (slides; Bromley 1991 Part 1)

"Rights" are a product of "rules". For every right an individual holds, rules exist that authorise or require particular actions in exercising that property right. If an individual has a **right** someone else has a commensurate **duty** (= defines the actions the individual may or may not take in relation to another or their property) to observe that rights.

Rights: Allow an individual to **compel the coercive power of the state** to come to her assistance. They do not imply a passive but an active assistance.

Property: Property is a value. One acquires the control over a **benefit stream**, arising from that setting and circumstances, that runs into the future. The magnitude of that new benefit stream is a **function of the legal parameters** associated with it. The price paid is thus the expected **discounted present value** of all future net income appropriable.

Physicalist (Locke)	Social (Kant)
<ul style="list-style-type: none"> The private appropriation of scarce and valuable natural resources is necessary and sufficient for a market to emerge among atomistic resource owners. Argues that prior collective consent is not required for individual expropriation of valuable resources. The absolute right to appropriation derives from the need for all to secure their sustenance and the rights from all to the fruit of their labour. 	<ul style="list-style-type: none"> Kant believes that Locke's empirical possession does not establish ownership. If the necessity of a social convention is understood to be the core of intelligible possessions then two conclusions follow. <ol style="list-style-type: none"> all property rights flow from the collective and property rights are instrumental variables. Property claims failing to win this external acknowledgement will not be recognised as legitimate by those forced to forswear interest in the benefit stream. If the collective fails to admit the social usefulness, then it is delegitimised and non-instrumental. True state of nature is something that man could never have experienced, it is more of a moral reality (instead of empirical). An important factor is the capacity of the collective to coerce itself and enforce an general will. A civil society exists only if there are underlying tacit agreements recognised by all individuals capable of moral judgement. Within the state of nature we have the natural rights to compel/coerce everyone to enter with us into a society where property holding is sanctioned by positive legal powers. → idea of a social contract

Summary: Open access resources will be **overused**, will **generate conflict** and may be destroyed. All type of property rights regimes may **reduce the costs** of open access regimes, but **perform differentially** depending on the attributed of the resource, the local community and the specific rules used. The likelihood is small that any set of uniform rules for all natural resource systems and will produce optimal results.

2. What does "triadic relationship" mean in the context of property rights? Use an example (slides; Bromley 1991 Part 1)

Property is not an object but rather is a social relation that defines the property holder with respect to something of value against all others. **Property is a triadic social relation involving benefit streams, rights holders and duty bearers.**

- Property regimes acquire their special character by **virtue of collective perceptions** regarding what is scarce (worth protecting with rights) and what is valuable (definitely worth protecting).
- A right is the capacity to call upon the collective to **stand behind one's claim** to a benefit stream.
- A right is a triadic relationship that encompasses the **object of my interest, plus all others in the polity that have a duty to respect my right**.
- Rights are not relationships between me and an object, but are rather relationships between me and others with respect to that object.
- Rights can only exist where there is a social mechanism that gives duties and binds individuals to those duties. When one has a right, the benefit stream arising from that situation is consciously protected by the state.
- The state gives and takes away rights to protect one's claims.
- Example:** Environmental problems are regarded as triadic matters, between Alpha, Beta and the state. To protect the interest of Alpha is to interfere with Beta and vice versa. One party's interference is another party's liberation.

3. What is the difference between the positions as right holder and the position as privilege holder from the perspective of property rights theory (Hohfeld/ Bromley 1991, p44 ff)?

A claim right

► right which entails that another person has a **duty to the right-holder**. Somebody else must do or refrain from doing something to or for the *claim holder*.

"Person A has a claim that person B do something if and only if B has a duty to A to do that something." Every claim-right entails that some other duty-bearer must do some duty for the claim to be satisfied (act or refrain).

Example: many jurisdictions recognise broad claim rights to things like "life, liberty, and property"; these rights impose an obligation upon others *not* to assault or restrain a person, or use their property, without the claim-holder's permission.

A liberty right or privilege

► a freedom or permission for the right-holder to do something, and there are *no obligations* on other parties to do or not do anything.

"Person A has a privilege to do something if and only if A has no duty not to do that something."

Example: if a person has a legal liberty right to free speech, that merely means that it is not legally forbidden for them to speak freely: it does *not* mean that anyone has to help enable their speech, or to listen to their speech; or even, per se, refrain from stopping them from speaking.

- Liberty rights and claim rights are the **inverse of one another**: a person has a liberty right permitting him to do something only if there is no other person who has a claim right forbidding him from doing so.
- Likewise, if a person has a claim right against someone else, then that other person's liberty is limited. **Example:** a person has a *liberty right* to walk down a sidewalk and can decide freely whether or not to do so, since there is no obligation either to do so or to refrain from doing so. But pedestrians may have an obligation not to walk on certain lands, such as other people's private property, to which those other people have a claim right. So a person's *liberty right* of walking extends precisely to the point where another's *claim right* limits his or her freedom.

4. What are static correlates and dynamic correlates according to Hohfeld (1971). Define the two concepts and use one example of each (i.e. by referring to Hohfeld's typology) (slides; Bromley 1991 Part 2)

The institutional arrangements create the social order that allows it to function and to survive. The ways in which those institutions are promulgated and enforced constitute the **legal system** of that society. The societal recognition of a specific set of ordered relations among individuals is a **legal relation**.

	Alpha	Beta
Static Correlates	Right Privilege	Duty No Right
Dynamic Correlates	Power Immunity	Liability No Power

Hohfeld posted four sets of dualities which he considered as the essence of legal relations among individuals in a society.

- Static Aspect:
 - Right:** Alpha has an expectation or assurance that Beta will behave in a certain way towards Alpha.
 - Duty:** Beta must behave in a specific way with respect to Alpha.
 - First correlate:** Alpha has the right, Beta has the duty. (Cannot be bought off or compensated for, Alpha may not interfere with Beta under any circumstances, and no compensation is required. Beta is protected by inalienability.
 - Privilege:** Alpha is free to behave in a certain way with respect to Beta.
 - No right:** Beta has no recourse in which Alpha behaves in a certain way with respect to Beta e.g. by emitting large quantities of sulfur dioxide.
- Dynamic Aspect:
 - Power:** Alpha may voluntarily create a new legal relation affecting Beta. Alpha has the capacity to force Beta into a new situation that may be of disadvantage for Beta.
 - Liability:** Beta is subject to a new legal relation voluntarily created by Alpha.
 - Immunity:** Alpha is not subject to Beta's attempt to voluntarily create a new legal relation affecting Alpha.
 - No power:** Beta may not voluntarily create a new legal relation affecting Alpha.
- Right/duty and power/liability relations are active** in that they represent imperative relations subject to the authority of the state.
- Privilege/no right and immunity/no power relations are passive** in that they are not themselves subject to direct legal enforcement. They set the limit of the state's activities by defining the types of behaviour that are beyond the interest of the state.

5. What determines the choice between securing a property right through a liability rule and securing a property right through a property rule (Bromley, 1991, 46)?

Beta has right of non-interference (e.g. not to suffer from pollution). The right can be backed up by a property or a liability rule:

- Property rule:** Alpha may not interfere with Beta without Beta's consent, Beta is protected by a property rule. Thus, Beta has the **right of protection against unwanted interference** and it is Alpha's duty to buy off this right ex ante.
- Liability rule:** Alpha may interfere with Beta but must compensate Beta. Beta has the right to compensation ex post and it is Alphas's duty to compensate, where unwanted interference has taken place. Vice versa, where Alpha has the right to interfere (e.g. **alpha may pollute**), Alpha may stop Beta from interfering, but must compensate Beta.

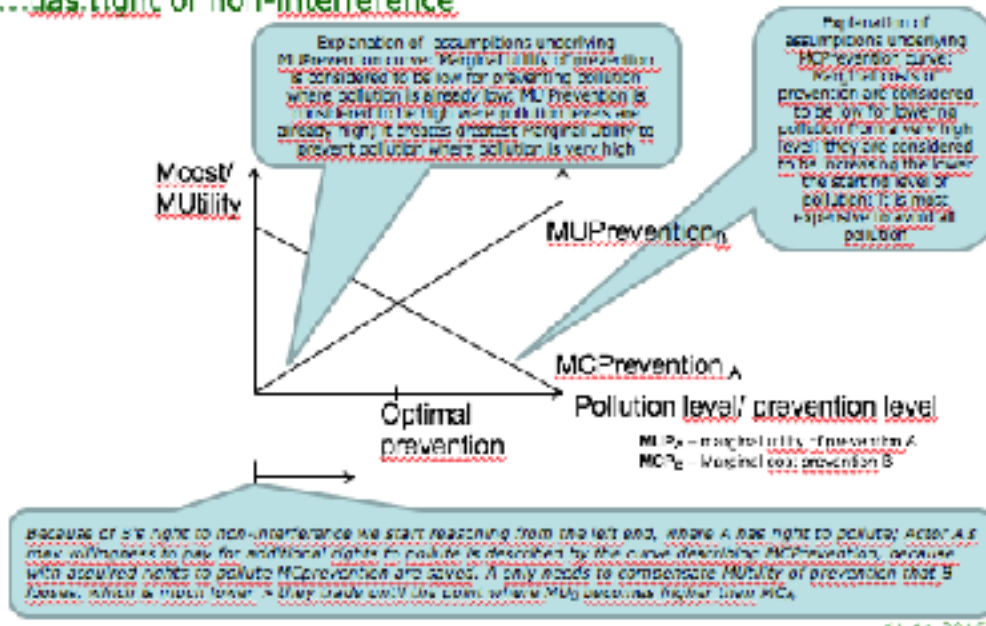
What rule to chose?

- The tendencies that interference will occur **depends on the type of rule**.

Assumption: no Transaction costs



how do we get to the social optimum under a property rule: B has right of non-interference



• Transaction costs are imposed on different actors and **optimal allocation changes**
• **TC under property rule are higher** than under the liability rule. The property rule is difficult to realise when many actors are impacted and the cost of prior agreement are high.

Property rights can be protected by a property rule or by a liability rule. The key differences lie in (1) whether consent is needed or not and (2) who has to compensate who.

6. What does

environmental policy making have to do with property rights (Bromley, 1991)?

Environmental policy is about rights and duties and about benefit streams that represent property in various interests.

- **Private interest** of one party, Alpha, as against the private interest of another, Beta. Either the interests of Alpha will prevail, or the interest of Beta will prevail. Each party hopes to obtain a benefit stream that we call property.
- Environmental problems are regarded as **triadic matters**, between Alpha, Beta and the state. Usually the private interest of Alpha versus the private interest of Beta. To protect the interest of Alpha is to interfere with Beta.
- **Leaving things to the market** will offer a solution to environmental conflicts that are characterised by:
 - high transaction costs
 - large and important non-monetary benefits and costs
 - uncertainty over the future
 - potential irreversibilities
- Environmental matters are often characterised by **unclear property rights**, indivisibilities, publicness, contemporary or inter-temporal externalities and irreversibilities.
- **Solution:** standards of performance that have been collectively determined and mechanisms of implementation that reward individual initiative, experimentation and efficiency.
- **Fundamental policy problem:** boundary between proper domain for collective choice from the proper domain of atomistic choice.
- Environmental policy is concerned with **altering actual or presumed property rights** among independent agents. Who will get those rights, and have the effective protection of the state to do as they wish.

Summary: Environmental policy is nothing if not a dispute over the putative rights structure that gives protection to mutually exclusive users of certain environmental resources. Disputes may appear to be "environmental problems" but are really problems of conflicting rights claims.

7. What does the Coase theorem suggest? What are the underlying assumptions? Please, explain what these assumptions imply. Are these assumptions realistic (Slides)?

The Coase Theorem

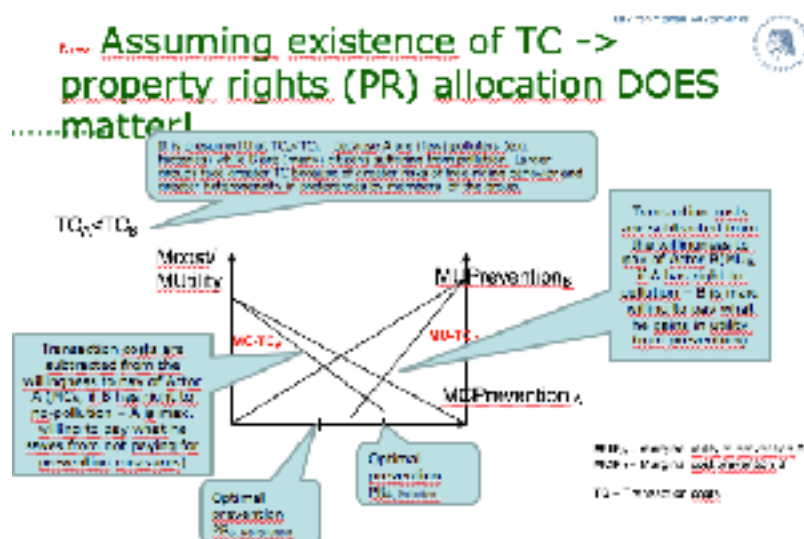
► If transaction cost are zero, the distribution of private property rights is **irrelevant for economic efficiency** since negotiations between the parties will always result in the same **Pareto-efficient level** of the externality.

Assumptions:

- **zero transaction costs in bargaining**,
- information is **costlessly available** → process of bargaining is absolutely costless.
- **perfect and costless enforcement** of bargains.

- Normative conclusion: private property rights are fully assigned, not how they are assigned to achieve pareto efficient outcome!

8. What happens to the socially optimal levels of prevention of harmful activities if we loosen the assumptions of the Coase theorem and consider the existence of transaction costs (Slides, Coase)? Please, illustrate your reasoning graphically (slides).



If we loosen assumptions (TC empirically matter) differences in property rights allocation lead to different outcomes in terms of resource management (see below) – different social optima!

9. What do Ostrom and Schlager view as different rights and positions associated to them? Explain each right and position with an example (slides; Schlager and Ostrom 1992)

1. **Access:** The right to enter a defined physical area and enjoy non subtractive benefits. **Example:** a hike or sitting in the sun).
2. **Withdrawal:** The right to obtain the resource units or “products” of a resource. **Example:** catch fish, appropriate water etc.). In addition to the right to **access** users may be authorised to **harvest** resource units at a particular location, during a specific time or using particular technologies.

The distinction between rights at an operational level and rights on a collective-choice level is important. It is the difference between exercising a right and participating in the future rights to be exercised. Collective choice property rights (define what allowed to do and what not allowed to do) include:

3. **Management:** The right to **regulate internal use patterns** and transform the resource by making **improvements**. Devise operational-level withdrawal rights governing the use of a resource; **how, when and where** harvesting from a resource may occur and whether and **how the structure** of a resource may be changed. **Example:** a group of fishers who implement zoning, which limits harvesting activities.
4. **Exclusion:** the right to determine **who will have an access right** and how that right may be transferred. Devise operational-level rights to access. They have the authority to **define the qualifications** that individuals must meet in order to access a resource. **Example:** fishers who limit access to fishing grounds above a certain age, who live in a certain community and who utilise particular types of gear.
5. **Alienation:** The right to **sell or lease** either or both of the above collective-choice rights. Permits the transfer of part or all of the collective-choice rights to another individual or group. Transferable ownership of productive resources leads to **investments that maximises** the current value of the resource. Non-transferability of ownership disconnect the investment from the time horizon of the investor.

Arranging these rights allows us to make distinctions among 5 classes of property-right holders. The five property rights are independent from each other but are often held in a cumulative manner. Individuals/Collectives may hold well-defined property rights that do not include the full set of rights.

- I. **Authorised Entrants:** Individual who hold operational-level **access rights**. **Example:** access to a park to enjoy recreational activities.
- II. **Authorised Users:** Individual who has both **entry and withdrawal rights** **Example:** involves the right to enter the park and right to harvest timber or other forest products. Defined by others who have collective choice rights of management and exclusion.
- III. **Claimants:** Individuals who possess the **same rights as authorised users plus the collective-choice right of management**. Have collective choice authority to devise operational rights of withdrawal, regulate internal use patterns and transform resource by making improvements. Little incentives for investment/ innovation.

- IV. **Proprietors:** Individuals who possess collective-choice rights to participate in **management and exclusion**. They authorise who may access resources and how resources may be utilised. They do not have the right to alienate either of these collective-choice rights.
- V. **Owners:** Individuals hold collective-choice rights of **management and exclusion and alienation**. They can sell or lease their collective-choice rights. Private ownership creates **incentives for investments**, innovations, and work efforts since it protects against expropriation by others. (security: will be able to harvest/benefit in the future)

	Owner	Proprietor	Claimant	Authorized Users	Authorized Entrant
Access	X	X	X	X	X
Withdrawal	X	X	X	X	
Management	X	X	X		
Exclusion	X	X			
Alienation	X				

10. What component rights does full ownership entail (slides)?

Full Ownership

- Right to use (usus)
- Right to appropriate the returns (usus fructus)
- Right to change form, substance or location (abusus)
- Right to transfer part or all of the rights
- Right to exclude
- Right is limited by the rights of others (tort law)

Rules produce rights. Rights have different sources:

- **De facto property rights:** source among resource users
- **De jure:** backed by state/ subject to judicial system, exist only to extent. Must be recognized and credibly enforced otherwise anarchy

11. Please, categorize the following types of goods. What establishes incentives for actors to invest into governance to exclude other actors from use / benefit of goods and services (Slides)? Please, elaborate on your categorization describing assumptions you may make for classifying the corresponding goods and services.

National defence, IEPE 1 lectures on Wednesday afternoon, pollination services by bees, IEPE 1 moodle site, agricultural extension services, amounts of water in a river

- **National Defence** is a public good and often state property. It has low rivalry and a low excludability). The more rivalry the greater the benefit of exclusion. Example: In the case of a war, I feel more protected if I have my own army and do not have to compete with others for protection (high rivalry). Therefore there could be an incentive to establish my own army before (club good).
- **IEPE Lectures:** Club good because of low rivalry but a high excludability. If the room is full, I can exclude people that didn't enroll properly into the class.
- **Pollination Services by Bees:** Public good (Low rivalry/low excludability), in normal world with enough bees
 - CPR (if there a little bees, because of too much fertilizers used). Incentive: My incentive is to be the only farmer close to the bee stock.
- **IEPE Moodle Site:** Club good (Low rivalry/high excludability). Password protected, excludes those who don't have the password. No rivalry, everyone can use the site at the same time but the the internet system might become slow with too many users; incentive to further exclude.
- **Agricultural Extension Services:** It depends on the style of the service. High exclusion: Only Agricultural farmers; Low rivalry if the extension is provided for free (Club Good); if has to be bought it becomes a private good.
- Amount of water in a river: Public good (Low rivalry/low excludability), because the river is a running water system, there is not less water available for others if I take some part from it.

12. Are types of goods static? If not, why not? Please provide examples.

13. Name the four types of resource management regimes and illustrate them with examples. (slides; Cole & Ostrom 2011; Bromley 2006)

	High level of excludability	Low level of excludability
High level of rivalry	Private good	Common pool resource
Low level of rivalry	Club good	Public good

Private Property:

Private property is the legally and socially sanctioned ability to exclude others.

• Make management decisions and investments in the full knowledge that good stewardship will **return private rewards**.

• Right to undertake **socially acceptable uses**, and have duty to refrain from socially unacceptable uses. Others have duty to refrain from preventing socially acceptable uses, and have right to expect that only socially acceptable uses will occur.

• Depends on **authority system** / coercive power of the state

• **Strong incentives for investments**, innovation and efforts but there are costs of specification and exclusion (set-up; distributional conflicts)

- Relatively **low costs** of monitoring and enforcement and costs of transferring private rights

Summary: Recognised right to benefit from the asset, subject to legislative mediation and judicial review.

Open Access (res nullius):

There is no property right: "Everybody's access is nobody property"

- **Rule of capture**, an individual must physically capture the objects before they can exercise effective control. There is no property right there is only possession.
- The potential user has **complete autonomy** to use the resource since no-one has the legal ability to keep any potential user out. The benefit stream is available to anyone.
- Individuals have both **privilege and no right** with respect to use rates and maintenance of the asset.
- The **institutional vacuum** insures that use rates will eventually **deplete an asset**.
- Results from a **breakdown or absence** of a management and authority system whose purpose it was to introduce and enforce norms of behaviour.
- **Example:** Every villager to take what he needs to survive; leads to degradation due to population growth; total demands on the physical environment exceed the rate of natural regeneration.
- Can be **transformed into a CPR**: then the existence of clear resource boundaries, small manageable resource size and scope and accessible information about the condition of the resource are critical.

Summary: No individual has a duty to refrain from accessing and using a resource. No individual or group has the right to prevent any other individual or group from accessing and using the resource. e.g. high seas fishery outside 200mile limits, the atmosphere.

Common Pool Resources (res communes):

Common property represents private property for the group of co-owners since all others are excluded from the use and decision making.

- **Social units with definite membership and boundaries** with certain common interests, with interaction among members, common cultural norms and their own endogenous authority systems.
- These groups hold **customary ownership** of certain natural resources e.g. farm land, grazing land and water sources.
- Involves **sanction** against anti social behaviour and thus has a built-in structure of economic and non-economic **incentives that encourage compliance** with existing conventions and institutions.
- **Problems:**
 - **state disregards the interests** of those segments of the population largely dependent upon CPR. External threats will not receive the same governmental response as would a threat to private property.
 - **private property is encroaching** on CPR, thus preventing the traditional movement of people and livestock.
- **Five attributes that are conducive to the development of CPR regimes:**
 - **Low value of production** per unit of area
 - High **variance in availability** of resource units on any one parcel
 - **Low returns from intensification** of investment
 - Substantial **economies of scale** by utilising a **large area & building infrastructures** to utilise the large area
- **Variables that affect the performance of CPR systems:**
 - accurate information about the condition of the resource & expected flow of benefits/costs are available at low cost.
 - share a **common understanding** about the potential benefits and risks.
 - share generalised **norms of reciprocity and trust** that can be used as initial **social capital**
 - the group using the resource is relatively **stable**
 - participants plan to live and work in the area a **long time** and thus do not heavily discount the future.
 - participant use **collective choice rules** that fall between the extremes of unanimity or control by a few and thus avoid high TC or deprivation costs.
 - participants can develop accurate and **low cost monitoring and sanctioning** arrangements.

Summary: Non-owners have a legal duty to respect boundaries of the regime e.g. irrigation districts, pastures. Each member has the right to exclude non-members of the ownership group, but no right to exclude other member of the ownership group. Lower exclusion and specification costs but reduced incentives for investments, innovations and

efforts, costs of designing and managing use rights and costs for monitoring and enforcement. Many CPR are de facto open access resources: anyone who wishes can gain access and appropriate resource units.

State Property:

Ownership and control over use rest in the hands of the state.

- Individuals and groups may be able to make use of the natural resources, but only at the forbearance of the state.
- The state has the right to **determine rules of access and use**, but a duty to manage publicly owned resources for the **public welfare**. Public do not necessarily have a right to access/use, but a **duty to observe** access and use rules.
- **Directly managed** and controlled e.g through government agencies, or **lease** the natural resource to groups or individuals.
- **Characteristics:**
 - Often **separation of ownership** (citizens) and management (administration)
 - **Low specification and exclusion costs** but
 - **Low incentives** for investments, innovation and work efforts
 - Cost for designing and managing use rights
 - Cost of monitoring and enforcement

Summary: The political community is the recognised owner of the asset. Individuals in the political community may benefit from the asset but must observe rules of the government agency responsible to the political community e.g. national forests and parks, military bases etc.

14. Cite four aspects that can affect to the effectiveness of private property regimes in allocating goods and services. Specify how they shall affect effectiveness (slides; Cole 1999)

It is implausible that any single institution would constitute a universal first-best solution, but private property is often said to be the **most economically and environmentally sound** resource management system due to the **incentive structure** and a **longer-term perspective**.

1. However, in some cases private ownership **did not guarantee the low discount rates and long time horizons** that are necessary for resource conservation.
2. Property rights are **costly to design and enforce**. The definition and enforcement process may preclude whatever gains might have been released by the establishment of property rights.
3. Often the choice of an institutions is not a once and for all choice and must be **changed and adapted** given the technological circumstances and other externalities.
4. Private ownership may **undo some of the common understanding and norms** that allowed communal ownership systems to operate at lower day-to-day administrative costs.

15. Cite four aspects that can affect to the effectiveness of government property regimes in allocating goods and services. Specify how they shall affect effectiveness (slides)

1. Like private owners, the politicians and bureaucrats who manage public property **seek to maximise their self-interest**. But their incentives are quite different from private owners, because they **do not bear the costs of poor management decisions**.
2. They tend to have a **shorter time horizons and higher discount rates**, because there is no “voice of the future” in government equivalent to the rising market price of an increasingly valuable resource since they face **reelection** in relatively short intervals.
3. Politicians **respond not to market signals** but to political circumstances, even if it reduces the total value of production.
4. The result can be government **failure to allocate environmental goods efficiently or effectively**. The government can become the cause for environmental problems.

16. Name aspects affecting the adequacy of common pool resource regimes (Ostrom, 2003)

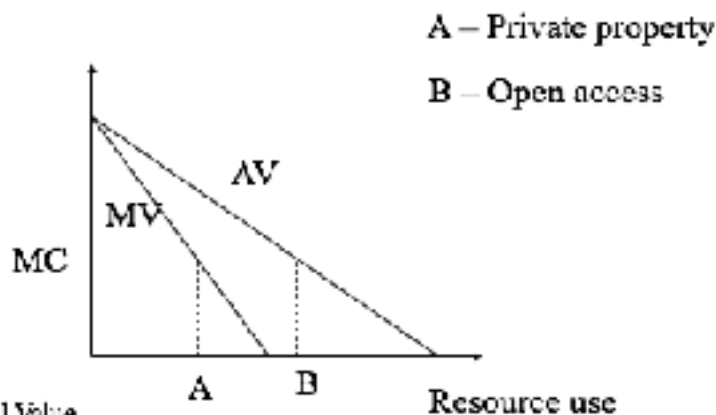
- Accurate information about resource and expected flow of benefits and costs are cheaply available to participants.
- Common understanding about the potential benefits and risks associated with the status quo.
- Shared generalized norms of reciprocity and trust (initial social capital).
- Stable group of resource users.
- Participants plan to live and work in the area for a long time (low discount rate).
- „Moderate“ collective choice rules between extremes of unanimity or control by a few to avoid high transaction costs or deprivation costs.
- Participants are able to monitor and sanction at low cost.

17. How do externalities in the tragedy of the commons lead to suboptimal allocation and overuse of the resource. Please, illustrate your reasoning using a graph (slides) (Furubotn & Richter, 1998, chapter 3 p 100).

Hardin's allegory of the “tragedy of the commons” provides a framework for analysing relations between property rights and environmental protection.

❁ **Thesis:** resource depletion and pollution problems both **stem from the incentives created** by open access resources; when **no-one can exclude anybody** from access or use.

❁ **Avoid the tragedy:** **restricting access and privatisation**, which would **internalise costs of access and use decisions** to the owners. The owners have the incentive to conserve the resources and are governed by the state.



MV-Marginal Value
AV-Average Value
MC-Marginal Costs

Solving the tragedy in the face of positive TC?

The marginal costs are the costs for buying an additional cow. The average costs in comparison is the benefit from adding an animal, which will have an impact on all others. The marginal value is the benefit of the added cow for the farmer plus the externalities of others, thus also the function of the private good (internalised externality). At point B the resource is open access and an additional animal would no longer be beneficial. Point A is where the additional cow on private property would become unprofitable.

Thus, in common pool resources you can externalise costs onto other users, which leads to the overexploitation of the resource. If the resource is private (A) you would stop adding animals earlier (B).

Section: 2.2 Principal - Agent Problems in the Economy

1. What are relative property rights? To which extent contracts depend on third party enforcement and how does this affect the “freedom” of contracts? (slides; Furubotn et al. 2003 Ch.4)

Relative property rights

► consist of a claim of a certain individual, the obligee, against one or more other individuals, the obligator, and can only be exercised against them.

- Thus, relative property rights can be **violated or “stolen”** by the person/s against whom the claims are directed.
- People operate in a **network of legally binding obligations** into which they enter either **voluntarily** or through **compulsion**. There are two principles of contractual obligations:

1. Liberty of Contract:

- enables the owner of a property right to transfer his right and the asset to which the right refers, to the locus where it is valued the most highly. Freedom to:
 - conclude a contract or not
 - choose one's partner/s to a contract
 - determine the contract's content
 - choose the form of the contract.

- **Idea:** each individual is **free to regulate the circumstances of his life** himself. Individuals create law on a micro level by concluding particular contracts within the framework of the existing contractual system. The principle requires the freedom of will of the contractual parties and the protection of third party interests.

2. Liability from Contract:

- Freedom of contract: enforceable by the state as a last resort.
- In case of intervention, public agencies supplement, or even replace, private markets as directors of the allocative process.
- The state may undertake, though official or unofficial pledges, to come to the aid of private companies.
- The obligation to keep one's promises (sanctity of promises) needs an advocate to become relevant.

A contract is a voluntary agreement that constitutes mutual obligations. Contracts depend on third party enforcement because they ensure that contracts can be legally enforced. Therefore third parties (e.g. government) ensure freedom of contracts in a way because they contribute to the functioning and efficiency of contracts. **BUT** on the other hand this dependency also means that contractual liberty is restricted because contracts shouldn't conflict with law and rights of third parties and are therefore bounded in a way. Besides some contracts are already part of other contract agreements (e.g. employment contract embodied in the labour law) so that they are bonded to this conditions. Therefore characteristics like free choice of contract content which is part of the freedom of contracts cannot be ensured.

2. Why do transaction partners have problems of contracting where the conditions of contracts according Arrow-Debreu are not fulfilled? What does the Arrow-Debreu contract entail? What are problems and what are their causes and for what types of transactions are contracting problems specifically significant, why?

Fully contingent Arrow-Debreu Contracts are **explicitly agreed** upon **symmetric** information contracts, binding in an **ex-ante clearly defined** sense. It does not matter if they are independent or dependent, short or long-term, complex or standard. The contracts are **third party enforced and individual**.

Real contracts: difference to Arrow Debreu

- **not closed and often long-term** → need for adaptation and private extra arrangements.
- The price often does not explain the contract and poses the need to **analyse market failures** e.g. adverse selection or moral hazard.
- **Imperfect foresight** makes it impossible to enumerate and contract upon all conceivable contingencies. Enforcement can be difficult or impossible.
- **Asymmetric information**: one party has more relevant information than the other; opportunistic behaviour.
- **Asset specificity** where one party has invested in capital which leads to sinking investments so that the other party has also room for opportunistic behaviour. Consequently the price not necessarily explains the contract.
- **Problem**: payoff-relevant activities or information are **not verifiable by court** or the contingencies are too complex.
- **Result**: parties **leave gaps in their contracts** with the understanding that the gaps will be closed when the time comes for adjustment. There are agreements that cannot be enforced by contracts at all (non-contractual agreements).

3. Why and how does asymmetric information lead to market failure? (slides)

Asymmetric information:

- the agent enjoys some **informational advantage** over the principle.
- can be categorised as **ex ante**, pre-contractual of the transaction, or **ex post**, post-contractual of the transaction.
- Two types of asymmetric information exists:

- (1) adverse selection (pre contractual asymmetric information)
- (2) moral hazard (post contractual asymmetric information).

- create market failures:

- in **product markets** where low quality products drive out good quality products,
- **insurance markets** where low risk groups do take out insurance and high risk groups do
- **other markets** where principals do not receiving productivity/return from agents.

- distribution of the information between agents that can influence their actions in the market.

Adverse Selection	Moral Hazard
<p><i>Example: Motor Vehicle Market(Quality)</i></p> <ul style="list-style-type: none"> • Asymmetric information: the sellers knows more about the motor vehicle than the buyer. All prospective buyers are suspicious of the quality of used motor vehicles and infer quality from pricing policies of sellers. • Absence of full information, or a high cost of obtaining all the information, low quality goods will drive high quality goods out of the market, and the market may collapse. Solutions that are available to correct market failure in relation to quality asymmetries are: • Reputation: High quality product sellers can build a reputation to differentiate the high quality products. • Standardisation: To help building a reputation, sellers may standardise the high quality service/good. • Guarantees and Warranties: Higher quality products signal product quality through an extensive warranty or guarantee. 	<p><u>Moral Hazard</u></p> <p>The results of moral hazard are an increased probability of undesired outcomes for one party and the market, post contractual. A basic example of moral hazard is motor vehicle owners driving more recklessly if their motor vehicle is fully insured(Gibson,1997).</p>
<p><i>Example: Insurance Market(Pooled)</i></p> <p>Assumption: individuals are either <i>Low Risk</i> or a <i>High Risk</i> of the insured event happening, but they are not individually identifiable by the insurer. General assumptions are:</p> <ul style="list-style-type: none"> - High risk individuals are most likely to claim on insurance and will be enthusiastic to purchase full insurance. - Low risk individuals are unlikely to claim insurance and are willing to purchase insurance at a discounted rate. <p>Insurers offer an insurance contract at a premium set at the average probability of a claim. As premiums rise, low risk individuals will not be willing to buy insurance so losses will occur to the insurer and hence market failure will occur.</p> <p>The adverse selection problem: buyer has hidden information from the insurer before a contract is entered into.</p> <p>Solutions to adverse selection in the insurance market include:</p> <ul style="list-style-type: none"> - Trying to obtain critical information before insurance is provided. e.g. pre-inspection before fire insurance is provided. - Offer full insurance at a high premium and partial insurance at lower premium to help identify individuals into their respective risk groups. 	<p><i>Example: Home & Contents Insurance</i></p> <p>When individuals are insured, they will pay less care ensuring that the undesired outcome does not occur. This moral hazard problem can cause market failure, because individuals incentives are altered by not having to worry about their post contractual actions in regards to the insured event. Insurers may not offer Home & Contents insurance where moral hazard problems are strong, or specify certain conditions for the insured. Solutions to moral hazard in the insurance market are:</p> <ul style="list-style-type: none"> - The use of deductibles(excess) and co-payments, depending on whether moral hazard increases the risk or increases the size of the loss. - Government intervention through taxation or subsidies to ensure an incentive to reduce the risk or improve the care taken by individuals(Gibson,1997).

4. What does Kronman describe as “state of nature”? What are problems for the economic order that he describes? (slides; Kronman 1985)

Classical Model (Hobbes):

"War of every man against every man", conceived as a condition of radical insecurity. Security of two different sorts:

- (1) **"vulnerability of possession"**: anything a person possesses is subject to attack and expropriation by others so that the things he controls are not securely his.
- (2) **"transactional insecurity"**: any exchange that requires one person to perform before the other exposes the party to the danger that he will be denied what he bargained for after completing his side of the exchange.

Cause: **Absence of a sovereign power** able to enforce proprietary and contractual claims. If there is no third party powerful enough to enforce the agreement on their behalf, they are in a **state of nature towards each other**.

State of Nature

- the parties to an agreement must establish the conditions of whatever enforcement powers they hope to enjoy. These powers do not exist by nature and they do not exist by virtue of the effective guarantees of a dominant third party.
- In the condition of mere nature the covenants are **not subject to any "common power"** with the right to force sufficient to compel performance.
- State of nature is any situation in which individuals and groups must arrange their transactions without the aid of an independent enforcement mechanism whose powers are significantly greater than their own.
- Even in a state of nature, two individuals will have and **incentive to exchange** resources whenever both can be made better off by the trade.
- When the exchange is **simultaneous**, neither needs to worry about enforcing the other's performance.
- Whenever the full performance of an exchange **requires time**, a situation may arise in which one party receives what he has bargained for before the other does, having the latter to **rely on the promise** of his trading partner to complete a still unfinished job.
- Where one person is put in an asymmetrically disadvantageous position the **absence of a centralised enforcement** increases the **risk and the cost** of exchange for the disadvantage trader. If the risk is great enough it will kill the change entirely.
- There will be **pressure to make the exchange as simultaneous** as possible to reduce the risk. The push towards simultaneity **has its costs**, which can also inhibit trade. If the risk is great enough, partners may trade only when **private mechanisms** substitute for the missing guarantees of a coercive "common power".

5. How do transacting partners in a state of nature overcome the problem of transactional insecurity? (slides; Kronman 1985)

- Partners may trade only when **private mechanisms substitute** for the missing guarantees of a coercive "common power".
- An object can function as a **medium of exchange** only by virtue of its real or intrinsic worth, since the **establishment of a currency system** in which the nominal value of money exceeds its real value itself requires the effective guarantee of some centralised institution or common power.
- In a state of nature where there is no coercive common power, those contemplating a non-simultaneous exchange must rely for their security on devices of their own construction. There are 4 devices or techniques:

- (1) hostages
- (2) collaterals
- (3) hands-tying: make agreements self-enforcing
- (4) union

6. What is the difference between "hostage" as a way to secure transactions and "collaterals"? In what way can these "techniques to overcome contracting problems in a "state of nature" be affected by opportunistic behaviour? (slides; Kronman 1985)

Hostages:

- Exchange horse for calf: If I want to **increase the likelihood that you will deliver** your calf as promised, I may insist that you give me a hostage to hold until your performance is completed.
- The hostage can be anything of **value to you**, knowing that I can **destroy** the hostage if you fail to perform, you have an incentive to keep your end of the bargain and I am made more secure.
- The hostage giver will want his hostage to be **returned** when he performs his promise.
- Hostage giving is simply a **means for achieving simultaneity** that would otherwise be unattainable.
- **Hostage: can be something that had worth to the hostage giver but no market value at all or something that anyone other than the hostage giver would consider a positive liability.**
- **Risk:** obvious risk that you have deceived me regarding its value to you. In this case I will **lack the means** of coercing you. I must take your word and trust you. Since you are aware that the destruction can do me no good, you are in a position to **bargain for an advantageous compromise**.
- **"Bargain Space":** The space exists because the hostage is worth to you more than to me. What bargain we eventually strike depends on:
 - **value you attach to the hostage,**
 - **your ability to persuade me** that you value it less highly than you do
 - **my ability to persuade you** that I am prepared to destroy the hostage.
- **Any hostage giving arrangement involves an irreducible risk of opportunism.**

Collaterals:

- I now have an **asset which is a direct substitute** for the performance you have promised, an asset whose value I can realise through **use of trade** without having to deal with you at all.
- The property in question must be worth as much to him as the performance he has been promised.
- If the other party threatens breach he will be **indifferent between keeping** what he already has and exchanging it for what he has originally promised.
- Thus, you create an opportunity for bargain, that I can exploit to appropriate the gain you expected to realise from our transaction. Seeing this in advance, you have a powerful incentive to resist any demand, on my part, for complete collateralisation.
- This creates a **risk of opportunism** on the recipient's part. **Example:** If a goblet is worth as much to me as the calf, we can assume that you value the goblet more highly than the calf. I can credibly threaten to keep the goblet.
- I **cannot make a credible threat**. The **actual destruction** of a hostage never does the party holding the hostage any good; the contrary, it harms him by **extinguishing the coercive power** which the possession of a hostage confers. Its destruction means a **loss of value and usefulness** as an instrument of blackmail. (same for collateral)
- The more a hostage takes the form of a collateral, the **more costly its destruction becomes** to the hostage-holder.

7. Why do for example "collaterals" or "hands-tying" also apply where a state exists? Why the state is not fully effective in coping with contract ineffectiveness? (slides; Kronman 1985)

Hands-tying: actions that make a promise more credible by putting it out of the promisor's power to breach without incurring costs he could otherwise have avoided.

In the case of hands-tying and collaterals the promisor **does something at the outset** that makes a subsequent breach on his part more **costly**. As a result, his own **incentive to perform is strengthened** and the **confidence** of the other party increases.

- In hands-tying the promisor's punishment is self-executing, it guarantees that he will pay the added costs. There is no way for me to intervene, to do something to you, you have arranged things so that whatever wounds you suffer will be self-inflicted. Thus hands-tying compared to the others has an automaticity (self-enforcing).

Private parties contracting with one another continue to make use of each of the four techniques.

Example: Creditors often demand some valuable property as collateral (e.g. warehouse or jewellery) to secure their loans. **Objective:** assure that the creditor will have the borrower's possession when the borrower's default property is of sufficient worth to compensate the creditor for his loss. A creditor may insist that he be given physical control over some small piece of equipment (critical to the borrower's business) until the loan is repaid. If the equipment has little value to anyone but the borrower (e.g. specialised to his operations and can only be replaced at great expense) the security held by the creditor is clearly a hostage.

- The investments that firms make in **transaction-specific equipment** e.g. advertising, whose function often just is to increase a firm's repetitional commitment to the product advertised, is an example of hands-tying.
- **Reason:** the legal right to enforce a promise can reduce but never eliminate the insecurity with all temporally asymmetrical exchanges. When someone makes an enforceable promise, the person to whom the promise is made acquires the right to sue for relief if the promisor fails to perform. If a promisee is entitled to money damages only, he might be under **under-compensated**. **Two reasons:**
 - (1) legal rules that define compensable harm limit the promisee's recovery by denying him compensation for losses that are considered as **too remote or speculative**. A third party final authority about the validity.
 - (2) it must still be measured before damages can be awarded. The **magnitude of the loss may be controversial**, someone other than the disappointed promisee e.g. judge or jury must resolve the dispute. Risk: third party's estimate of the harm suffered will diverge and that damages will be under-compensatory.
- **Risk:** moral hazard; the promisor is likely to cut corners, shirk and shift resources. A court may **lack the ability to distinguish adequate** from inadequate performance and be **unpersuaded by the evidence**. If the promisee has a hostage or collateral, he would be the arbiter of the promisor's performance and would **spare the risk to justify his own assessment** to a third party.

8. Please, give examples of principals and agents in different contexts, name the principal and the agent and identify one non-contractible aspect in those contexts. (slides)

Good/Service	Noncontractible aspect	Endogenous enforcement	Principal/agent
Labour service	Labour effort, care	Contingent renewal	Employer, employee
Managerial service	Effort, maximising owners' profits	Profit sharing, contingent renewal	Owner/ manager
Debt	Level of risk taken	Collateral, shared control	Lender/ borrower
Sovereign debt	Probability of default	Trade sanctions, other interventions	Lending government/ borrowing government
Goods	Product quality	Contingent renewal by buyer	Buyer/ seller
Public policy	Choice and implementation	Contingent renewal referendum	Citizen/ government official
Residential tenancy	Care of residence/ local amenities	Security deposit, contingent renewal	Landlord/ tenant
Agricultural tenancy	Labor effort and quality, care of land	Shared residual claimancy	Landlord/ sharecropper
Equipment rental	Care of equipment	Deposit, ownership share in equipment	Owner/ renter

9. Describe the problems of pre-contractual and post-contractual opportunism related to issues of asymmetric information. Use one example for each case of opportunism. (slides)

Some of the economic problems that arise from transaction costs are: (1) **asymmetric information** and (2) **transaction-specific investments** (= need for investments to begin delivering services before they receive their full reward). This makes pre contractual and post contractual opportunistic behaviour possible.

Opportunism:

Self-interest seeking with guile. More often involves subtle forms of deceit e.g. incomplete or distorted disclosure of information especially to calculated effort to mislead, distort, disguise, obfuscate or otherwise confuse.

Pre contractual Opportunism:

- Result of asymmetric information: lemon case
- Trust becomes important

Post contractual Opportunism:

- becomes a problem in cases of physical asset specificity, dedicated assets, purchases involving products requiring servicing over time and repeated purchases involving site specificity or human-capital specificity.
- the difficulty is not so much asymmetric information but the presence of transaction-specific investments.

(Examples in the next questions)

10. Describe the hold-up problem. How does the hold-up problem relate to asset specific investments?

An open form of opportunism occurs in the case of the so-called holdup.

A **holdup** occurs when some or all of the **quasi rent** of the party with the **greater specific investment** is captured by the **other party** or parties to the business venture.

In economics, the **hold-up problem** is central to the theory of incomplete contracts, and shows the difficulty in writing complete contracts. A hold-up problem arises when **two factors** are present:

- 1 Parties to a future transaction must make **non-contractible relationship-specific investments** before the transaction takes place.
 - 2 The **specific form** of the optimal transaction (e.g. quality-level specifications, time of delivery, what quantity of units) cannot be determined with certainty beforehand.
- Situation where two parties may be able to work most efficiently by cooperating, but refrain from doing so due to **concerns** that they may give the other party **increased bargaining power**, and thereby **reduce their own profits**.
 - The hold-up problem leads to severe economic cost and might also lead to underinvestment.

- Underinvestment occurs because investors **cannot guarantee** themselves a sufficient share of the return through ex post bargaining.

Scenario: two risk-neutral parties S (supplier) and B (Buyer) can make profit by working together; efficient as long as the buyers' valuation exceeds the sellers' costs.

When the two parties could agree on a binding contract covering the whole period of the investment and anticipating all possible outcomes and providing protection for both parties in every situation, then the parties would have enough confidence to make the investment, and both parties could enjoy high profits.

However, making such a contract is not often possible because of

- Unforeseeable external factors
 - Lack of trust
 - Quality problems
 - Asymmetric information
- The initial contract only can cover **short term** situations and at a certain point in time renegotiation is needed, which provides an opportunity for e.g. S to hold up B.
 - S knows that the investment is a significant cost to B and tries to use this as **leverage to negotiate** an increase in its prices. S has got more bargaining power compared to B and tries to use it to its own advantage.
 - The source of power lies in the investment of B. For B it is hard to find out whether or not the raise in prices is reasonable.
 - In an extreme case, S could demand 100 percent of the profits, if the only alternative to B is to lose the entire initial investment. Even though the outcome would be Pareto efficient, B might not accept the agreement.
 - When the renegotiations turn out to be unsuccessful both parties are worse off: B has made an investment that goes to waste and S lost a customer.
 - Inefficiency is caused by the hold-up problem when B is reluctant to make the investment ex ante because of the fear that S uses its extra bargaining power to its own advantage. In that case the supplier is 'holding up' the buyer.

11. Describe a moral hazard and adverse selection problems, specify who bears the problem and why. (slides; Furubotn et al. 2003 Ch.5; Varian 2006)

The study of markets has mainly focused on the assumption that buyers and sellers were both perfectly informed about the quality of the goods being sold in the market. But if information about quality is costly to obtain, then it is no longer plausible that buyers and sellers have the same information.

<p>Adverse selection events occur in the period before the conclusion (ex ante). Situations where one side of the market cannot observe the "type" or quality of the goods on the other side of the market.</p>	<p>Moral hazard events that occur during the executing stage (ex-post opportunism). Situations where one side of the market cannot observe the actions of the other. Moral hazard distinguishes between:</p> <ul style="list-style-type: none"> • hidden information: the agent has acquired some information that the principal has not. • hidden action: e.g. the effort level of the agent, which is unobservable by the agent.
<p>Setting:</p> <ul style="list-style-type: none"> • the principal cannot fully observe the qualities of the individual agents before contract conclusion • the agent is tempted to misrepresent his qualifications • to avoid misrepresentation the principal offers a menu of contracts that leads the individual agent to reveal his type (qualities) and promotes the principal's welfare • parties are asymmetrically informed before and up to the moment of contract conclusion, • Afterwards, they are symmetrically informed. • agents do not act under uncertainty but principals act under uncertainty 	<p>Setting:</p> <ul style="list-style-type: none"> • the principle operates subject to limited information and cannot observe fully his agent's actions • the principle is not satisfied with a determined profit payment; tries actively to come as close as possible to his first best utility maximum • the principal offers the agent a contract that requires the agent to maximise the principal's utility together with his own. • the agent enjoys some informational advantage over the principal • the profits of the firm depend on the effort of the agent and the profit increases proportionally with the effort

<p>Problem:</p> <ul style="list-style-type: none"> The principal cannot observe the subjective cost functions of each individual agent, but he has some idea which cost functions exist and how they are distributed → he knows the probability of an agent having a certain cost function. The agents of course know their cost functions. A low-cost agent could pretend to be high cost, producing only a certain effort but receiving the surplus. Assumption: agents will only cheat if it pays. 	<p>Problem:</p> <ul style="list-style-type: none"> The principal is unable to observe the effort level the agent is supplying; but the agent produces some definite, quantifiable results the effort of the agent can be inferred from the realised profits the principal offers the agent a wage or incentive schedule the difference between the agent's wage and his effort costs expresses the agent's utility level. two inextricable elements, risk sharing and differential information. If the agent were risk neutral he would bear all the risk and the differential information would not matter (risk averse). acquiring information requires the use of resources. Welfare losses due to information constraints are generally unavoidable. the principal knows perfectly his agent's preferences and reservation utility. Both know perfectly the profit or result function.
<p>Solution:</p> <p>Under perfect competition principals determine a set of contracts that the agent can take or not since he is uninformed to which type the workers belong. (self-selection device). workers are forced to reveal truthful information about themselves by means of their market behavior.</p> <ul style="list-style-type: none"> the educational level can be understood as a signal of each worker's ability (productivity). The signal (education) is easier to be acquired by more productive workers. 	<p>Solution:</p> <ul style="list-style-type: none"> the incentive scheme is based on information content of observable signals the risk needs to be divided among the two parties involved
<p>Example Insurance:</p> <p>An insurance company wants to offer an insurance for bicycle theft and decides to offer the insurance based on the average theft rate. Claims will most likely come from people in communities with a high incidence of thefts (high risk areas). Thus, rates based on the average probability of theft will be misleading. The insurance will not get and unbiased selection of customers; they will get an adverse selection. In order to break even the insurance company needs to base their forecasts on the worst-case scenario and that consumers with a low, but not negligible, risk of bicycle theft will be unwilling to purchase the resulting high-priced insurance.</p>	<p>Example Insurance:</p> <p>Bicycle insurance market: all areas have the same risk of theft, so there is no adverse selection, the probability of theft may be affected by the actions taken of the bicycle owners. They may e.g. not lock their bikes or use a flimsy lock and not take enough care. So the insurance company has to take into account the incentives to take an appropriate care. If no insurance is available consumers have the incentive to take the max. care e.g. large expensive locks, because the individual bears the full costs. If he can purchase insurance the cost of having the bicycle stolen is much less and the individual has no incentive to take care at all (moral hazard). Insurance companies cannot observe all the relevant actions and a tradeoff (full insurance --> too little care, no insurance --> bear all the risk) will emerge. Thus, the insurance company will want the individual to bear some of the risk e.g. through deductibles. Thus the consumer always has the incentive to take some care.</p>

12. Please, provide examples of ex-ante and ex-post opportunism in employment, loan, and lease contracts. (2 for each type of contract and type of opportunism. (slides)

	Ex-ante Opportunism	Ex-post Opportunism
Employment Contract: core of labour law and deals with the exchange between personal services for remuneration.	Results from asymmetric information . Workers looking for jobs know their abilities better than prospective employers. Potential employees could thus misrepresent their capabilities (adverse selection). Signaling devices can be of help e.g. the educational level.	Due to asymmetric information and specific investments . The employee's performance on the job is only imperfectly observable (moral hazard). Monitoring workers is costly.
Loan Contracts: regulates the transfer of control over resources (directly: loan in kind, indirectly: money loan)	Due to asymmetric information . The debtor knows his own economic prospects and his integrity better than a potential creditor. Measurement of sorting costs is high. Signaling, self-selecting mechanisms and information technologies can help.	Due to asymmetric information and specific investments . Monitoring of debtors is a costly process

	Ex-ante Opportunism	Ex-post Opportunism
Lease Contracts: relevant rights are leased for a specific period of time in exchange for periodic payments of a stipulated price, the rent.	The lessor may present the apartment overly positive and hide information e.g. an underground passing right underneath the complex or the noise that is coming from ambulances travelling to a nearby hospital. These will only be discovered by the lessee once he moves in.	Lease of an apartment: contract investments are higher for the lessee, e.g. moving costs, building relationships with the neighbours and buying furniture. Once the lessee settled he may feel locked-in to the contractual relation. The lessor has a strong position and may decide to increase the rent and exploit the situation. On the other hand, the lessee doesn't have the same incentive to treat the apartment with care and show serious concern for the maintenance. (moral hazard hidden action problem)

13. If an enterprise is unable to distinguish between the capabilities of employees, what problem emerges and what wage will the enterprise pay its workers? (slides; Varian 2005)

- Suppose we have two types of workers: **able and unable**. A fraction b is able and $(1-b)$ unable. The able workers have a marginal product a_2 , the unable workers have a marginal product of a_1 and $a_2 > a_1$.
- If we assume a linear production function then the total output produced by able (L_2) and unable (L_1) workers is $a_1 L_1 + a_2 L_2$. If worker quality was easily observable, then firms would offer a **wage of $w_2 = a_2$ to the able and $w_1 = a_1$ to the unable workers**.
- If the firm cannot distinguish between able and unable workers, then the best they can do is offer an **average wage** for all workers, which is $w = (1-b)a_1 + ba_2$.
- If both workers would earn an average wage, then the wage of the **able workers would be depressed** because of the presence of unable workers.

14. Please, explain why, under certain assumptions, it is worthwhile for the most able employees among a group of employees to invest into education? (slides; Varian 2005)

- If workers can send a **signal e.g. education** then they may allow the **principal to distinguish** between the unable and able workers.
- The **costs of acquiring education is less** for the able than for the unable workers. For example, both workers will acquire different education levels and the principal will pay the ones with the high level (e^*) a higher wage than the ones with a low education level (0).
- The condition of able workers to invest in education is: $a_2 - a_1 > c_2 e^*$ (unable: $a_2 - a_1 < c_1 e^*$)
 - a_1 : wage for less education
 - a_2 : wage for more education
 - $c_2 e^*$: costs of the able worker to reach a high level education
- If each able worker chooses education level e^* and each unable worker chooses education level 0 (equilibrium because no worker has a reason to change his behavior) the educational level of a worker can, in equilibrium, **serve as a signal** of the different productivities.
- Each able worker, thus, finds it in his interest to **pay for acquiring the signal**, not because it makes them more productive, but because it **distinguishes them** from the unable workers.
- If both workers would earn an average wage, then the wage of the able workers would be **depressed** because of the presence of unable workers. Thus they would have an incentive to invest in signals that distinguish them from less able workers. **This investment offers a private benefit but no social benefit.**

15. What conditions do we need for reputation to counterbalance the risk of market failure due to adverse selection? Use an example. (slides; Furubotn et al. 2003 Ch5)

- **Dishonesty is costly.** Trust can only be achieved in a roundabout way with the help of institutions such as:
 - guarantees,
 - reputation ("brand name capital"),
 - diplomas or licenses.
- The establishment of such institutions **costs resources**, but it is the level of these costs that signal the buyer that the seller offers a good product. The quality of the signal depends on the resources invested in it.

Reputation

- affects the **credibility of commitments**, is important and the cultivation of a business "relation" becomes an objective in its own right.
- Investment in reputation or brand name capital, e.g. advertising, **requires considerable resources** and these are **sunk**.
- Serve as an **indicator** for the buyer of the **quality level** of the product and act in a sense as "hostages" in the hands of the firm's customers.
- People seek information about the **reliability** of those with whom they deal.

- **Experience** plays a role, which is the history of the behaviour of the other side and its resulting "reputation" of completing an agreement.
- Reputation works as an enforcement mechanism if a sufficient number of individuals can observe when an actor reneges.
- Reliability is not considered to be an inherent personality trait, a person is assumed to act responsibly only if it is of advantage to him.
- **Reputation:** owners of a good quality have an incentive to give customers a "hostage" (otherwise risk of failed contract/market)
 - repeated purchases can offer incentive to deliver high quality (buyers can test it and punish or reward)
 - reputation effectiveness possible as long as consumers have an initial believe in reputation
 - e.g. ebay seller and rating system after purchasing
- **Signalling:** owners of a good quality have an incentive to convey good quality to potential buyers (otherwise risk of failed contract/market)
 - choose action that signal good quality e.g. car warranty

Section 2.3 Governance of Economic Transactions

1. Why, according to Coase not all the economic transactions are arranged through markets? Why are neither all economic transactions regulated through hierarchies? Why do firms exist and what limits the size of the firm? (Coarse)

Outside the firm, price movements direct production, which is coordinated through a series of exchange transactions on the market. **Costs of carrying a transaction out** with the price mechanism will vary considerably, but can be very high in the market.

Disadvantages: Market

- The operation of the market **costs something** and forming a firm and allowing some authority to direct resources, saves some marketing costs. It is always possible to revert to the market if it fails.
- As a firm gets larger there may be **decreasing returns** to the entrepreneur function as the costs of organising additional transactions within the firm may rise.
- Transactions increase: fails to place the **factors of production** in the uses where their value is greatest and fails to make the best use of the factors of production. The supply of one or more of the factors of production may rise, because the "other advantages" of a small firm may be greater than those of a large firm.
- The first two would be labeled **diminishing return of management**.
- The equation of **diminishing returns** the costs of carrying certain transaction out within the firm may be greater than carrying them out in the open market.

Disadvantage: Hierarchy

- Firms address transaction activities **ex post contract**: vertical integration to economise on inspection costs due to uncertainty and bounded rationality (incomplete contracting):
 - members of the same organisation more difficult to appropriate benefit from opportunistic behaviour
 - internal organisation easier controlled
 - internal organisation advantageous to resolve disputes
- Firm-specific property rights for each member of the firm, need to analyse property rights/incentives and interests of individuals in firm
- „Impossible to intervene selectively“
 1. if entrepreneur becomes **manager of stage of production** and no own assets, short term rationality introduced (p.r. analysis/ „principal-agent problem“)
 2. „seller“ can be **expropriated** ex post (of promised benefit shares)
 3. price mechanism difficult to simulate in enterprise, increasing management costs (tradeoff with gain from integration)
 4. better cooperation between e.g. research and development BUT problems: causal ambiguity; office intrusion; loss of control due to fixed control capacity, decreasing marginal benefit of integration

Why do firms exist:

- **Main reason:** there is a **cost of using the price mechanism**, especially discovering what the relative prices are. Additionally, **costs of negotiating and concluding** a separate contract for each exchange transactions must be taken into account. If the costs of making an exchange are greater than the gains, the exchange would not take place.
- The **number of contracts** is reduced when there is a firm. The character of the contract is different, its is one where the factor for a certain remuneration agrees to obey the directions of an entrepreneur with certain limits.
- It may be desired to make **long-term contracts**, because certain costs of making a contract can be avoided. The **longer** the period of the contract the **less desirable/possible** it is to specify exactly what each party is expected to do. The service provided will be expressed in general terms and exact details left to a later stage, only limits are defined.
- A firm consists of a **system of relationships** which comes into existence when the direction of resources is dependent on the entrepreneur.

What limits their size:

- A firm becomes larger as **additional transactions** are organised by the entrepreneur and becomes smaller as he abandons the organisation of such transactions.
- A firm will expand until the **costs of organising and extra transaction** within the firm become equal to the costs of carrying out the same transaction by means of exchange on the open market or the costs of organising in another firm.
- A firm will tend to be larger:
 - the **less the costs of organising** and the slower the increase in these costs if more transactions are organised
 - the less likely the entrepreneurs to make **mistakes** and the smaller the increase in mistakes with the increase of transactions
 - the greater the **lowering in the supply price of factors** of production to firms of larger size.
 - **Inventions** that will bring factors of production closer together (lessening spatial distribution), increase size.
 - All changes which improve the managerial technique will tend to increase the size of a firm.
 - **Replication** without selective intervention would allow large firms to grow without limit.

2. What is the discriminating alignment hypothesis and how does it relate to the approach of comparative economic organisation?

Discriminating Alignment Hypothesis:

Transactions, which differ in their attributes, are aligned with governance structures, which differ in their costs and competencies, in a discriminating (mainly, transaction-cost economising way).

1. If some transactions are simple and others complex, then the **attributes of transactions** that are responsible for these differences must be named and their ramifications worked out. → names **asset specificity, uncertainty, and frequency** as three of the critical dimensions for describing transactions.
2. If the **comparative efficacy of different modes of governance** (market, hierarchy, hybrid) differ, then the critical attributes that describe alternative modes of governance need to be named and viable modes need to be worked out. Relevant dimensions include **intensive intensity, administrative control, and contract law regime**.
3. A predictive theory of economic organisation resides in the hypothesis that **transactions**, which differ in their attributes, are **aligned with governance structures**, which differ in their **costs and competencies**, so as to effect a (mainly) transaction costs economising result.

3. Which attributes of transactions influence transaction costs of different governance structures how and why? Define these attributes. Please, also illustrate your argument with examples.

1. Asset Specificity:

- Asset specificity is usually defined as the extent to which the investments made to support a particular transaction have **a higher value to that transaction than they would have if they were redeployed for any other purpose**.
- **Williamson**: transaction-specific assets are **non-redeployable physical and human investments** that are **specialised and unique** to a task.
- Value of the asset in the first best allocation minus the value of the asset in the second best allocation divided by the value of the asset in the first best allocation
- **Examples**: the production of a certain component may require investment in specialised equipment, the distribution of a certain product may necessitate unique physical facilities, or the delivery of a certain service may be predicated on the existence of an uncommon set of professional know-how and skills.

2. Uncertainty:

- **Source of disturbances** to which adaptation is required. Uncertainty is the situation which involves **imperfect and / or unknown information**. A state of having **limited knowledge** where it is impossible to exactly describe the existing state, a future outcome, or more than one possible outcome.
- Arises in **partially observable and/or stochastic** environments, as well as due to **ignorance and/or indolence**.
- **Example**: Unavoidable in **Environmental Impact Assessments**, EIAs: involve situations in which the full set of possible options and impacts for a particular project might not be known; no certainty about the magnitude of impacts; assumptions are not easily verifiable.
- Uncertainty is also reflected in situations in which:
 - (i) there is no agreement as to the **criteria** to use to evaluate the importance of the impacts;
 - (ii) the **effectiveness of measures** to manage impacts is uncertain; or
 - (iii) when it is extremely difficult to **detect early changes** in the environment in order to minimise them over time.

3. Frequency:

Relevant to two respects; reputation effects and setup costs, the net effects of which will vary with the particulars.

4. What is asset specificity? Provide examples for the different types. Illustrate with an example why asset specificity questions the effectiveness of market transactions.

There are four types of specific investments.

Specificity \ Frequency	Low	Mixed	High
Low	Market Governance	Triateral governance ("neoclassical contract")	
High	("classical contract")	Bilateral governance ("relational contract")	Unified governance ("vertical integration")

(1) **Site Specificity:** Buyer and seller are in a **cheek and jowl relation**, reflecting ex ante decisions to minimise inventory and transportation expense. **Example:** coal mine and coal burning facility. Specialisation by proximity.

(2) **Physical Asset Specificity:** One or both parties make **investments in equipment and machinery** that involve design characteristics specific to the transaction and with low alternative uses. **Example:** die for stamping out specific metal shapes.

(3) **Human Capital Specificity:** Consequence of **learning-by-doing**, investment, **transfer of skills** specific to a particular relationship. **Example:** arise from firm specific training or learning by doing

(4) **Dedicated Assets:** General investment for the prospect of selling a significant amount of a product to a **particular customer**. If the contract is terminated the supplier has considerable excess supply; sold at distress prices. **Example:** to carve out a specific piece of metal for a specific product that is not used by competitors.

(5) **Brand Name Capital**

5. Which type of uncertainty is P-A theory most concerned about? How is Economic governance theory different in that regard?

1. Primary Uncertainty

- **Uncertainty concerning the future state of (exogenous) nature .**
- The most important type of uncertainty is the **primary uncertainty**, because that people have to **forecast future wants**. For example, the decision on which product will be released on the market is an entirely impersonal prediction of the wants and needs of the customer.

2. Secondary Uncertainty

- **Uncertainty concerning the behaviour of the contracting partner that is due to communication problems between actors (not strategic/non opportunistic).**

3. Behavioural Uncertainty

- **Uncertainty concerning the behaviour of contracting partners that is due to strategic/ opportunistic behaviour.**

6. Provide examples of highly asset specific transactions (for both parties) and not at all asset specific transactions in a scenario of high uncertainty and in a scenario of low uncertainty (four examples total). Assume that frequency of transactions is high.

	High Asset Specificity	Low Asset Specificity
High Uncertainty	Cole mine and power plant vertical integration, i.e. hierarchy	Related to some kind of standard equipment like IT services: HU hires worker who, on a monthly basis, comes to university and checks software configuration <ul style="list-style-type: none"> • Uncertain: software changes very often, HU people do not have enough knowledge • about it (as opposed to worker from IT firm) • No specific investments necessary: HU could always hire other worker, worker • could find same kind of employment elsewhere • (Long-term) contract could be suitable, but due to information asymmetry vertical integration might be beneficial for HU: it is a standard task and needs to be performed frequently
Low Uncertainty	Renting a car for a an indeterminate period of time long-term leasing contract as form of hybrid	Frequently buying gas at a gas station market, i.e. spot contract

7. Which type of governance structure would Williamson's economic governance theory prescribe for highly uncertain, infrequent and highly asset specific transactions? Why? (Explain why for each of the transaction attributes).

Unified Governance (“vertical integration”) or Hierarchy: **high specificity; low to high frequency**

- The hybrid is a **compromise mode** that is located between hierarchy on all three attributes and works well in autonomous and coordinated adaptation reposts.
- The viability is dependent on the **efficacy of credible commitments** (e.g. penalties for premature termination, information disclosure and verification mechanisms, specialised dispute settlement etc.) the **cost effectiveness** of which varies with the attributes of transactions.
- **Contract as framework**, which is more elastic and promotes cooperative adaptation.
- If the adaptive limits of a hybrid are exceeded, transactions are organised as hierarchies. The implicit contract law in hierarchy is forbearance. Forbearance law authenticates hierarchy by supporting its main purpose, namely, timely responsiveness to consequential disturbances for which coordinated adaptations are needed.

Trilateral Governance : **mixed to high specificity; low frequency**

8. Which type of governance structure would Williamson’s economic governance theory prescribe for frequent and somewhat asset specific transactions? Why? (Explain why for each of the transaction attributes; assume that uncertainty is low).

Bilateral Governance (“relational contract”):

- **Mixed specificity; high frequency**
- Absence of state support parties have no choice but to do their best to create their own bilateral or group mechanisms to support otherwise problematic exchange.
- Most disputes are resolved by avoidance, self-help etc. In many cases the participants can devise more satisfactory solutions than professionals, that are constrained to apply general rules with limited knowledge of the dispute.

9. Which type of governance structure Williamson’s economic governance theory would prescribe not asset specific transactions in a context of low uncertainty of transactions? Why? (Explain why for each of the transaction attributes; assume frequency is high).

Market Governance (“classical contract”):

- **Low specificity; low to high frequency**
- Single, all-purpose law of contract that is **costlessly enforced by well-informed courts**.
- Works out for **high-powered incentives**, little administrative control, and a legal-rules contract-law regime, which is well suited to implement autonomous adaptations but poorly suited to effect cooperative adaptations.
- The contract of law is that of **legal rules**, where each party goes their own way and courts award money damages in the event of a dispute, there being no interest in continuity of such transactions.

10. What does simultaneous adaptation refer to in the study of governance structures? And independent adaptation? To which governance structures are each associate? Use an example for each type of adaptation.

Attributes of Governance Structures

Attributes	Governance Structures		
	Market	Hybrid	Hierarchy
Instruments			
Incentive Intensity	++	+	0
Administrative control	0	+	++
Performance Attributes			
Independent Adaptation	++	+	0
Simultaneous Adaptation	0	+	++
Contract Law	++	+	0

* ++ = strong; + = medium; 0 = weak

Source: Williamson 1986: 105.

Adaption is taken to be the main purpose, where the requisite mix of autonomous adaptations and coordinated adaptations vary among transactions. The need for coordinated adaptation builds up as asset specificity deepens.

•Governance is concerned with the **ongoing contractual relations** for which continuity of the relationship is a source of value.

•Given that incomplete contracts need to be **adapted to disturbances** for which contractual provision was not made or incorrectly made, continuity can and will benefit from a spirit of cooperation.

•Maladaptation to disturbances is where the **main costs of governance** reside.

Simultaneous adaptation is referred to intentional adaptation through a firm because both parties can rely on each other. They are bilaterally or multilaterally dependent. They consult each other when adapting to disturbances, or the decision is referred to the hierarchy where through fiat is decided on the type of response. (Jolink)

Independent adaptation is found on spot market or through price mechanism. For a autonomous actor the individual players at the market are not relevant, if there is a better price for something he changes to this.

11. When are firms more advantageous than markets according to Williamson’s economic governance theory? Why are not all economic transaction organized through firms according to the same theory?

Firm and market are regarded as “alternative methods of coordinating production”.

- Because added bureaucratic costs **accrue** upon taking a transaction out of the market and **organising it internally**, it is the organisation of last resort. *That is, try markets, try hybrids and have recourse to the firm only if all else fails.*
- **Efficiency is the product of adaptive capacities** of both kinds, the firm for the purpose is described not as production function but as a governance structure.
- However, a unified firm comes in as **higher degrees of asset specificity** and **added uncertainty** pose greater needs for **cooperative adaptation**.
- Vertical Integration has the advantage of being **simpler**, because a variety of complications that arise between firms and workers or firms and consumers (e.g. disparities of information, differential access to legal and technical expertise, differential capacity to bear the risk etc.) are of lesser importance in transactions between firms, where the specialisation of labour within a and between functions is extensive.
- Markets and hierarchies differ in kinds, in that each possesses **distinctive strengths and weaknesses**, where **hierarchy** enjoys the advantage for managing **cooperative adaptations** and the **market for autonomous adaptations**.

A consequence of organising transactions in markets (M) and hierarchies (H) as a function of asset specificity (k). The bureaucratic burdens of hierarchy place it at an initial disadvantage ($k=0$), but the **cost difference** between markets $M(k)$ and hierarchies $H(k)$ **narrow as asset specificity builds up** and eventually reverse as the need for cooperative adaptation becomes especially great ($k>0$).

- **Hybrid mode** of organisation $X(k)$: market-preserving credible contracting modes that possess adaptive attributes located between classical markets and hierarchies.
- **Incentive intensity and administrative control** thus take on immediate effects. $M(0)<X(0)<H(0)$ (by reason of bureaucratic cost differences) but $M'>X'>H'$ (reflects the cost of coordinated adaptation). **Hierarchy is favoured as asset specificity builds up.**
- Transactions that use **general purpose technology** ($k=0$; no specific assets involved) or **special purpose technology** ($k>0$).
- Incentives to promote continuity and safeguard (s) their specific investments.
- **Market: absence of dependency, governance is accomplished through competitive market prices and in case of disputes courts award damages.**
- **Unrelieved Hazard**: specialised investments are exposed for which no safeguards have been provided. Hazards can be recognised by far sighted players, who will price out the risk.
- **Credible Contracting**: inter-firm contractual safeguards. Transactions may be taken out to the market or hierarchy instead.
- **Hierarchy: Only as higher degrees of asset specificity are added and uncertainty pose greater needs for cooperative adaptation.**
- Under hierarchy, **incentive intensity is less, administrative controls are more numerous and discretionary and internal dispute resolution supplant court ordering.**

12. Describe and define the governance structures of markets, and hierarchies. Provide examples of each. Describe advantages and disadvantages of each.

Hierarchies:

High relevance of identity, strong interdependence whose details are contractually unregulated.

Advantages of hierarchical relationship:

1. Flexibility allocating human resources/ address uncertainty
2. Improve decision making/ „division of cognitive labour“
3. Communication coordinated by entrepreneur may be gain
4. Settle disputes without time and costs of arbitration
5. Internal auditing more effective than external control
6. Cooperation also in firms: „willingness of agents to pool resources; scale economies (information; risk bearing; ...)

Disadvantages:

1. non-replicability of market incentives in firm
2. How distribute residual claims among residual claimants,
3. loss of information along hierarchy
4. collective decision making hampering command; incentives to collude/ develop side payments;
5. high cost of processing information/ communication/ control

Markets:

Identity of parties is irrelevant, little trust, no (inter-) dependence, parties can go own way at negligible cost, legalistic contract law.

- Market governance structures **transfer property rights**
- **Specialisation in exchange** of property rights through mechanisms that require the mutual consent of parties involved (freedom of contract)/ coordinate decentralised decisions through the price system.
- Markets **depend on institutions** that shape them. Require institutional support, e.g. Property rights, court systems.
- Different stock exchanges/ diamond exchange, role of personal relations > differences in price determination (posted or negotiated)
- Agents collect information about the characteristics of goods and services through the price system

13. What are hybrids? Provide examples. Why do you think hybrids may be more efficient than markets and hierarchies?

Hybrid modes:

Forms of long-term contracting, reciprocal trading, franchising → more elastic than markets and more legalistic than hierarchies.

- Governance for Hybrids-Continuum: between decentralised relationship and quasi integration

• Advantages:

- increased market share,
- transfer of competencies,
- access to scarce resources

• Risks:

- Uncertain about uncoordinated transactions/ transaction cost problems emerge (bounded rationality/ incomplete information);
- share resources/ coordinate decisions in order to create rents/ may also be source of conflict
- Contracts incomplete/ How to minimise renegotiations?
- Role of prices in hybrids in disciplining replaced by mix of competition and cooperation

Chapter 2.4: Agrarian Institutions; The Nature of the Farm

Explaining the persistence of family farms in a New Institutional Economics perspective; The family farm as an Integrative Institution and the link to Political Economy of Agriculture.

1. Please explain what forms of Agrarian Institutions exist and give reasons for their complexity.

What are Agrarian Institutions?

- Remember: Institutions are **sets of rules** put into practice by **forms of organisation** (= structures and of modes of governance)
 - **Example 1:** Rights defined by rules such as property rights in land, water, livestock, plants, seeds, changing ecosystems, knowledge, etc.
 - **Example 2:** Organisation of production, i.e. by farms, contracts, labor organisation, marketing chains, cooperatives, veterinary services, irrigation and drainage systems, extension, etc.

There are contracts for equipment, labour, marketing, production and services. Contracts can be simple and short term or complicated and long-term.

Why are Agrarian Institutions complex?

- Agriculture is heavily **linked to nature**. In many cases, the constraints of nature coupled with social and economic forces lead to rather **simple contracts**. When production is organised in a way, that nature is minimised in the production stage, contracts tend to become more complex.
- The farm alone would not be able to exist, a sustainable system of agrarian institutions is **diverse and polycentric**.
- The farm as an **organisation of production** is embedded in a network of other organisations together, based on complex rules of interaction.
- **Why?** A variety of organisational solutions needed for:
 - (1) responding to activities with different economies of scale and
 - (2) governing transactions cost.
 - (3) Plus path dependency!
- All agriculture inputs and outputs are complex, in the sense that are composed of **many attributes**.
 - property rights are imperfect,
 - uncertainty is a necessary input into production,
 - nature has a systematic factor we call seasonality, which limits the degree to which farmers can specialise their production. → seldom able to realise economies of size,
 - maximise the expected value of a relationship (given the characteristics of contracting parties, desired output and attributes of assets).

2. Why is the “Family Farm” a suitable example for explaining the system of such Institutions? What role do transaction costs and economies of scale play? What role does the principal-agent problem play?

The Farm as the Core of Agrarian Institutions

- Starting from the diversity of farm types: peasant farms, family farms, family-managed farms, partnerships, limited companies, joint-stock companies, production cooperatives, agricultural commons, socialist collective and state farms, household plots, farms in Chinese household responsibility system, plantations, indoor feeding of hogs and poultry, etc.
- We look at the family farm to learn about what shapes the farm as an institution. In processes of factor re-allocation, family farms respond to equal opportunity or mobility costs but they **respond in a different way** than members of other branches do.
- **Low agency costs** of family labor: advantage compared to non-family operations
- Decentralised governance: actors = farmers take their own decisions - **autonomous action!**

- And *also individualised governance*: actors = farmers are responsible for their decisions

Nature-related Transactions and Production-related Transactions

- Agricultural production is closely connected with ecological, biological, climatic processes.
- Farming activities have *particular properties*:
 - **Diversity and heterogeneity**, dependence on varying ecological, biological, hydrological and weather conditions, spatial dimensions → difficult to be organised by standardised processes.
 - **Transaction Costs of Labor**
 - 'The family farm can be regarded as an organisational solution to the difficulty of monitoring and supervising workers, who, for technological reasons, cannot be gathered in a single location' (Pollak 1985: 592)
 - Farm production demands farm **households' resources** in competition with the demand for off-farm activities. **The economic organisation is reflected by transaction costs.** In agriculture transaction costs of production of farm products have to be **borne by the farm.**
 - Farms (just as household production) are subject to the **law of diminishing returns.**
 - Most **economies of size** are captured by moderate-size farms.
 - Optimal farm size is determined by the **wage level.**
 - **The lower the opportunity costs of farm labour are, the greater the optimal farm size. The lower the wage rate is, the more labour (family or hired) will be allocated. Higher opportunity costs on small sized farms can be compensated by increasing economies of size due to technological innovation.**
 - Transaction costs have a **fixed cost element**: cost per unit are declining if farms increase in size.
 - Farm size is linked to farm labour input and family labour might have to be **supplemented** by hired labour.
 - **Higher transaction costs** are incurred as a response of the family farm to the **difficulty of supervising** workers.

The 'Principal-agent Problem'

- As a farm increases more labour has to be **hired to exploit the capacity** of the family farm (becomes family-managed farm).
- **The greater the size the greater the distance between the manager and the last worker and the more difficult it is to organise all workers efficiently and to stimulate the workers' interest in the success of the farm.**
- The farmer has to develop a compensation system, which coordinates the farmers worker's interests efficiently with the farmer's interest, so that **free riding** is prevented. Compensation system difficult, problems of measurability due to nature of farming. (Pollak)
- Larger 'social distance' between manager and worker in large farms

3. What are reasons the for the persistence of family farms? When do non-family operations prevail in agriculture?

1. Organisation based on household and family

- several production factors are **jointly allocated** at the same time
- **wide spectrum of management tasks** (owner & manager). Decisive **institutional "entity"**. They can allocate available resources to farm & off-farm uses as well as to household production in such a way that **income or utility** of that household will be maximised. → efficient.
- engagement for the family: household and profession are **intertwined** in term of time allocation and organisation of activities. → **interdependence**: economic decisions for the private household
- production processes are **harmonised** more easily
- **work time and free time** are not subject to collectively agreed and formally fixed time schedules → flexible coordination.
- **spatial proximity** of farm buildings and living quarters
- TC of agricultural production to be borne by the farm are TC to be borne by the family/household.
- Obviously the family/household can do this better than a segregated farm firm

2. Farm labour vs. Hired Labour

- The dominance of family farms in agriculture has been **strengthened by the decline in hired labour relative** to family labour.
- The most important factor price in agriculture is **farm labour**, the opportunity costs of which are increasing in the longer run.
- Opportunity costs of the farm labour is determined by the off-farm wage rate. Off-farm: farm labour is less qualified b/c:
 - **specialisation in farming activities,**
 - **lack of experience,**
 - **often of higher age**
 - **a larger share of female workers.**
- Off-farm wages > opportunity costs of farm labour supplied by the farm family. **Rising wage levels have increased transaction costs for hired labour.**

3. Principle Agent Problem through social distance eliminated

- The family farm is an **organisational solution** to the difficulty of monitoring and supervising workers, who, for technical reasons, cannot be gathered in a single location.
- **Transaction costs** linked to the employment of **hired labour** is much higher than transaction costs for family labour.
- Thus, transaction costs are increasing with rising farm sizes and greater number of hired workers, because the **social distance** increases, stimulate their interest and prevent free-riding.

4. Technological advances

- Technological advances **favour small-scale production** more than large-scale production.
- Due to **labour-saving** technological advances, the labour capacity of farms is increasing by a **growth of productivity** of that labour. Although the labour capacity decreased for many family farms the increase of productivity mostly **overcompensated** the loss in capacity.

5. Efficient use of Resources

Inefficient use of resources in agriculture reflected by suboptimal farm sizes are seen as the main foundation of the persistency and dominance of family farms in agriculture.

6. Part-time employment is possible

Family farms allow for part time farming and off-farm employment, which often **exceeds the income** of larger full time farms and non-farm households.

When non-family farms prevail...

Larger farms can prevail, because the the **average cost** tends to remain relatively **constant over time**, even though the lowest production costs may be attainable on medium-sized farms. This creates a strong **incentive to expand**. TC have a **fixed cost element**, so that the **cost per unit are declining** to a certain extent if farms increase in size.

4. What are Integrative Institutions and how are they characterised by March and Olsen (1989) and Bogason (2003)?

Integrative Institutions

The integrative system involves such things as **status, identity, love, hate, benevolence and legitimacy**. Its a social institution which defines roles ins such a way that you do things because of what you are and because what I am, that is, because of some **status or respect**.

• Physical perspective

- Integrative institutions allow actors deciding on transactions, not only to profit from beneficial **effects**, but they also hold them liable for adverse **effects**.
- Similarly, they not only make them **internalise** the **transaction costs**, but also **protect** them against transaction cost resulting from activities of others.
- Decision makers **enjoy all benefits and bear all costs** of their own decisions, and decisions made by other actors will cause them neither gains nor nuisances.

• Integrative Systems differ in:

- **Property rights** and duties are attributed to economic actors in a different way, **governance structures** for using these property rights and to fulfil their duties differs as well.
- This refers to the binding of property rights in the hands of one actor or group and to **joint governance** of those production factors this group can dispose of.
- Factor re-allocation in agriculture is “**voluntary**”

• Characteristics:

- property rights on labour and capital are put into practice jointly used by small groups of people (families)
- internal conflict of interests: consider the trade-offs between alternative use of labour and capital of the family
- migration of labour: if capital is located elsewhere the farmer has to take into account the costs and risks caused by searching for non-agricultural occupation.

5. What are Segregative Institutions and how are they characterised by March and Olsen (1989) and Bogason (2003)?

	Integrative Institutions	Segregative Institutions
The people	A group	Cluster of individuals
Will of the people	Deliberated	Bargained
Base of order	Reason	Exchange
Leadership	Trusteeship	Brokerage
Change	Adaptation	Instantaneous
Majority rule	Curbed by norms	Dominant
Policy outcome	Shared purpose and trust	Allocation of resources
Loyalty of agents	Professional integrity	Incentive compatibility

•Exact opposite of integrative institutions. They show a **higher degree of separation** between employers and employees, capital owners and management, family and profession, household and firm, work time and free time, production units and living quarters etc.

- Different impact on integrating and segregating institutions on **transaction costs of decision making**, which influences effectiveness or attenuation of property rights. Characteristics:
 - decision makers may **not** be able to collect **all components of benefit** of his or her factor allocation activities
 - decision makers may be successful to **burden other actors** with some cost components resulting from his or her factor re-allocation activities without incurring prohibitive costs.
- In segregating systems such decisions are taken in a **separated way**, and are based only on a part of the total TC.
- **Considerable opportunities for externalising such costs are typical for segregating systems.**
 - Whereas farmers are interested in adequate remuneration for their production factors in a holistic way this is only partial in nature for employers and employees.
 - Family farm decisions at the level of factor incomes are made by individual action, in other areas of the economy they are influenced by collective decisions.
- **Characteristics:**
 - property rights on labour and capital are put into practice separately by large groups of people (employers&employees)
 - division of interests
 - migration of labour: losses of capital can be neglected

6. Do we find more Integrative or Segregative economic institutions in agriculture? Give reasons, especially in regard to structural changes.

- Farmers in integrating institutional systems **internalise more** and externalise less transaction costs.
- **Deviating attributes of structural change** may be due to deviating institutional performance of integrating and segregating economic institutions, the first prevailing in agriculture and the other outside of agriculture.
- Compared with the segregating institutions, the integrating agrarian family farm is able to coordinate decision-making **without structural change at lower transaction costs** but can only coordinate decision-making **with structural change at higher transaction costs**.

7. Please refer to the “Family Farm” as an institutional success on the one hand and as institutional barrier on the other hand.

8. What are the advantages of Family Farms (in small farms) being Integrative institutions?

- Agricultural production is closely **interconnected** with ecological and biological processes.
- Farming causes **nature-related transactions**: diverse, heterogeneous, cannot be standardised.
- Small units have **lower coordination cost** than large units.
- **Economies of scale** are exploited at a firm size which can be operated by a family or extended family or small group (no large factory). They **over-compensate** for higher transaction costs.
- Thus, the already existing integrative institution “family” can be used for coordinating the economic decisions: no separate institution required.
- Family farm is an institutional extension of the **pre-existing (INTEGRATIVE) social institutions** “family” and “household”. This explains why transaction costs are lower in small family units than in large ones.
- No separate organisation, no segregation!

Success	Barriers
<ul style="list-style-type: none"> • Labour Coordination Advantages: Family farms have important advantages regarding coordination: e.g., information flow, motivation, trust, responsibility, accountability, knowledge transfer, continuity. • Pollak (1985: 585): ‘the advantage of family governance can be grouped into four categories: incentives, monitoring, altruism, and loyalty.’ <ul style="list-style-type: none"> • incentives: Family members have claims on family resources; e.g. social security for inactive members (informal and formal) • monitoring: economic relationships are intertwined with significant personal ones. • altruism • loyalty • diligence and work habits, network of relationships → integrated • Similarly, Allen and Lueck (1998): farm families’ “self-motivated effort” is superior because: Farming activities are seasonal in nature, flexible adjustment of family labor capacity • Timeliness of work due to biological processes 	<ul style="list-style-type: none"> • When agricultural tasks can be monitored easily in terms of inputs or outputs, family farms are often overshadowed by other forms of agr. organisation. → The advantage (agency problem) do not arise. • For some crops and tasks hired labor can be concentrated into work gangs and supervised directly, so plantation agriculture is possible. • For other crops and tasks (e.g. harvesting) output can be measured directly and work paid for on a piece-rate basis’ (Pollak 1985: 592) • Scope for specialisation is often limited for family farms. • Work is sequenced in between random events

- Outsourcing activities with larger economies of scale, e.g. in coops (farmers = patrons)

Advantages of Family Farms as Integrative Institutions:

- Family farms as important **advantages regarding the quality of coordination.**
- Agricultural activities are difficult to be organised in standardised processes.

- Hired labor usually causes higher transaction costs in agriculture than in industry. Family labor in small farms has a **comparative advantage due to low agency costs**. Exemptions: large plantations, poultry production
- The farm family **owns several production factors**, (labour, land, human, physical and natural capital). It also provides the management of these assets.
- **Intertwined** activities for family, household and job.
- Economic decisions for the private household and the firm are taken in close **interdependence**.
- Agricultural production and “household production” or “shadow economy” can be easily **harmonised**.
- **Work time and free time** are not subject to collectively agreed and formally fixed schedules.
- **Proximity** of farm and housing facilitates mutual penetration of private and professional concerns.

9. Please discuss adjustment and income problems of agriculture in processes of structural change and how they are related to institutional reasons?

Theory of Agricultural Adjustment

- „Obstacles to mobility“ affecting the *adjustment capacity* are considered as the key towards a proper explanation of „the agrarian problem“.
- Core element in agricultural economics theory that has *shaped the shared mental models* of agricultural economists.
- It belongs to the *most important applications* of “mainstream economic thought” in agricultural economics which “had special reference to the **evolution of ideas about the role of agriculture in the economy**” (Throsby, 1986: 18f.).

• Income Problems:

- The institutional deficit of the family farm system is that it does not offer a solution to deal with the problems of **poly-polistic supply labour**.
- The price of labour (wage) does not change in a perceptible way if a farmer gives up his family farm.
- Operators of family farms and their family members as owners of labour have **no agent for collective action** and cannot try to optimise prices and quantities by the means of joint strategies.
- Only an agent who is in charge of collective action can act as a supplier of a large quantity of labour effectively and is able to defend a lower threshold of wages.

• Deficits of the Adjustment Theory

- As it tries to explain a *dynamic* process by a *static* approach, the process of change itself is not understood as an institutional challenge to economising transaction cost.
- The operation of markets is measured against the ideal of a perfect co-ordination mechanism („Nirvana Approach“).
- Comparing actual & perfect institutional performance implies **ubiquity of market failure**.
- Adjustment problems and over-capacities are normal - **no indicator of inefficient decisions**.
- The following opportunities for externalising transaction costs are not available to farmers:
 - **burdens of adjustment** are usually shifted to those whose interest would not be successfully enforced during wage negotiations.
 - **externalising TC of re-allocation** may not only burden other groups but also members of one's own group e.g. after having successfully increased wages workers may have to pay a price for that, an increase in unemployment.

• **Insufficient factor mobility -resulting in low opportunity costs for agricultural production factors- is considered the key for the solution of the agricultural income problem.**

1. **Mobility costs** may be *higher* for agriculture, i.e. opportunity costs *lower*, than in other areas. (Important to show: merely the existence of mobility costs or exit barriers for agriculture cannot support the theory !!!).

2. **Institutions** and modes of organisation influencing adjustment behaviour and mobility of farmers may *differ*. Farmers who choose between the *same* alternative options of factor re-allocation as non-agricultural actors, and facing the *same* mobility costs, may respond with *different* solutions.

10. Please explain the statement “institutional cumulation of transaction costs due to Integrating institutions”.

Background of Institutional Choice

1. The institutional capacity of the family farm has quasi been “*gauged*” towards **economising transaction costs** without structural change.
2. The historical challenge to satisfy the *increasing demand for food* was the conditions under which family farms have proven competitive: institutional success (China's household responsibility system)
3. This type of structural change burdens family farmers with **cumulating transaction costs**.

Coordinating the process of adjustment hit the coordination capacity of the family farm at its weak point: it burdens those decisions of farmers which become necessary through structural change in the process of fast economic growth with cumulating transaction costs.

Integrating institutions like the family farm lead to institutional cumulation of transaction costs, because the **costs of factor mobility accrue jointly** and as a whole taking into account in the collective decisions of the family farm on factor re-allocation.

In **segregating systems** such decisions are taken in a **separated way**, and are based only on a **part** of the total transaction costs. The costs of re-allocation for an aggregated factor unit consisting of labour, land, capital, management etc are equal.

- A family farmer will **internalise** more costs and decisions are based on a personal union of the land owner, capital provider, employer and employee.
- One factor can only be effectively used if the other factors also **remain in the farm**. If one factor is taken out of the production process, the other factors can no longer be employed and may be subject to a **costly process of transfer** into other uses.
- The **costs of reallocation** originating from the different elements of the institutional system **cumulate** e.g. locating their own labour outside agriculture would lead to high capital losses.
- In segregating institution those costs of change accrue separately to different actors and have an isolated impact on mobility decisions. This is applicable to all types of mobilities e.g. retain others from entering agriculture or if a farmer wants to exit agriculture. The cumulating transaction costs can also be applied to potential farm successors.
- The cumulation of TC results in a “**inclusion of farmers and their family members in the family farm system**”. This makes it difficult for them to leave the farm sector and leads to a delay in structural change resulting in disparity of factor incomes. They respond to this situation by lowering their income expectations and successively consuming their assets. → decrease of farm equity and may even worsen the economic and social situation.

11. What is the political relevance of the transaction cost cumulation?

Reasons for Higher Internalisation of Transaction Costs

1. Farmer is landowner, capital provider, employer and employee in **personal union**.
2. He affects the use of the **production capacity** of his family members.
3. Detaining new entries into agriculture, e.g., by legal entrance qualifications, is not feasible.
4. Farm successors may anticipate trade-off between property value & income disparity.

Less Opportunities for Externalising Transaction Costs

- Holistic vs. partial interest in factor remuneration
- Individual vs. collective decisions on factor income
- Collective labour supply and demand must fail
- Shifting adjustment costs to others not feasible
- Internal conflicts of interest with labour & capital

The adjustment behaviour to structural changes differs for integrative and segregative institutions. In non-agricultural areas parity of factor incomes can be achieved through **collective action**. As operators of a family farm play the role of employers and employees at the same time, this would require that collective action could be organised by a group **against all members of the same group**.

Consequence:

- Since different institutions for economical decision making have formed in family-based agriculture, different institutions for political decision making had to **evolve at a political level**.
- Agriculture cannot focus its collective strategies directly on the payment of labour, land or capital but should rather be oriented towards **variables and instruments**.
- Collective strategies do not take place where the payment of labour, land or capital, but on price support, production quotas, direct payments, etc. (factor incomes) are negotiated, but where product prices, quotas and payments are negotiated.
- Impact of Integrative Institutions on Structural Adjustment and Political Preferences Cumulation of transaction costs leads to:
 - “**Inclusion effect of the family farm system**”: institutional exit barrier for farmers and their families
 - „**Substitution of exit by voice mechanisms**“: political intervention system results in protectionism
- **Result:** intensive political preferences of farmers

Political consequence of the cumulation of TC: The “**inclusion effect**” represents an institutional **barrier from exit** for farmers and their family. However, the more exit from farming is restricted by cumulating TC, the more voice will come up in terms of political **protest**. By exerting political influence agricultural groups try to protect themselves against the costs of economic changes. They develop intensive and organised political preferences and **defend their economic and social status** by effective strategies of collective action, causing protectionism.

Chapter 3: Analysis of the Role of State and Public Administrative Contracts

3.2 Basic Concepts of Public Choice Theory

1. What is “New Political Economy” or “Public Choice Theory”?

Politics and economy are dependent on one another especially concerning, governmental activities such as resource allocation, distribution and stabilisation. **Public Choice** allows the investigation of impacts of the economy on politics.

Public Choice Theory (US-American version): Application of the **methodological tools of economics to political institutions** and decision-making processes. It is the mentality and methods of modern economic sciences extended to apprehension of political processes. The key area is the **connection** between politics and the economy. Relationships models are developed and **empirically (econometrically) tested**.

It developed into a general framework to analyse institutions and includes:

- (1) rules and procedures,
- (2) social norms and governmental legislation and
- (3) organisations.

New Political Economy (European version): Analysis of the **interrelationship between the economy and politics** - more diverse than Public Choice Theory and greater tolerance as regards approaches from other disciplines. New Institutional Economics is mainly based on the **theory of property rights and the theory of transaction costs**.

2. Please describe the area of application and the basic properties of New Political Economy (Public Choice Theory). What is meant by “methodological individualism”?

The government is a part of this system and cannot pursue politics without consideration for other decision makers. Political decision making is often in conflict with organised interest groups or sensitive components of the society.

The starting point are economical behaviours, that assumes that individuals and thus institutions react to changes of benefits and costs in a predictable and systematic way. Thus, goods that become more expensive are supplied more but demanded less.

- The **area of competence** is the relationship between the economy and politics. The approach focuses on the question as to how economic and political actors or organisations **influence each other**.
- The **methodological tools** have been taken from economic sciences, that means the theoretical concepts of economics and also empirical methods of quantitative economics has been transplanted to political processes.
- **Methodological Individualism** is a methodological precept for social sciences by Max Weber. It amounts to the claim that social phenomena must be explained by showing **how they result from individual actions**, which in turn must be explained through **reference to the intentional states** that motivate the individual actors. **The individual is the relevant unit of analysis, even if collectives are studied**.

How politico-economic decision making is made depends on the degree to which a system is “open”.

1. in a **completely closed system** no links to the external components of the system exist and it develops within. The course of history depends on the relationships within the system and the starting conditions. → predetermined development.
2. **partly open system** have a few exogenous influences and not all interactions are closed. Interventions from outside are possible. The problem is to determine where and how these interactions are possible. Partly open due to imperfect information.
 - **voters** cannot discriminate to which degree the government is responsible for the state of the economy or whether another party would do a better job. Partly informed about how they can make their preferences have an impact; if they are well represented by interest groups.
 - the **government** does not know with certainty how they need to behave to “survive” and be re-elected; partly the wishes of the voters; cannot foresee how many voters will be mobilised by the different interest groups; possible applications and effects of politico-economic instruments.
 - **interest groups** know about their own areas, but do not have full information and which instruments will best implement their goals and how different measures affect their clientele.

Most social system are always **partly open**, because agents have a **free will and no perfect information**. Information is a key point for politico-economic activities and can occur on two different levels.

- (1) on the basis of the **social consensus** in which voluntary decision making is being performed on long-term regulations under uncertainty; if implemented properly individual preferences of individuals can be considered,
- (2) on the basis of an **ongoing social process** where the separate decision making agents are informed about how they can best achieve their interests.

3. Why do important interrelationships between politics and the economy exist? Which theories reflect these types of relationships?

In the **private economy**, economics has successfully analysed choices made under conditions of scarcity. New Political Economy or Public Choice Theory applies the same approach to choices made in the **public sector**.

1. **Economic Theory of Constitutions:** New contract theory (Buchanan and Tullock)
2. **Economic Theory of Democracy:** Approaches for explaining party competition and electoral behaviour (Downs; Herder-Dorneich)
3. **Economic Theory of Collective Action:** Capacities of groups to organise and to get acceptance of or enforce their objectives (Olson; Hardin)
4. **Economic Theory of Bureaucracy:** Budget maximisation hypotheses (Niskanen; Roppel)
5. **Economic Theory of Regulation:** Economic theory of interest groups competition (Peltzman; Becker)
6. **Theory of Political-economic Business Cycles** (Frey; Kirchgässner)
7. **Game Theory:** Bargaining Theory (Holler, Rappaport)

- **Allocation** of resources is significantly influenced by governmental activities e.g. agriculture is taken out of the influence of the market and the prices are increase artificially, production is subsidised and import barriers for foreign products exist.

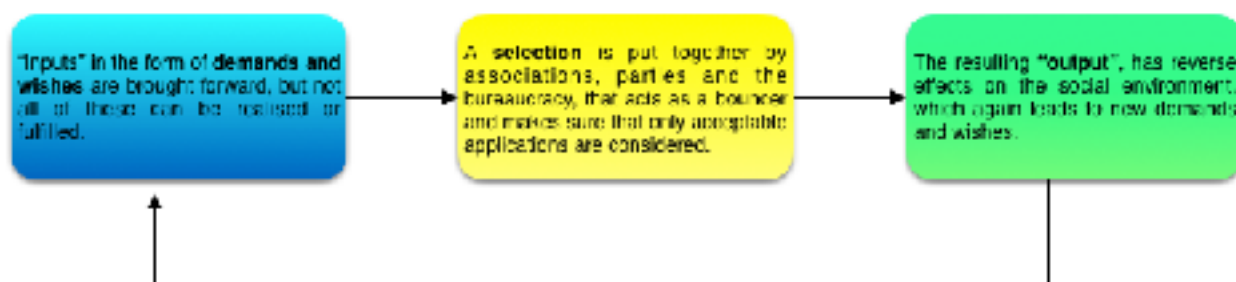
- **Distribution** is also influenced by political decision making e.g. social security creates a redistribution between different generations and regional politics aims to decrease the differences in income.
 - **Stabilisation** is influenced by fiscal and monetary policies, which mostly target inflation and unemployment.
- State activities create cyclical variations in the economy.

However, politics is also dependent on economic factors e.g. tax income. The state of the economy also affects the popularity and thus the chances for re-election

4. What is “system theory” and what are the basic characteristics of this theory?

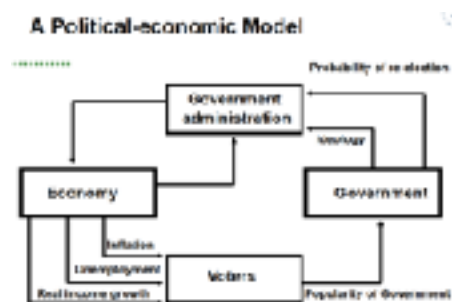
System theory analyses the characteristics of all systems e.g. of biological, technical or social nature.

- In political sciences, it focuses on the relationship of the political sphere to the environment, especially the economy.



- **Methodological individualism:** The individual is the relevant unit of analysis, even if collectives are studied.
- **(Economically) rational behaviour:** Individuals respond to changes in cost and benefits in a systematic way.
- **Self-interest:** Although rationality would also be compatible with altruistic behaviour, self-interested behaviour is in the most cases assumed.
- **Constraints due to scarcity:** For explaining changes in behaviour only changes in the scope of action by changing constraints but not changes in preferences are taken into consideration.

5. Please describe the political-economic model of interaction used in the New Political Economy. What is meant by the “political-economic business cycle”?



Total politico-economic models analyse the **overall interdependence of economy and polity**. **Government activity** is at the centre of attention and constitutes the **decisive link between economic and political forces**. The government is assumed to maximise its utility subject to a re-election constraint. It must also take into account economic and administrative constraints.

• Government action is mainly **determined by economic conditions**, as voters hold the government responsible for an unfavourable state of the economy.

• During elections public opinion polls are indicators of the likely future election outcome. Relationship between economic variable and government action is captured in the popularity function.

• If the **popularity is low and re-election compromised**, the GRN uses policy instrument to **improve** economic conditions. If polls indicate a comfortable re-election they can use policies that do not necessarily bring votes. (policy function).

- The loop going from the GRN to the economy indicated the popularity function.
- The loop leading from GRN via the civil service to the economy indicates the policy function.
- The GRN **popularity** is determined by the **economic variables** of unemployment, inflation (negatively dependent) and growth of income (positively dependent).
- There is also independent influence on the civil service.
- If economic conditions are **good**, a larger share of the people asked will tend to **support the party** in government.
- GRN popularity is not only determined by economic variables, but also the amount of time that has passed since the last election (popular policies at the end close to re-election others in the beginning) → **popularity depreciation (increases) over time**.

6. New Political Economy consists of a bundle of theories. Which are the main theories in this bundle? Which basic social institutions do the theories correspond with?

- Economic Theory of Constitutions (New Contract Theory)
- Economic Theory of Democracy (explaining party competition and electoral behaviour)
- Economic Theory of Collective Action (capacities of groups to organise and get acceptance/enforce their objectives)

- Economic Theory of Bureaucracy (budget maximising hypothesis)
- Economic Theory of Regulation (theory of interest groups competition)
- Theory of Political-economic Business Cycles
- Game Theory (Bargaining Theory)

Which basic social institutions do the theories correspond with?

- Economic Theory of Constitutions → Constitutions
- Economic Theory of Democracy → Voting etc.
- Economic Theory of Collective Action → Collectives and collective decision-making
- Economic Theory of Bureaucracy → Bureaucracies, Democracy
- Economic Theory of Regulation → Interest Groups, etc.
- Theory of Political-economic Business Cycles → Economy, Politics, etc.
- Game Theory (Bargaining Theory) → Individual behaviour / Decision-Making

Chapter 3: Analysis of the Role of State and Public Administrative Contracts

3.3 Economic Theory of Constitutions

1. Why are rules of a community or society always associated with more or less collective coercion? Which conditions must be fulfilled if we want to avoid such coercion?

Constitutional rules demand from individuals to **renounce** partly of following their **preferences** and enjoying **freedom**. It is typical for market mechanisms and individual action that they cause **external effects** and cannot provide **public goods**.

There are two basic options to respond to this situation:

- to hope for **altruism** for all members of society; however, this is non-realistic, the right of the strongest will prevail; resulting in "robbery"
- **collective action**; for this purpose, two problems have to be solved: first, people do not honestly reveal their preferences, and secondly, they avoid to show their own capability to pay; results in "coercion"

Kirsch (1983, p. 35): „To avoid that the individual becomes a victim of individual violence, he or she becomes the object of collective coercion“.

Collective coercion

- From an individual point of view these rules may benefit the average individual in society but it is often even more beneficial for the individuals if everybody follows the rules except themselves.
- Collective rules **reduce the individual's freedom** to do whatever he or she likes to satisfy his/her preferences.
- "the market" cannot provide collective goods → misbehave and take advantage of other members of society (**strongest will prevail**). Without coercion this type of behaviour will be favourable.
- Ensured that they are granted **property rights** and that these property rights are also enforced! Otherwise, those who try to produce have to devote a lot of time on defending their yields against
- Exerting state coercion is not a favourable option either as it reduces personal freedom of individual but there are only those two options: Anarchy or Coercion (reduce state coercion to a minimum).

If we want to avoid such coercion we need to take into account:

Cost and possibility of **successful "exit"** and cost and probability of successful **exertion of "voice"**. The cost of both need to be kept as small as possible and the possibility of success must be high! Increasing participation opportunities and more transparency in politics are ways to improve the "voice" factor!

Coercion: "the practice of **forcing** another party to act in an **involuntary** manner by use of intimidation or threats or some other form of **pressure or force**, and describes a set of various different similar types of forceful actions that **violate the free will** of an individual to induce a desired response"

2. What are external effects and what are private and public goods (and club goods and common pool resources)? What do the terms "excludability" and "rivalness" mean in this context?

Property rights play a particularly important role for economic welfare. Without such rights, those who work and produce must devote large parts of their effort and income to defend the fruits of their activity. Property rights are productive only if they are well defined and effectively protect the (legitimate) owner.

Two main characteristics to distinguish between Property Rights:

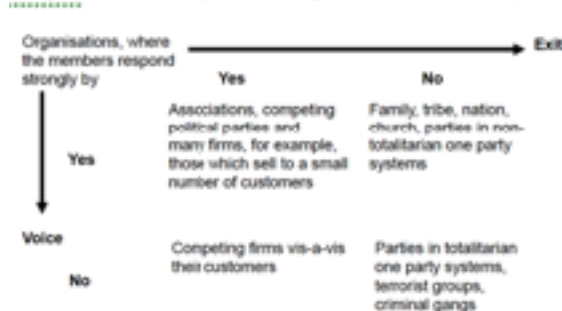
- **Excludability:** whoever is not authorised or willing to pay a certain price may be excluded from consuming a good.
- **Rivalness:** if one individual consumes a good the same good cannot be consumed by someone else.

1. Goods that have both characteristics are **private goods**. everybody who want to consumer a price good have to pay the price and thus contribute to the product without special governmental or societal provisions.
2. **Public goods** have one of the two characteristics. For this good excludability is often not realisable. It is unreasonable for consumers to pay a price for the good and it thus **encourages free riding**. Especially true for large groups, so that the own contribution is negligible. A voluntary cooperation is hardly possible. Without state intervention the good can only be produced under suboptimal conditions.

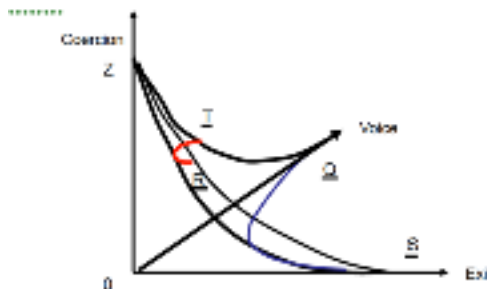
3. **Common Property resources** are goods that have no excludability but where rivalry exists e.g. fishing grounds. Danger of overexploitation. It is necessary that the rules of utilisation are clearly stated, a majority decides on the rules of the utilisation, perpetrators must be punished; solution mechanisms. Self organisation is an important issue.
4. For **club goods** users can be excluded but there is no rivalry.

3. Which relationship exists between the intensity of coercion felt by citizens, or the degree of freedom of manoeuvre, on the one hand and the opportunities and probability of success of exit and voice on the other hand in different types of collectives? Please explain the terms “exit”, “voice” and “loyalty” and why they are relevant in this concept?

Different Combinations of Exit and Voice in Organisations (according to A. Hirschman)



Relationship between Coercion, Voice and Exit in Collectives



Source: Hirsch (1983, p. 39)

Coercion is a function of:

- The costs associated with migration (costs of exit)
- The diversity of bundles of goods offered by different collectives (benefit of exit for the individual)
- The level of costs caused by voice mechanism (costs of voice)
- The expected success of practicing voice (benefit of voice for the individual)

DDR: no probability of exit, also high costs of voice

Russia: cost of voice is very high

Local restaurant: it is not simple to exit if there is only one restaurant in the village

Basic concept: members of an organisation, whether a business, a nation or any other form of human grouping, have essentially **3 possible responses** when they perceive that the organisation is demonstrating a decrease in quality or benefit to the member **dissatisfaction with organisation**.

1. Exit: withdraw from the relationship (e.g. employees can choose to quit their unpleasant job)
 2. Voice: attempt to repair or improve the relationship through communication of the complaint, grievance or proposal for change (e.g. citizens of a country may respond to increasing political repression by protest)
 3. Loyalty: nevertheless support the organisation (e.g. loyalty to the organisation (strong patriotism politically, or brand loyalty) exit may be reduced, especially where options to exit are not so appealing (small job market, political or financial hurdles to emigration or moving)
- Exit and voice represent a link between economic and political action
 - Economic: **Exit** associated with Adam Smith's invisible hand self-regulating behaviour of the market
 - Political: **Voice** is by nature political. Both possibilities cause costs!

Exit and voice are fundamental political rights of the individual and serve as important means of his/her freedom of manoeuvre. Therefore, the possibility of the individual to practice exit and voice decreases the intensity of coercion felt by citizens.

4. Private negotiations on a voluntary basis could perhaps be used to provide collective goods without collective coercion. Under what conditions are such solutions feasible and under what conditions are they not realistic?

- Voluntary agreement on rules and compliance mechanisms is possible, but only with few people and easy negotiation
- In reality, negotiations are usually not bilateral [?] huge TC
- So, if TC were low, private negotiations would be possible, but this is not realistic
- In “Corporatism”, a theory where few actors, e.g. labour unions, are assumed to make decisions in society [?] here, these actors can determine a lot, but the assumption is not (no longer) realistic

Conclusion: the amount of participants and the TCs are fundamental for the possibility of provision of collective goods by private negotiations. Large groups favour the position of the “free-rider” as his/her contribution is very small and excludability is not given. Many participants and heterogeneous preferences result in high TCs that make private negotiations not feasible.

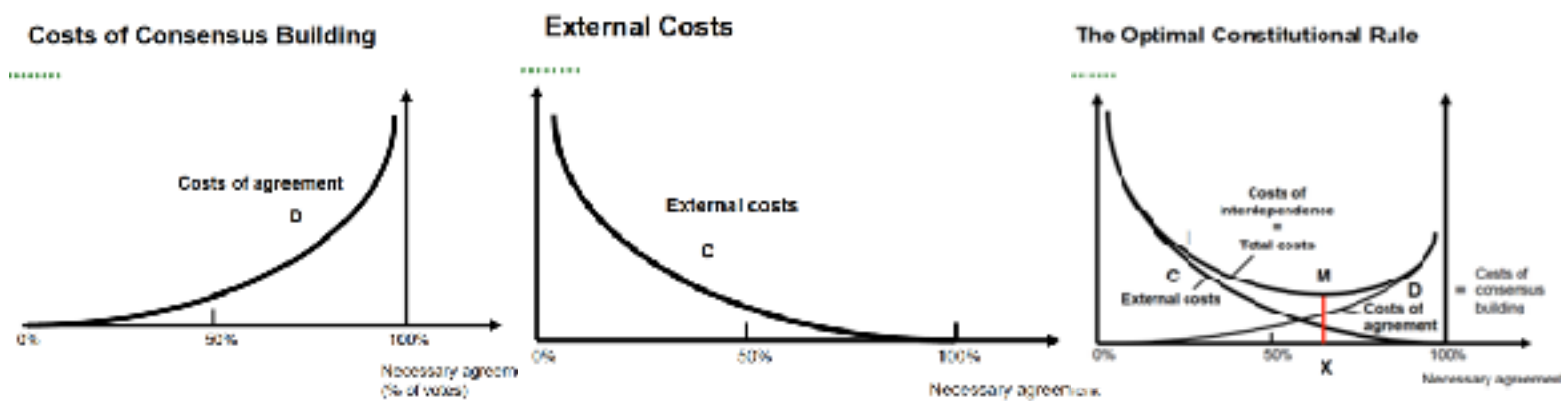
5. Why is the economic theory of constitution based on constitutional calculus of individual persons? What are “costs of consensus building”, “probable external costs” and “costs of interdependence”?

External costs:

- This cost is the **difference in utility levels actually secured and those that would have been secured** and is called “external costs”.
- **Less-than-unanimity rule** imposes costs on those who are made worse off by the issue’s passage, a cost that could be avoided through the expenditure of time and effort required to redefine the issue to benefit all. Each individual decides on an issue alone. No delays may occur, but the external costs are potentially indefinitely large.
- **Unanimity**: individuals can block any agreement until he has one with which he is satisfied. The external decision costs under this rule are zero (prevent a decision that he does not like), but the decision time costs are indefinite.
- **Optimum**: when there are no costs associated with the unanimity rule (minimises external costs).
- Trade-off between external costs of having an issue pass vs. the costs of time lost through decision making.

Decision-Making costs:

- Arise when the collectivity (society) is to decide a question. The smaller the majority, the easier it is to reach a decision.
- **Near unanimity**: it becomes more difficult to reach a decision. The danger of strategic behaviour increases e.g. if someone knows his consent is needed for a collective decision, he has the possibility of exploiting those expecting to gain most.
- **Unanimity**: everybody is in this favourable position, so the decision costs are extremely high.



Graph:

- the costs of a particular collective decision is presented on the vertical axis: the number of people from 0 to N. Curve C are the external costs representing the expected loss of utility from a victory of a decision to which an individual is opposed under the committee decision rule.
- Curve D depicts the decision-time costs of achieving a required majority is the percentage of the committee at which these two sets of costs are together minimised.
- this occurs at M where the vertical addition of the two curves reaches its minimum. The optimal majority to pass this issue, given the cost curves, is M/X. At this percentage, the expected gain in utility from redefining a bill to gain more supporters just equals the expected loss in time from doing so.
- since these costs are likely to differ from issue to issue, there is no optimal voting rule. The external costs will vary with the nature of the issues to be decided and the characteristics of the community deciding them. When opinions differ widely or information is scarce, lengthy periods of time may be required to reach a consensus. If the likely costs to opposing citizens are not too high, relatively small percentages of the community might be required to make a decision e.g. private goods. Issues from which large losses can occur are likely to require higher majorities.
- the larger the community, the greater the number of individuals with similar tastes and the easier it is to achieve a consensus.
- an increase in N should shift the curve D rightward and downward. But the fall in costs of achieving a consensus among a given number is unlikely to be fully proportional to the rise in community size.

Costs of Interdependence: This is the sum of consensus building costs and probable external costs.

6. What is the optimal number of yes-votes in a collective decision on a constitutional rule as considered by an individual? Sometimes this point is more at the left side and sometimes more at the right side of the curve of interdependence costs. How do you interpret these different positions as regards the rule of decision making the individual in question prefers?

Individual will take into account **external and decision-making costs** when they determine an optimal majority. The optimum is given where total costs are lowest. The optimal majority has 3 properties:

- the shapes of the decision making cost curves can differ and different majorities may be optimal
- the optimal majority is 50% by chance only.
- Simple majority thus has no special significance as a decision-making rule with regard to the determination of the private and collective domains.

Optimal number of positive votes:

- The more important the individual considers the **expected external costs**, the more he wants to protect himself against them: He prefers a **high number of required positive votes**. For him it is more important, that the collective

doesn't burden him with undesired decisions than to put his preferences easily into practice. → the higher the external costs are, the larger is the optimal majority

- The more important the individual considers the **costs of consensus building**, the more he wants to protect himself against them: He prefers a **low number of required positive votes**. For him it is more important, that he can put his preferences into practice by participating in the collective than to avoid non-desirable results of collective decisions. → the higher the decision-making costs are, the lower the optimal majority.

7. What is reflected by the degree of curvature of the function of interdependence costs? What does this degree of curvature depend on?

- **Costs of collective decision making:** are the higher, the steeper the increase of the expected external costs and/or the costs of consensus building are increasing.
- **Urgency of solving the problem of constitutional rules:** **strongly bent curve** of costs of interdependence means that an optimal rule for decision making is important for the individual; a **very flat curve** of the costs of interdependence means that the individual is rather indifferent as regards the question of constitutional rules.

8. For arriving at constitutional rules which are valid for all individuals in a community or society the individual calculi of consent have to be aggregated? Which solutions to this procedure, that means the aggregation of many individual calculi of consent to one single constitution, can be thought of in a one-dimensional political arena? What is meant by "veil of ignorance" and "renegotiation calculus" in the constitutional theory developed by Buchanan and Tullock?

Conditions under which individual preferences may be aggregated in order to reach a consensual social decision or to construct a complete social welfare function. This aggregation can be taken to be an element of every political process and is therefore independent of institutions.

- **Central question:** How can we aggregate all individual preferences when preferences are very different in one-dimensional political arena?
- **One-dimensional political arena:** Collective decision under one aspect: "one-dimensional heterogeneity" e.g. left-wing or right-wing political orientation
- **Infinite regression** for deriving constitutional rules (we need a constitution on how to decide on constitutional rules, so we need infinite layers of constitutions). Stop the regression by means of **authority** (god, nature, etc.)
- **Legitimation by future:** Marx – the law of history (legitimation by a desired future state, here Marx's dominance by the working class)
- Unanimous constitutional consensus: the **veil of ignorance**
- **Permanent decisions on constitutional rules without complete absence of uncertainty:** instrumentalisation of rules in favour of interests of more powerful groups (those groups who contribute to constitutional decisions will influence their aims, e.g. German Parliament)
- Re-negotiation calculus

The "**veil of ignorance**", along with the original position, is a method of determining the morality of a certain issue (e.g., slavery) based upon the following thought experiment: parties to the original position know nothing about their particular abilities, tastes, and position within the social order of society. When such parties are selecting the principles for distribution of rights, positions, and resources in the society they will live in, the veil of ignorance prevents them from knowing about who they will be in that society. → are willing to form an unanimous consensus because they are unable to envisage their future situation.

Renegotiation calculus: Basically this solution assumes that all people in society expect that they get out what they put in. Therefore you also put in what you get out (it's tautological, i.e. valid from all possible perspectives!)

- Groups have shared expectations, which are already rules
- Many obstacles to aggregation of preferences when reforming / creating constitutional rules
- But since people believe that anarchy is worse than accepting rules with some external costs, people will agree on something (they are afraid of anarchy as the alternative)
- **Criticism of this approach:** The belief that people will "avoid anarchy" is already an informal rule (that exists in advance), which is simply transformed into a formal rule tautological (im Kreis drehend) argument. There is a shared expectation that anarchy will break out, if we do not agree (e.g. everybody arriving c.t. to lecture → shared expectation → forms a constitution)

9. From a libertarian and individualistic point of view a constitution which is applicable to the collective as a whole can only be decided on unanimously. Please explain why this is the case.

- Important to start at the **level of the individual** if you want the individual to be the "highest authority" in your society or if you want the rules for living together to be based on consensus. Need unanimous consent, i.e. consent from every individual.

- A collective won't reach an unanimous constitution if all people are asked to give their votes on all **matters** one could think of. But one can try to reach consensus on **HOW to come to decisions**, i.e. the procedures that decision making should follow.
- The contradiction between personal freedom & collective coercion can only be solved on procedural rationality level.
- **Individualism**: collective action is composed of individual actions and on the rejection of any organic interpretation of the state
- A purely individualistic conception of collectivity is maintained: the state is an artefact, created by men and thus subject to change and perfection
- According to *Buchanan and Tullock* only constitutional changes, which can be shown to be in the interest of all interested parties can be judged as "improvements" and therefore consider conceptual unanimity as the only legitimate decision-making rule
- When less than an unanimous majority is sufficient to pass an issue → some individuals will be made worse-off
- Coercion of the minority

10. Which solutions to the problem of constitution building are imaginable in a multi-dimensional political arena? Why is a constitutional consensus easier achievable also in a one-dimensional political arena, if the members of the collectives are more homogenous?

<p>One-dimensional political environment:</p> <ol style="list-style-type: none"> 1. Infinite regression for deriving constitutional rules 2. Stop the regression by means of authority (god, nature, etc.) 3. Legitimation by future: Marx – the law of history 4. Unanimous constitutional consensus: the veil of ignorance: under the veil of ignorance individuals are ready to form a unanimous constitutional consensus because they are unable to envisage their future situation. 5. Repelling or silencing dissidents (Siberia) 6. Permanent decisions on constitutional rules without complete absence of uncertainty: instrumentalisation of rules in favour of interests of more powerful groups 7. Re-negotiation calculus: assumes convergent expectations (= rights) and is for this reason tautological 8. Result: no satisfactory solution 	<p>Multi-dimensional:</p> <ul style="list-style-type: none"> • Homogeneity of the participants of the collective: similar curves of interdependence costs, constitutional consensus is easy • Heterogeneity of the participants of the collective: different curves of interdependence costs, constitutional consensus is difficult • Problem of consensus can be solved by changing from an one-dimensional to a multi-dimensional setting of political decision making • Decisions on several constitutional problems: an individual can simultaneously belong to the losers and to the winners. • Intra-individual instead of inter-individual conflicts: Compromises are facilitated. • „The unanimous consensus on constitutional rules will be easily possible, in spite of existing contradictions of interests, if for all participants in the collective the calculation of cost and benefit including all dimensions of politics is more or less equal. In other words: if they belong to minority groups and to majority groups in a more or less equal number of cases“ (Kirsch, 1983, p. 69). • „Cross-cutting cleavages“: divisions in society (e.g., according to ethnic groups or economic wealth): <ul style="list-style-type: none"> - parallel: reinforcement of social conflicts (Belgium) - intersection: mitigation of social conflicts (Switzerland) • Unanimous constitutional consensus in case of heterogeneity of the participants in the collective is possible, if <ul style="list-style-type: none"> - many objects of decisions, many political dimensions, - which do not overlap but intersect. • In case of opposite conditions: reinforcement of dissent on constitutional rules.
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11. Why (and under what conditions) can a constitutional consensus more easily be achieved although the members of the collectives are heterogeneous if several or even numerous political dimensions are included in decision making?

Only under the conditions that in sum (i.e. the calculation of) the costs and benefits of all parts of constitution/all const. rules are more or less equal in every individual.

- If all individuals belong to majority (winners) groups and minority groups (losers of the const.) to a more or less equal number of cases you can still get an **unanimous consensus** on the constitutional rules.
- **Why?**: if this balance is kept there is **no benefit for individual to refuse** the constitutional rules. Will have external costs incurred by some rules but he/she will also benefit from other rules and get her/his preferences.
- The alternative would be to go back to **anarchy**, have no constitution at all and **not get your preferences** at all! Therefore, the collective consensus can be reached under these conditions.
- if several or even numerous political dimensions are included in decision making → Individual belongs simultaneously to loser and winners
- **Intra-individual** conflict instead of **inter-individual** conflict
- Constitutional consensus can be reached even if heterogeneity exist because the calculation of individual costs and benefits including all dimensions of politics is more or less equal (*Kirsch 1983*)

Individuals can belong to a minority and a majority of different cleavages, so that they have different individual calculus of the interdependence costs for each cleavage. Nevertheless, they can only decide on one constitution, so they have to make a compromise among their cleavages which will probably compensate each other [intra-individual compromise.

12. What is meant by “cross-cutting cleavages”? Please mention a few examples and how the relationship between cross-cutting cleavages and the achievability of constitutional consensus. Why and under what conditions is it easier to arrive at a unanimous constitutional consensus if the variety of cross-cutting cleavages exist?

Cross-cutting cleavage is a social science term that refers to the structure of two (or more) cleavages, such as race, political, religious divisions etc., in society.

- Specifically, it is when groups on a first cleavage overlap among groups on a second cleavage. Formally, members of a group j on a given cleavage x belong to groups on a second cleavage y with members of other groups k, l, m, etc. from the first cleavage x.
- Example:** if a society contained two ethnic groups that had equal proportions of rich and poor it would be cross-cutting.
- The term's antonym is “reinforcing cleavages”, which would be the case of one of the ethnic groups being all rich and the other all poor.
- The concept of cross-cutting cleavages is perhaps most heavily used in the field of Political Science. Cross-cutting cleavages were originally suggested as a mechanism for **political stability**, as no group can align all its members along a uniform cleavage-based platform, but rather has to appeal to members of the group that are spread throughout the groups created by other cleavages.
- “**cross-cutting cleavages**” = divisions in society (e.g. according to ethnic groups or economic wealth)
- parallel: reinforcement of social conflicts (e.g. Belgium – Flanders and Wallonia)
- intersection: mitigation of social conflicts (e.g. Switzerland)
- In a heterogeneous country with intersecting cleavages (like Switzerland) it is easier to achieve constitutional consensus than in a country with parallel cleavages (like Belgium)

Chapter 3: Analysis of the Role of State and Public Administrative Contracts

3.4 Voting and Party Competition

1. Please discuss the following concepts of democracy: classical conception of democracy according to Rousseau, the conception of democracy of Schumpeter, the models of democracy by Downs and Herder-Dorneich, and finally the notion of democracy by Luhmann.

Political Preferences of Farmers

- A group which has made **considerable irreversible investments** forms a natural community of interests.
- In unfavourable economic change (price cuts), irreversible investments become a **barrier to exit** and support *voice*.
- Farmers* have usually made irreversible investments, and then experience **unfavourable economic conditions** which they did not anticipate.
- However, not only their economic situation, but also **cumulating transaction costs** as *institutional particularities* of family farm systems give rise to intensive and organisable political preferences.

Economic Theory of Democracy

- Classical conception of democracy** (Rousseau): By means of overcoming people's differences in attitudes and opinions, politicians search for **the public interest serving all members of society**.
- Joseph A. Schumpeter**: „The democratic method is to be understood as that order of institutions for achieving political decisions, by which individuals obtain decision making powers by means of **competition for the votes of the people**“ (1980, pp. 428ff.).
- Anthony Downs**: „**Economic Theory of Democracy**“ (1957); realistic view of competition between politicians for votes from the electorate.
- Philipp Herder-Dorneich**: „Political model of economic theory“ (1959); like Downs; **there is no pre-existing public interest**, instead: the democratic discourse is no procedure to **find the (hidden) will of the people**, but to **invent it** by means of competition and discussion.
- Niklas Luhmann**: By means of elections „the political system is able to orient itself towards its own history“ and to **learn**, „to respond to itself and its impact on society“ (1969, p. 179):
- The democratic discourse is considered as a process of learning and innovation.

2. What are the assumptions the model of democracy by Downs is based on, and how can it be visualised?

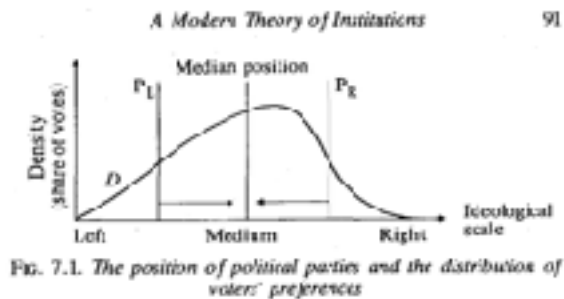
Public choice regards the state as an institution composed of selfish individuals. → tendency to think in a socially non-optimal or biased ways. If the government takes over an activity it will only lead to an optimal outcome if specific conditions are in place:

- parties competing for votes
- vote maximising politicians and consumers (voters) who maximise their own utility.

The Spatial Model of Democracy (Downs)

- Political options can be arranged on a spatial continuum from the **left to the right** (Hotelling) → doesn't interpret space as locations but rather as the positions of party programmes.

- Voters always prefer that point on this continuum, which is closest to their **optimum** utility, irrespective of how far the distance between these points may be.
- Only the impact of political decisions on **one issue** is taken into account. In reality, decisions relevant for the outcome of elections refer to numerous issues, have many attributes and have an impact on many aspects of life.
- **Two parties** compete to win the elections and to come into office (then extended to three parties).
- Different distributions of programmes desired by voting citizens over the continuum are possible.
- The voters change the party, they follow to their **self-interests**; they decide for that party which provides them with the highest „**party differential**“.



- Curve D gives the density of various ideological views.
- It assumes that most voters have a medium position and that there are only a few voters with extreme positions. → each voter casts his vote to the party that is nearest to his own position.
- The model assumes a right wing (Pr) and left wing (Pl) party that attempt to get as many votes as possible.
- The party to the left would win votes if it introduces a programme that is more to the middle, and voters who were closer to the right-wing would then vote for the other party. Voters on the left would go on voting for Pl.
- A position is reached if both parties are at the median. The parties no longer differ with respect to their ideological position and they receive the same number of votes and thus the same chance to get into power. This position is only preferred by a few voters.
- Each of the two parties can expect an increase in votes by moving more closely to the competing party's position.
- In the state of equilibrium:
 - identical programmes at the median. Chance decides which one is in power → same results as a simple majority rule.
 - no exploitation of voters because party competition erases every monopoly profit.
 - equilibrium is pareto-optimal
 - a rational voter participates in the election of party programmes differ. As they are identical, perfect democracy is characterised by complete vote abstention.

For different policy dimensions:

- No position exists that could not be beaten by a position taken by the competing party, owing to the Impossibility Theorem.

3. How can the attractiveness of the median and the spatial model of democracy by Downs be explained?

Centripetal force "Attractiveness of the median voter": tendency of parties to move towards the median voter.

- voter who has exactly the same amount of voters to the left as to the right. 50% of voters to his left and 50% to his right. (does not need to be the middle)
- Both parties pursue getting the votes of the 50% (either to left or right) AND/PLUS the vote of that median voter. → The party who gains the median voter wins the election in this model!
- Therefore, both parties adjust their party programmes and wishes further and further according to the median voter's preferences. This is what's meant by the attractiveness of the median voter!
- Model can be used as a intuitive notion of ideological distance to develop or forecast explanation for observable electoral trends; is attractive because it assumes rational individuals = easy explanation; fits well to neoclassical theory.

4. Which problems are likely to occur if in the spatial model of democracy one party changes its position fundamentally in order to maximise its number of votes? Do the outcomes this model produces differ between the case of equal distribution, distribution according to Gaus and double-peak distribution of the voters?

Hotelling-Downs Model (Median Voter Theorem):

- political opinion is depicted as lying along a single liberal-conservative (left-right) dimension.
- each vote is assumed to have a most preferred position along the spectrum for his candidate or party. The farther the candidate is from this position, the less desirable his election is for the voter. → assumes single peaked preferences.
- **The problems that are likely to occur are:**
 - Voters do not believe that the party actually changed its position but understand that the party only did it to maximise votes and won't keep its promises after elections → Party needs to have a really **credible claim** why it changed its course if it wants to be convincing!
 - Party members will **protest and intra-party conflict** arises because the members can no longer identify with party programme!
 - Regular voters that have always voted for the party may feel left alone and betrayed because they **no longer share party's opinion** → loss of regular voter base!
- Influence of the distribution of voters:

- **Equal distribution:** Three parties on the continuum the party in the middle (closest to median voter) will lose voters to the parties to the left and the right when those two move closer and closer to the median! -> Tough survival chances for party in the middle!
- **Gaus' distribution:** Parties will become politically active in areas where they can gain or lose A LOT of voters. Here, this would be in the middle. If there's many people in the middle and only few to the left and right, the party in the middle may survive longer and lose votes to the two approaching parties from left and right slower!
- **Double peak distribution:** The party in the middle will move either to the left or to the right depending on the specific elections.

5. How can it be explained that the spatial model of democracy reveal “centrifugal and centripetal forces”?

Centrifugal Forces in the Spatial Model of Democracy

Centripetal forces: Attractiveness of median voter

Centrifugal forces: Additional considerations

- **Decreasing party differential** increases losses of votes due to **voting abstinence**.
- **Differences between political programmes** of parties are becoming too small and cannot sufficiently be perceived of by the citizens: **lack of arguments in the election campaigns**.
- **Loosing voters** at the left and right wings: **extreme voters** are becoming “**politically homeless**”.
- New parties established at the extreme wings: occurs more in case of proportional representation than in case of relative majority voting, and depends on the distribution of voters over the continuum.
- **Consensus building within the parties:** There may be a distance between the median voter within the **party** and the median voter between different **parties**.
- If the party programme and the declarations of its leading politicians are insufficiently in line with the attitudes and convictions of the party members, particularly the party's activities, conflicts arise which disturb the campaigning process.

6. On what factors does it depend whether or not new parties are founded at the wings of the spatial model of democracy? Are such foundations of new parties more likely in a case of proportional voting or in the case of majority voting, and which influence has the distribution of voters?

Elections:

- **two election systems:** (1) **proportional representation:** the number of seats is distributed according to the share of vote received by the party, (2) **majority representation:** relative majority of votes
- Extreme parties are formed when voters to the left and to the right end of the spectrum don't find their preferences/ opinions **represented or accepted** by any party in parliament anymore.
- The likelihood of the foundation of extreme parties depends a lot on the voting system in the respective country:
- It more likely that new parties (extreme parties) are founded if voting system is a **proportional voting!**
- In a relative **majority voting** only the party that receives the relative majority of votes in a certain district gets a seat/ seats in parliament. In this case, it makes no sense to form a new party because the extreme voter knows that it is highly unlikely that he will be able to win a whole district.
- If **proportional voting** is applied a party that receives 10% of votes will get 10% of seats in parliament. Here it may make sense to form a new party because the threshold to being able to shape and influence policy-making (by participating in elections) is much lower than in majority voting case.

Influence of the distribution of voters:

Of course it makes more sense to found a new party at extreme ends when there is an even or **double-peaked distribution of voters**. It makes no sense to form new party if the distribution is similar to distribution according to Gaus because then there are simply not enough voters with extreme voting behaviour/preferences to be successful!

7. Why is it possible, that internal consensus building in a party and the external elections strategies of a party are conflicting during election campaigns?

Government maximises its own utility subject to various constraints. The utility of politicians is increased when they are able to put their wishes into action. The major constraint is their wish to be re-elected. Their chances to be reelected depend (among others) on the state of the economy: they are lower the higher the rate of unemployment and inflation, and higher the higher the growth in real income.

- over time, the government will vary state expenditures and taxes in predictable ways. If GRN is **confident** of being re-elected, it will undertake an **ideologically motivated policy**, most usually immediately after it has come to power. If politicians are afraid of **losing** a forthcoming election they will undertake an **expansionary policy** as the election date approaches.
- democratic GRN will favour projects whose benefits are **highly visible and quickly attainable** → improves prospects for re-election. A GRN will carry the costs of projects without visible short-run benefits, only if it is confident of still being in power to reap the fruits of its investment in the next legislative periods.
- wishes of non-organised groups may be taken into account if they are considerably large and can be decisive in elections.

8. How can agriculture and agricultural policy be considered in a model of democracy which is based on the Economic Theory of Democracy?

Economic interests seek to shift relative prices to their advantage. They do so by manipulating the state, depends on their ability to gain public support. It is based on the assumptions, that:

- Any group seeking to **maximise its real incomes** by forming a coalition to secure a price rise has an **incentive to exclude** others from that coalition industries that constitute a **high share** of that group's purchases.
- Food forms a relatively large part of the typical consumer's budget, especially in poor societies.

Policy measures are largely a response to the formation of pressure groups e.g. to manipulate prices. Four assumptions:

1. the **magnitude** of the price increases depends on the **coalition structure** exhibited by the industries who seek to influence public policy.
2. all industries have **equal lobbying power** e.g. if to industries trade places they would receive each others price rise.
3. members of a coalition act as if they expect to receive **equal percentage price rises** ("equal partners").
4. a coalition's nominal price increases depends only on its **own size**.

Assumptions:

- only pay attention to the preferences of agricultural voters, non-agricultural voters are considered to be indifferent vis-a-vis agricultural policies.
- decide on their voting behaviour according to their evaluation of agr. policies.
- Agricultural politicians aim at maximising votes for their party.
- Agricultural politicians will respond to the demand for policies by agriculture with a supply of agricultural policies only if farmers and their families display flexible! voting behaviour (otherwise agr. politicians would have no incentive to grant them their wishes. If farmers displayed regular voting behaviour, politicians could be sure to get their votes regardless of whether they implement agr. policies or not. And he will decide not to because the opportunity cost of granting farmers their wishes instead of granting non-agricultural voters their wishes are too high!

9. Which electoral behaviour has the highest probability to exist in the agricultural population: median voters, floating voters, regular voters or extreme voters?

Agriculture and Agricultural Policy in a Model of Democracy - Assumptions of the model:

- Agrarian politicians only pay attention to **the preferences of agricultural voters**; non-agricultural voters are assumed to be indifferent vis-à-vis agricultural policies.
- Agricultural voters only decide on their voting behaviour according to their evaluation of agricultural policies; as far as other political problems are concerned, they behave completely neutral.
- The **agricultural politicians** aim at maximising the votes for their party.
- Agricultural politicians will respond to the **demand** for policies by agriculture with a **supply** of agricultural policies **only if** farmers and their families behave as **flexible voters** (median voters, floating voters or extreme voters).

Which strategy has prevailed - and for what reasons?

(1) **Agricultural voters:** By means of voting, a farmer can only decide for a general party programme, but not for *particular agricultural policies*, i.e. representation of agricultural interests must be delegated to parliament committees, farmers' unions and bureaucracy.

(2) **View of competing parties:** The 'optimal redistribution strategy' is characterised by 'maximum favours for a minimum majority' resulting in 'maximum burdens on a maximum minority'. The strategy of one party will constantly be countermined by promises of another one. This means instable political conditions.

(3) **Protection against electoral opportunity costs:** An insulated political agenda allows agricultural policies to be biased in favour of the farmers' interests. By means of *legitimation systems*, opposing voters' preferences are screened-off, neutralised or even turned into generate broad solidarity with agriculture.

(4) **Perspective of non-agricultural voters:** Due to the farmers' high party identification, the *number of voters* and the *voting flexibility* of consumers and tax payers is higher. The gain of agricultural votes achieved by favouring the farmers would be over-compensated for by losses of non- agricultural votes. *These electoral opportunity costs* would be higher than the benefits.

Farmers as Median Voters: <ul style="list-style-type: none"> • Contradiction: Farmers as passionate minority might be expected to vote in a very flexible way; instead, they show little voting mobility and one-sided party preferences predominantly for conservative parties • Explanation: This party identification is an expression of a certain socio-psychological situation: permanent adjustment pressure in the process of structural change, decreasing economic importance of farmers, fear to lose economic position and their social status. • Response: intensive group identification for defending economic position and social status; thus, they vote for such politicians who promise them policies which preserve agricultural structures and do not announce agricultural policies which require economic adjustment and favour structural change. • Particular preferences for order and steadiness: the agrarian minority could fall behind in case of large changes in society and the economy. 	Farmers as Floating Voters: <ul style="list-style-type: none"> • Median voter model: pure allocation model; but floating voter model includes additional gains of voters by means of policy measures that redistribute incomes. • Optimal distribution strategy in the model of pure democracy • Farmers as "providers of majority"? Two hypotheses (see below) 	Farmers as Regular Voters: <ul style="list-style-type: none"> • The more agriculture intends to rely on party competition, the more they depend on floating voters: avoid ideological commitment, maintain high flexibility of agricultural voters. • The more agriculture intends to use other institutions for exerting political influence, e.g. internal lobby, influence of framers' unions, bureaucracy, interpretation systems, the more their political partners will expect that they can rely on regular voters from agriculture: requires long-term maintenance of respective party identification.
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10. Why does the agricultural population in developed countries usually show a very clear party identification in favour of conservative and bourgeois parties? Why seems this electoral behaviour to be contradictory at first glance?

- **Contradiction:** Farmers as **passionate minority** might be expected to vote in a very **flexible way**; instead, they show **little voting mobility** and **one-sided party preferences** predominantly for **conservative parties**
- **Conservation of party identification by family relationship and religion:** extraordinary similarity of the social, cultural and economic conditions of life between parents and children; religious behavioural patterns.
- **Question for the future:** Will this attitude favouring structure conservation also emerge as a response to the upcoming **ecological changes in agriculture**?

11. Which mechanisms contribute to preserving the conservative party conservation of farmers? How can the anticommunist attitude of farmers be explained?

- **Anti-communist attitudes of farmers:** Farmers depend on a guarantee of private property in production factors.
- Party identification is preserved by family relationships and religion. Heavily influenced by their parents in terms of political attitudes and religious behaviour → preservation of party preferences
- Ongoing structural change and economic growth: Farmers afraid to fall behind if structural change happens too fast. They want conservative parties to keep it that way. (CDU: "Farming is good for society!")
- Besides, farmers do not have many other choices in Germany: They don't trust the social democrats and the left-wing party because they fear that those are hidden communists! The Green are too restrictive.
- Farmers are anticommunist because the communists were the ones who expropriated the farmers (stripped them of their private property!) → Very negative image of communists. Why would someone be a farmer if he cannot decide what to grow, how much to grow and if he is not allowed to keep the profits.

12. How can the optimal strategy of redistribution to be used by politicians in model of pure democracy be explained?

Optimal distribution strategy in the model of pure democracy:

- **Maximum favours for a minimum majority and maximum burdens for a maximum minority.**
- Party A: favours a **"51 %-Group"**, burdens a **"49 %-Group"**; Response of Party B: situation of defeated **"49 %-Group"** is improved and, in addition, a **"2 %-Group"** is separated from the **"51 %-Group"** by special favours.
- The strategy of one party will constantly be **countermined** by promises of another one. This means **instable political conditions**.

13. Why are many farmers in industrialised societies reluctant to vote for social democratic parties?

Farmers as "providers of majority"?

Two hypotheses:

1. In spite of conservative party identification, also socialist and **social-democratic parties** compete for the farm vote (e.g., farmers-oriented policies of the social-liberal coalition in Western Germany) = **an attempt to change the minds of regular voters**.
2. Hypothesis of the **"marginal benefit position"** of **agricultural voters between bourgeois parties** (between CDU and FDP; Ertl as an agricultural minister from FDP in the social-liberal coalition) = **empirically non substantiated**.

- **Red-green coalition:** They obviously did not care for farmers and instead tried to gain the votes of consumers.
- **Coalitions led by the CDU /CSU 2009 and 2013:** comeback of more favourable agricultural policies for the farming sector

• Because they fear that the social democrats are communists hiding behind masks who will eventually strip the farmers of their property again!

14. Why can agricultural politicians be influenced by arguments that relate to the electoral behaviour of farmers although most farmers are no flexible voters?

- The efforts to **produce political solidarity** of other groups in favour of farmers are supported by the attractiveness of agriculture as a member in winning coalitions formed by dominating interests.
- The decline in numbers of farmers is often seen as a decrease in agricultural power but the out-migration may also be a source of increasing power. Constant per capita benefits can be maintained by reduces per capita costs for non-farmers.
- Pressure groups seeking to manipulate relative prices cannot achieve this by their own forces, but need support from other groups and are **bound to form coalitions**.
- However, price rises in favour of one industrial group lower the real incomes in every other groups.
- Incentive to **exclude** from that coalition industries whose goods comprise a **high share** of that group's purchases, and to seek instead an alliance with industries whose goods combine a lower share of their purchases.
- For this reason, economic development is associated with growing incentives to practise solidarity with agriculture by including it in successful coalitions with other influential social groups.
- **Protection against electoral opportunity costs:** An insulated political agenda allows agricultural policies to be biased in favour of the farmers' interests. By means of *legitimation systems*, opposing voters' preferences are screened-off, neutralised or even turned into generate broad solidarity with agriculture.
- „Marginal benefit position“ of agricultural voters between bourgeois parties
- Politicians provide policies in response to the preferences of flexible voters because they need their votes. Farmers=regular voters: means that they have a high degree of party identification and do not vote for another party unless they are absolutely unsatisfied with their traditional party or are offered substantial benefits by another party.
- Agricultural interests only represent a small minority. However, if agricultural voters are a group that could provide a party (or coalition) with the majority ("marginal benefit position"), this party will try to win the additional votes by offering special favours. - Example: social-democratic and liberal coalition (SPD-FDP) in Western
- Another possibility: fundamental change of program of conservative party (e.g. expropriation) so that agricultural voters change to another party.

15. Which alternative strategies to get acceptance of their preferences can be associated with the floating voter model and the regular voter model respectively from the point of view of an interest group like the farmers?

- By means of his vote farmers can opt for a **global party programme**, but not particular agricultural policy measures.
- But famers have a great interest in choosing between different agricultural party programmes.
- At the level of general elections however, they **cannot find corresponding alternatives** and the representation of agricultural interests has to be delegated to farm politicians.
- **Farmers have two basic mechanisms to get their preferences accepted:**
 - **Voting mechanisms:** vote for the party that promises to fulfil their demands. This obviously only works if farmers display floating voting behaviour.
 - **Regular voting behaviour:** they will need to rely on a strategy to exert political influence: They need to engage in the formation of networks to influence politicians → internal lobby, using the influence of farmers' unions, bureaucracy, interpretation systems, etc. Costly to pay lobbyists to go to the politicians everyday and lobby the interests of the farmers.

16. Why is it necessary from the point of view of agricultural voters to complement the general institution of elections by mechanisms of fine tuning, for example, provided by organised interest groups and other lobbying capacities to influence the policy making process?

- A group of people who have made considerable **irreversible investments** form a natural community of interests.
- The irreversible investment acts as a **barrier to entry** into the market and to a quasi-rent for the group members. In unfavourable economic conditions the irreversible investment may also become a **barrier to exit**.
- This motivates farmers, who have a considerable irreversible investment in physical and human capital, to organise into a **pressure group** to defend their existing quasi-rent by collective action.
- Low resource returns in agriculture lead to income disparity and increasing solidarity which supports collective action.
→ it pays to form an organisation.

17. Why would changing minorities be exploited by changing majorities resulting in unstable political conditions if the model of pure democracy would prevail in reality?

- From the **standpoint of competing parties**, the question arises whether employment of agricultural policy instruments can **help them win elections**.
- Would be possible, if farmers would become **marginal voters**. Since both parties will make **redistribution** strategies to secure the marginal votes, any decision by one party will constantly be **undermined** by strategic redistribution promises by the other one.
- Victory will be attainable only by extreme concentration of redistribution on a group of voters as small as possible, but still assuring the majority.
- Since the budget available for redistribution is supposed to be as large as possible, the number of citizens who have to **carry the burden has to be maximised** too.
- If a party has decided in favour of a particular "51% group" and burdens the remaining "49% group", then the competing party will try to prevent its victory by improving the situation of the disadvantaged "49% group" by means of adequate reliefs and favours. In addition it will isolate a call "2% group" from the "51% group" by promising them even more advantages than the other party. **Farmers would be suitable for such a role of procuring the majority.**
- Not advisable for the politicians or the farmers, because it does **not** lead to a **reliable majority** for the politicians and to a stable agricultural policy for the farmers.
- This would result in **unstable political conditions**, characterised by exploitation of changing minorities by changing majorities.

18. Why would, strictly speaking, the opportunity costs of a type of agricultural policies that favour the farmers be too high from the point of view of rational political entrepreneurs if these agricultural policies would only be controlled by general elections?

- Due to the farmers' **high party identification**, not only the number of votes, but also the **voting flexibility** of most consumers and tax payers is considerably higher.
- Consequently, the gain in agricultural votes achieved by the policy favouring the farmers' interests would be **over-compensated** by the resulting loss in non-agricultural votes.

→ **the electoral opportunity costs caused by redistribution in favour of agriculture would be much higher than the benefits.**

19. Why are both farmers and agricultural politicians and also the farmers unions interested in insulating the agricultural policy arena (what results in a protected policy network or political subsystem for agriculture)?

(continued from question above)

- Thus, farmers and politicians have a common interest in **protecting agricultural policy** against electoral control.
- They try to **influence the political preferences** and electoral behaviour of the non-agricultural voters (majority) so they are inclined to vote in favour of protecting agriculture in general elections.
- Allows agricultural policy to be **biased** in favour of the farmers' interests without overwhelming opportunity costs. (opportunity costs are too high in a rational sense both farmers and politicians have no interest in leaving policies only controlled by general elections.)
- To preclude protests expressed by general elections, **constitutional provisions** are necessary to give **legal status** to agricultural policy, which is devoted mainly to farmers' interests.
- Furthermore, they created subsystems (i.e. agricultural committees in state and federal parliaments) which are largely independent from the rest of political arena! Thereby, agricultural policy arena is protected from criticism and those in favour of farming can rejoice and enjoy political subsystem for agriculture and obviously want to keep it that way!
- First option for politicians could be an inefficient redistribution policy, means short-time „election gifts“ without a burden for a minimal group and a also no high favour for maximal group (based on assumption that redistribution of income is not efficient)
- **BUT** first option is neither sufficient for politicians because just represents a short-time solution to be reelected nor for farmers because they want to ensure income redistribution as agriculture is under pressure for structural change out of the system of party competition → political subsystem is needed through insulation mechanisms like bureaucracy, lobbying (farmers unions) and interpretation systems
- This is a condition to have a collective action with „equally thinking actors“ only somehow
- Agricultural politicians prefer a protected policy network as well because they can be safeguarded against electoral opportunity costs with a “legitimation system”. The opposition (against pro-agricultural policies) can be neutralised during elections by interpretation systems showing how important these policies and farmers are for the whole society.

20. Please explain the logic of voting abstinence which is practiced more often by agricultural voters than by non-agricultural voters. How is this type of behaviour related to the terms “transaction costs of changing the party” and “integrative threat”?

The identification of farmers is well known, they support conservative parties, so that it is highly unlikely that farmers become floating voters and support the opposition. However, they can nevertheless protest by abstaining from voting.

- **Agricultural pressure groups** have succeeded in preventing, neutralising or even reversing opposing voters' preferences, the mechanisms of electoral control and party competition are at their disposal as action parameters.

- Government and the opposition are now **free to campaign for agricultural votes**, without provoking stable losses of non-agricultural votes. It is now possible for agricultural pressure groups to gain acceptance of their demands on agricultural policy.
- They threaten abstention or protest voting, resignation of agriculture party members, withdrawal of support candidates and the forms of internal party protest.
- **Transaction cost of changing the party:** Reason for farmers to not change their party preference: giving their votes to another party might destroy relationships and coalitions with the conservative party that cannot be restored that easily. Farmers may assess the cost of losing this influence or this partner as higher than the benefit of gaining some influence on broad setting of political arena by voting for another party. Therefore, they refuse to vote at all which poses a so called "integrative threat" to the conservative parties.
- **Integrative threat:** Not voting at all signals a form of discontent with current policies and activities of the conservative party but it gives them the chance to make it better and regain the votes of the farmers in the next election by doing so!

21. Which types of elections can be distinguished as regards unchanged, temporary change or permanent change of party preferences?

Maintaining elections:

If farmers did not change their party preference but rather voted in a very **unsurprising way**, i.e. gave their votes to the party they always gave it to. (Same/Similar share of votes for party as in previous election)

Deviating elections:

Voting behaviour where the result of election shows some **inconsistency** compared to previous elections. For example, when some farmers withdraw their approval of conservative party and rather give it to social democrats. —> Such a change may represent a form of protest against current policies of conservative party and is likely to be a temporary but not permanent change of party preference!

Critical elections:

Here, farmers change their voting behaviour **radically** by changing their entire party identification and party preference. Lead to a permanent shift in party preferences or identification.

22. Which experiences from German history reveal some empirical evidence as regards the behaviour of the agricultural population vis-à-vis extreme parties?

- In times of economic recession farmers tend to be more prone to accept or join extreme parties than other parts of the German population. **Example:** Nazi-Germany. Farmers were among the first ones to join the NSDAP. For quite a while the proportion of farmers in NSDAP was considerably large compared to the proportion of farmers in whole population! In 1931, self-employed farmers made up 7% of German population but accounted for 18% of all NSDAP members!
- In the 1930s farmers suffered the biggest economic crisis of the century and struggled with their loss of importance in the society. Because of this, they feared losing their social and economic status and were more open for the Nazi-ideology which promised them a predominant place in society ("blood and soil ideology").

23. Why and how is the agricultural population often described as a group which is particularly important for society? Please explain the terms "agricultural fundamentalism" and "agrarianism".

Agriculture as a Social Contract

- To legitimate the agricultural group objectives, this theory interprets agricultural policy in the sense of a **social contract** which has been concluded on the constitutional level of politics, analogously to the Economic Theory of Constitutions (see, e.g., Buchanan, 1975; 1984).
- In this view, which is reinforced by the well-known ideologies based on **agrarian fundamentalism**, agricultural policy is justified by an **exchange of public goods** (Hagedorn, 1992).
- Agriculture provides security of food supply, reliable food quality, environmental protection, social stability, and other external benefits.
- In return, agricultural policy ensures farmers **equal participation in incomes and wealth**.
- Following this justification theory, support by agricultural policies is nothing but a just **reward for public goods** produced by farmers.
- By popularising **ideologically founded convictions** that closely associate the role of agriculture with social values, e.g. continuity, stability, solidarity and justice, agricultural pressure groups provide the basic prerequisite for political acceptance, legitimisation and implementation.
- It is based on a voluntary agreement between social groups on the **internalisation of external effects** in accordance with the valid notions of social justice, they are able to mobilise positive value judgements. The public good provided by agriculture relates to very essential human needs. Therefore, they may be willing to incur higher costs to maintain the possibility to make use of these precautions. → **has a high option value**.

24. Under what circumstances can farmers become radical?

Farmers as Extreme Voters

- **Durability and reliability of party identification:** (a) maintaining, (b) deviating, (c) critical elections; - Can farmers take the **position of extreme voters** in critical elections?
- **Early agreement of farmers with the Nazi Party** in Germany from 1928 to 1933: **Increasing proportion of voters and joining in NSDAP**, the highest compared to other groups of the electorate.
- Farmers are considered to be a **stable group**, but they can be **radicalised** in **legitimacy crises of agricultural policy**, if two **developments coincide**:
- If farmers feel that they are **left alone** by the traditional state actors and also by farmers' unions **in a crises** threatening their economic existence.
- If this feeling is **ideologically instrumentalised** by **groups and organisations** which mostly are not close to agriculture but come from urban society.
- **Danger of asymmetric political response of farmers**

Chapter 3: Analysis of the Role of State and Public Administrative Contracts

3.5 Producing Legitimacy by Interpretation Systems

1. The neglect of arguments and discourses as a constitutive element of policy making processes can be considered as a deficit of the New Political Economy or Public Choice Theory. Please explain the reasons for this.

A theoretical Deficit of the Economic Theory of Politics

- Aldrup considers the theories of Downs, Buchanan and Tullock as being non-realistic, because they neglect the role of **arguments and discourse** in political processes.
- Fleischmann distinguishes between a **static** and a **dynamic aspect**: In the theories mentioned above competition of political programmes prevents that the decision making of politicians deviates too much from the interests of the voters. This more or less explains „**an oscillation around a stationary state**“.
- The theories do not explain the **role of criticism based on arguments** in politics as a main driving force of **political progress: Politicians learn from criticism**.
- Söderbaum complains: in Public Choice Theory voters, politicians, bureaucrats & also farmers and consumers appear to be **speechless**. These theories give the appearance that they do not get involved in discussions, whereas in the real world **discourses** play an important role in forming political preferences, values & designing political programmes.

2. What are “interpretation systems providing legitimacy”? Which role do such “interpretation systems” play? What is meant by the terms “cognitive schemata” and “framing”?

(Individual) interpretation systems are pre-existing (stable) patterns of thought/perception that help evaluate and organise observations and thus help process/operationalise information. New observations confirm (i.e. provide legitimacy) the existing interpretation unless there are major deviations. If such strong deviations occur the individual will refer to collective interpretation systems to deal with the resulting insecurity (search for meaning).

Which role do such “interpretation systems” play?

- their role in dealing with new information is that they provide a reference for evaluating observations
- even when weak, they determine perception of reality and thus guide an individual's behaviour
- Individual behaviour follows an **interpretation of reality** which is permanently **compared** with the actor's **perception of reality**.
- If an actor considers the observations he makes by means of his **individual interpretation system** as an **unreliable and unsecure image** of reality, he will resort to **collective interpretation systems** for help.
- „**Framing**“ reflects a similar concept: Individual behaviour is guided by a **rather invariable frame of understanding** which only changes when serious **contradictions** against reality emerge (Lindenberg).

3. In political science, studies on “cognitive schemata” based on cognitive psychology have received increased attention. What are cognitive schemata and which role can they play in political processes?

The „Schemata Approach“ in Political Science

- **Cognitive Schemata („knowledge structures“):** „**variable images**“ = notions resulting from the experience of people are mobilised by external information to construct a notion of perceived phenomena.
- Example: „**Story of Pirates**“; change of cognitive schema from „**cruel pirates**“ to „**disguised at a masked ball**“.
- **Cognition: active and dynamic process**, in which the individual **constructs his or her reality** which he or she perceives of subjectively by means of 1. his or her **memory** and 2. **new information**.
- **Types:** Personal, self, role, event & procedural schemata.
- **Process:** 1. perception, 2. memory, 3. inference.
- **Decision making processes in foreign policy:** individual **belief systems** are **rather resistant** against changes and are able to control the behaviour of politicians. Which schema is mobilised depends on the action situation; examples: Paul Nitze and Ronald Reagan.
- **Attitude research:** Old theory: Ideologies **must be consistent systems of attitudes** to be effective. New theory: Even **weakly established cognitive schemata** are able to guide the behaviour of individuals.

4. Which cognitive schema seems to prevail in the minds of non-agricultural citizens as far as the role of agriculture is concerned, how is this related to the usually broad support for a type of agricultural policy that

favours farmers, and what is the basis for the existence and persistence of the schema and how can it be reinforced or destabilised?

- **Citizens outside agriculture** obviously have a cognitive schema (belief system) that is favouring the farmers; supporting them appears **legitimate** in their perception.
- Agriculture provides security of food supply, reliable food quality, environmental protection, social stability, and other external benefits.
- By popularising **ideologically founded convictions** that closely associate the role of agriculture with social values, e.g. continuity, stability, solidarity and justice, agricultural pressure groups provide the basic prerequisite for political acceptance, legitimisation and implementation.
- They are able to mobilise positive value judgements. The public good provided by agriculture relate to very essential human needs.

5. Why do interest groups use general basic rules of society for justifying their group interest?

How Interest Groups Influence and Manipulate Constitutional Rules for their Objectives

- A **normative 'theory'** of agricultural policy biased in favour of the farmers' interests is usually used. Have been agreed upon at the constitutional level of politics, they are an element of general consensus and are capable of convincing the citizens that the rules in question are fair and will be in their own interest.
- Foundation of group objectives. :
 - decreasing legitimacy for more distant objectives
 - orientation towards the status quo ante (standard of normal legitimacy)
 - protection of the poorer and weaker (principle of distribution according to needs)
 - reward for producers of important public goods.
- In order **to protect their political subsystem**, farm politicians refer to such basic rules of the society. Since these rules are successful in generating a consensus.
- **Public acceptance** of such group objectives is attainable easier, if the group officials succeed in interpreting them in accordance with the prevailing conceptions of social justice or/and in manipulating these general notions of fair behaviour in favour of their specific interests.
 - **Building internal and external solidarity**; the members of the own group can stand up for their own objectives based on self-interests **without any moral scruples**, because they are apparently in line with general notions of justice (**principle of cognitive consonance**); for the same reason they appear to be legitimate to non-members.
- For the same reason, the group objectives obtain legitimacy in the perspective of the **non-members**.
- To legitimate the agricultural group objectives, this theory interprets agricultural policy in the sense of a **social contract**.
- Agricultural and social policy both obtain a large portion of their legitimacy from the existence of inequality in society.
- Two principles indicate a **legitimation conflict** between agricultural and social policy:
 1. **social policy** (and direct income subsidies) are usually legitimated by the principle of distribution according to needs e.g. unemployment, old-age or disease since everyone could come into such a situation → self-interested in solidarity with the "poor and weak".
 2. **agricultural policy** is expected to be a policy for agriculture as a whole, nor for particular groups or poor farmers, because unequal treatment of farmers could be detrimental to their organisational stability. Agricultural interest groups try to convince the public by arguments based on the **principle of distribution according to merit**.

Social Policy	Agricultural Policy
based on individual needs	based on collective merits
one-way transfer to the needy	exchange of public benefits
recipients are only consumers of political goods	also a producer of political goods
legitimated by facts which relate to single persons or households	refers to the agricultural sector as a whole
shaped in accordance with individual criteria	determined more by sectoral criteria

6. Which role do ideologies based on agrarian fundamentalism play in arguments and discourses for the justification of agricultural policies? Why can the arguments which are used in this discourse for providing legitimacy for agricultural policies be understood as a contractarian interpretation?

Legitimation of Agricultural Policies by Means of a Contractarian Approach

- „**Goodwill**“ is important political **capital for agriculture**: it is maintained by farmers unions.
- **Ideologies of agrarian fundamentalism** which are deeply rooted as cognitive schemata in the minds of people are mobilised by farmers' unions and agrarian associations to achieve **legitimacy of agricultural policies**. Examples: "Bauerntumsideologie" in Germany and agrarian democracy in the USA

- **Interpretation as a social contract:** Agricultural policies in **exchange for benefits** produced by agriculture, i.e. income parity as a fair reward for (actual or supposed) collective goods provided
- This results in an **implicit contract** to establish political property rights of agriculture, what is plausible because they are based on the notion of a **voluntary agreement** between groups for the purpose of internalising external effects.
- Since social contracts of this sort are in accordance with the valid notions of social justice, they are able to **mobilise positive value judgements** of the citizens (relevance of hypothetical consensus).
- Result: Establishment and protection of a political subsystem for agriculture at two levels:
 - **Elections and public opinion:** Too high opportunity costs of agricultural support in general elections are avoided by influencing public opinion;
 - **Policy networks and joint decision making:** Political relationships and negotiations between agricultural members of Parliament (agricultural committee), bureaucrats in ministries, farmers unions, etc., are to a large extent isolated from monitoring and supervision by Parliament and Government.

7. Why is a hypothetical consensus on the fairness of the demands and claims of interest groups related to a process of mobilising positive value judgements of the citizens?

The **hypothetical consensus** is very effective to mobilise positive value judgments for agriculture because it is not a real demand of farmers to support agriculture (financially), but it emphasises that supporting agriculture would actually be in accordance with social justice.

- By popularising ideologically founded convictions that closely associate the role of agriculture with social values, e.g. continuity, stability, solidarity and justice, agricultural pressure groups provide the basic prerequisite for political acceptance, legitimation and implementation.
- The political equilibrium (dependent on the competition and cooperation of groups) and the group's power dependent on their ability to influence government institutions e.g. by voting, political pressure, convincing arguments, economic incentives, threats and intimidation. The efficiency is dependent on the efficiency of other groups.
- Hypothetically people agree to the legitimacy of agriculture; leads to a positive perception of agriculture in general, but that does not necessarily mean that they really would like to pay for agriculture, if they were asked to do so.

8. Why do agricultural politicians want to establish a political subsystem for agriculture that is make agricultural policies more or less “invisible” for the public? Why are the above mentioned approaches for providing legitimacy by means of those justification theories important for achieving this goal?

The obvious remedy to overcome reform resistance through price reductions is to make lower prices politically feasible by providing special compensation. Agricultural economists have suggested direct income subsidies. The trouble is, however, that the constitutional provisions (to create solidarity with agriculture) are constructed to work against a solution of this sort.

Direct Income Subsidies	
Advantages	Adequate instrument to compensate for the insufficient performance of agricultural price policy and to avoid problematic side effects. Could offer a variety of opportunities for tactical arrangements of redistribution policies.
Disadvantage	Could be interpreted as an indication that AP embraced the concept of social justice. Since it is not compatible it would replace the approved basis of legitimation and detrimental to the ability of pressure groups to organise.

Agricultural interests groups, thus, cannot agree to direct subsidies and developed other transfer possibilities:

- direct subsidies for specific purposes
- temporary regulations
- hidden transfer payments e.g. GRN allowances for the farmers' social security systems
- price support
- introduction of production quotas

Creation of a political subsystem makes it easier to protect the objectives of the relevant interest groups without bearing high electoral opportunity costs. (explain what a political subsystem is).

9. Please explain the term “option value of agricultural policies”.

Option Value of Agricultural Policy

- In politics, the **economy** has a **privileged position** because it provides important **functions for securing re-election of government**, (job opportunities, economic growth, stability of prices).
- Government also relies on similar political goods, for **reasons of popularity**, which can **only** be provided by **agriculture**.
- **Securing food supply and food quality as well as protection of the natural environment** refer to very sensitive needs of the citizens because **scarcity** of these goods could be **crucial** for mankind. → Provide public goods: food

supply, reliable food quality, environmental protection, social stability and other external benefits. In return, AP ensures farmers equal participation in incomes and wealth.

- As a consequence, it can be **very reasonable** from the **individual perspective** of citizens to agree with the design of agricultural policies which fulfil these **demands for security**.
- Citizens are willing to accept **higher costs**, because they want this kind of **security** for the future, if necessary. Therefore, this type of policy has a high **"option value"** (Frey, 1981, p. 50).

10. Please explain the so-called "paradise lost complex" and its relevance for the acceptance of agricultural policies by the urban electorate.

„It is ... the **subconscious memory** of all people in Western industrial society that all of them originally came from the farm, which solidly anchors their fondness and affection for the farm people. I call this the urban dweller's image of Paradise Lost: the **farm as the forebears' origin** and the happy valley where life is imagined as having been simple, safe, harmonious, and peaceful. ... Mixed with such nostalgia is a feeling of **guilt** towards those who were left behind in the **heroic march of urban progress** and who are supposed to be condemned to live in social isolation, deprived of the comforts of modern city residences, forced to do hard physical work for long hours, being tied to tend cows and other animals 365 days a year, exposed to the vicissitudes and hazards of weather and unstable international markets. ... Hence, with this reverence for their idealised common origin, the urban voters have nothing against subsidies for the 'poor fellows on the farm', ..." (Karl Brandt, 1961, pp. 86f.).

11. Why is in developed countries agriculture attractive as a partner in winning coalitions formed by interest groups, and why is this not the case in developing countries?

- Many researchers think that the **decrease of the agricultural sector** leads to a **loss of power for agriculture**.
- However, the process of out-migration of agriculture facilitates **solidarity of other groups** with farmers and, for this reason, represents a **source for maintaining power**. *Equal per capita transfers for farmers can be maintained by decreasing per capita burdens for non-farmers.*
- When interest groups form winning coalitions of **influential social groups** for manipulating price relations to their own benefit, they will always take into account that **price increases** of each potential coalition partner **reduces the real incomes** of each other group because it increases their expenditure for consumption.
- „Consequently, ceteris paribus, any group seeking to maximise its real incomes by forming a coalition to secure a price rise has **an incentive to exclude from that coalition industries whose goods comprise a high share of that group's purchases and to seek instead an alliance with industries whose goods comprise a lower share of their purchases**" (Bates and Rogerson, 1980, pp. 514f.).

12. What are the main impacts and determinants regarding the political economy of agricultural policies in developing countries?

Theory 1: One approach views the state as an agency for the maximisation of social welfare. But most commonly, economic growth is seen as a primary objective for poor societies. Growth necessarily entails a shift in resources out of agriculture and into "more productive" sectors of the economy.

Theory 2 "Sectoral Models": Division of eloping societies into aggregate sectors e.g urban, rural, modern, traditional, informal or transitional. The policy bias in the developing areas represents the political domination of the "advanced" sector and instruments of the state to transfer the resources from the more "backward" sectors of the society.

Theory 3 "Class or elite based theories": Public policy is determined by particular interests. The element of redistribution entails a shift between income groupings. Reflects the use of the state to enhance the special interests of the privileged few who derive their income from modern industrial and manufacturing firms.

The agricultural sector in developing countries is usually much larger (determinant) than in developed countries. This has several implications:

1. Due to the number of people affected its harder to organise efficiently in interest groups and harmonise preference.
2. Their attractiveness as coalition partners is lower (see question 11) -> agricultural prices stay relatively low (impact)

Chapter 3: Analysis of the Role of State and Public Administrative Contracts

Section 3.6 Political Cooperation: Interest Groups

1. Please recall Olson's theory and the concept of selective incentives from Section 1.3. Why was it introduced?

Free-rider Behaviour as a Problem of Organising Interest Groups

- **Starting question:** How can groups organise as collectives and how can they be stable over time?
- If the **exclusion principle** does not apply, then voluntary contributions to the provision of collective goods can only be based on altruistic behaviour.
- In case of self-interested behaviour, the individuals will **not contribute to collective goods** because they cannot be excluded from the benefits of such goods.
- **Consequences:**

(a) the individual prefers the free-rider position,

(b) and since all members of the collective do so, production of the public good will not take place.

- This contradicts the conventional view that individuals who have equal political interests will also work for these interests collectively: „**Unity makes strong; but who makes the unity?**“
- „**His own efforts will have no substantial influence on the situation of his organisation; but he himself can enjoy each improvement which has been achieved by others, non withstanding whether he has contributed to supporting his organisation or not**“ (Olson, 1968, pp. 14f.).

Small groups - large groups

- **Assumption:** Individuals do not include **the welfare of their fellow citizens** in their individual calculation of utility.
- If in small groups at least **one member** has higher benefits than costs from production of the collective good, then he or she alone will provide it.
- Even if the total costs are not lower than the individual benefits of one member of the collective, it is easier to **agree on transfer payments** if the group is small.
- The more unequal the **intensity of needs** is among individuals, the higher the probability that there is one individual in the collective who will provide the public good because he or she expects a very high individual benefit from it: This results in **“exploitation of the large one’s by the small one’s”** (Olson).

Medium-sized groups

- In **small** groups the decision of one individual to join the group **can be felt** by the other group members, in **large** groups this is **not** felt.
- In medium-sized groups it is **not sure** whether an increase of the collective by one individual affects the utility of the other group members to an extent that exceeds the **threshold** of **conceivability** and **response**.
- An individual who considers to join the group will try to predict the responses of the other group members, and he will decide to join if the collective good will no longer be produced if he or she does not participate.
- If one individual decides not to join the group, this may motivate other members also to leave the group. Then the collective may no longer exist.
- As a consequence, **the collective good the first individual wanted to make use of as a free rider will no longer be available**.
- In other words, this particular individual has the power to **contribute to the decay of the collective or to contribute to its stability and continuity**.

The intensities of preferences are	The group is	
	large	small
equal	1) Voluntary provision of the collective good is very unlikely	2) Voluntary provision of the collective good is not sure
unequal	3) Voluntary provision of the collective good is not sure	4) Voluntary provision of the collective good is very likely

Farmers form a latent group with “small” members, each of whom feels that his contribution will have no impact on the collective good “farm policy”. In their fire, this good will also prevail if they do not participate in the costs of collective action. → **incentive to free ride**.

Three major conditions under which a stable organisation of economic interests groups is possible:

1. In most cases, **fairness rules and social pressure** will lead individuals and firms to participate.

2. **“Selective Incentives”**: providing a private

goods as a by-product to its members only e.g. economic products and services of particularly good value or social and moral services. Selective incentives may also be negative: individuals may be given an incentive to join because non-members are economically/ socially discriminated against.

3. **Compulsory membership.**

2. Which selective incentives are offered by farmers unions?

„Selective Incentives“ as a Basis for the Provision of Collective Goods

A. Positive selective incentives

- **Paying members receive benefits which only they can get: private goods to which the exclusion principle applies. Non-members can be excluded.**
- Interest groups do not necessarily pay for selective incentives **from their own budget**: e.g. a trade union can attract members by negotiating benefits with employers only paid to its members.
- **Selective incentives of farmers’ unions**: a farm journal, advisory services, cheap insurance, help in negotiations in case of compensation for damages or land expropriation, etc.

B. Negative selective incentives: coercion

- Usually only government has the legitimacy to use formal and physical **power** in a society.
- Government **delegates** tasks to associations with compulsory membership; no free exit.
- **Examples**: Old-age, health and accident insurance, irrigation and drainage associations, chambers of agriculture, chambers of commerce, guilds.
- **Exchange between government and NGO**: govt. solves the problem of free riding for the association and the latter “takes care” of the group members.
- Social causes, e.g., **mediator** between members and govt., or technical causes, e.g., **network** goods (drainage associations).

The Role of Interest Groups - Farmers Unions

- **Kirsch:** The capacity of a group to organise may not have only one reason but **multiple** causes. For example, this can be explained not only by economic but also by psychological or moral incentives.
- **Wilson:** „Poor performance of Olson’s theory in comparative politics“ ; it does not explain:
 - different **density** of groups’ membership in different countries,
 - why people join **one particular** organisation if they can choose among several, and
 - why interest groups like farmers unions are not always compatible with **religious or ideological cleavages**.

The number and the unity of interest groups is a mirror of the political process.

The capacity of a group to organise also depends on the **political system**: in a more closed political system we usually have only one farmers union (Germany), in an open political system more farmers unions may get a hearing (USA).

- Not only *selective incentives* (private goods) but also **political objectives** (public goods) motivate people to become a group member (Hardin and Hansen).
- Group membership must be considered in a **dynamic perspective**, and collective action is a **strategic problem**: **Individuals try to avoid the cost of membership, after the public good is won.**
- Conventions based on **institutionalised rules** and *implicit contracts* evolving over time are important.
- Often “**co-operation**” plays an even more important role in political decision making than competition.
- Politicians can be put under pressure only by a withdrawal of *votes* (exit), i.e. in a *tacit manner*, but also by **arguments** (voice), e.g., legitimisation theories.
- Interest groups’ activities are not solely directed *towards government*, but also **towards members**. Group leaders *influence their attitudes and behaviour* in a way that serves the interests of politicians.

3. Which type of selective incentives exists for group members in the case of associations with compulsory membership? Please explain why associations with obligatory membership are often based on an exchange between government agencies and organised social groups. Please mention a few examples.

If individuals are forced to join e.g. through public regulation. For the GRN and public administration it may be advantageous to deal with one official interest group (institutional addressee) → ease the execution of laws and regulations.

- **Compulsory Membership** (*zwingende Mitgliedschaft*): Negative Selective Incentives –Coercion
- **Obligatory Membership** (*obligatorische Mitgliedschaft*): division of labor between politicians and group leaders. Groups are given autonomy/independence/selfsufficiency (government solves the problem of free riding for the group) to provide society with certain goods and in exchange they have to control their own members.
- Examples: old age insurance association (*Rentenversicherung*), irrigation and drainage associations (*Wasser- und Bodenverbände*), chambers of agriculture (Landwirtschaftskammer)

4. Why are associations with compulsory membership often characterised by a twofold strategy (that means working for the members and working for the government at the same time)? Why is a government often interested in the delivery of “half-finished political products” (initiated discourses, consensus building, acceptance of compromises) and why do they often prefer to delegate tasks of monitoring and control to associations instead of dealing directly with the members of the group in questions by means of government agencies?

If we want to explain, why politicians are interested in associations with obligatory membership, we cannot simply refer to the permanent need for information in politics.

- Interest groups do not hand over the interest of their members to the politicians without modification, but try to aggregate and to shape them. “**Half-finished political products**” supplied by the association are more relevant than information.
- Groups obtain considerable political influence if they can offer politicians more than just information, campaign contributions and promised votes. They are expected to **harmonise the interest** of their members, to make them feel committed to the compromises they have agreed on and **facilitate** acceptance and implementation of political programmes. Organisations that are able to fulfil these requirements can gain more political power.

5. Under what conditions does the provision of public goods (according to Hansen) in particular matter as regards the capacity of interest groups to organise?

- **Common economic interests** are a necessary but not sufficient condition for the organisation of interests.
- Their activity (influencing voters, government and public administration) has the **character of a public good**, because all of those with common interests are benefitted without having to be member of the organisation.
- If the activity of an interest groups consists of achieving the provision of a public good, there is **little incentive** for an individual or a firm to join the group and to carry the costs of the active (e.g. membership fees). → **free-riding**.
- **Conditions for interest groups:**
 - the group must be so **small that a mutual dependence** and therefore a pressure for conforming behaviour arises.
 - the public good must be **supplied jointly** with private goods available only to the paying members of the coalition.
 - the **costs** of making/ maintaining the corresponding agreement (public good) **rises** with the number of members.
 - **structure** of the political system

- **political objectives** motivate people to become registered group members. Cooperation by means of group membership has to be considered a dynamic perspective → strategic problem.
- must be able to **carry the costs** of acquiring political benefits
- **Risk**: exploitation of large players by small players.

6. Please explain the history behind the foundation of the German farmers union. Why came this umbrella association for the German farmers unions into being?

Collective Action of Agriculture

- On the one hand, farmers represent a decreasing share of the population and of GDP in society. They fear that their economic and social position will weaken. Thus, they develop a very strong **group identification**.
- On the other hand, the characteristics and problems of agriculture offer a variety of opportunities for **selective incentives** that farmers unions can offer to their farmers.
- **History**: enforced cessation of farmers unions by the Nazi Party, replaced by „Reichsnährstand“, „liberalisation of farmers from markets“ by „Darre“.

7. When has the German farmers union been established and what was the main objective during the phase of foundation? What is meant by the farmers union is an umbrella association?

- **Foundation of the German Farmers Union in 1947** as an umbrella organisation. President: „Hermes“; his objective: to prevent **fragmentation** of the system of agricultural associations, in order to maintain the political **monopoly** of the German Farmers Union as an interest group for farmers.
- After **reunification** of Germany in the early 1990s: inclusion of the post-socialist farmers unions established in Eastern Germany into the umbrella organisation in spite of **ideological discrepancies**.
- **Four pillars** of the system of German agricultural associations:
 - **German Farmers Union,**
 - **Association of Agricultural Chambers,**
 - **German Raiffeisen Association,**
 - **German Agricultural Association**
- The **Central Committee of German Agriculture** coordinates these organisations under the **leadership and management** of the German Farmers Union.

8. What are the main resources for organised interest groups for exerting influence in a democracy?

Opportunities of Interest Groups to Gain Political Influence

• Main factors

- Exchange of information
- Disruptive potential by market power
- Financing political parties

• Channels of influence

- Pre-Parliament Influence
- Members of Parliament
- Influencing referendums

• Public administration

- Offering information (selected)
- Negotiation partner (knows basis)
- Financial contributions (many types)

• Log rolling

• Selective delivery of information

• Often non-visible political influence

• Presenting weak members

- Credibility and legitimacy
- No differentiation of instruments

Strategic behaviour that can be used by interest groups:

- **Vote trading**: can achieve demands by **exchanging their votes**. A group will abandon voting for a less important goal provided that one or several groups will in exchange vote for a project deemed particularly important. **Problem**: public expenditure are blown up; there is often an intensive preference for one economic sector; voters not participating in the trade are exploited b/c political externalise are impose on them; paradox of vote trading → all groups are worse off.
- **Selective information**: positive and/or negative consequences of public activity for their own members known to decision-makers. Side effects other parts of the population are disregarded.
- **Partial invisibility**: make their activities as little known as possible to outside observers in order to avoid opposition by other interest groups and the general voting population.
- **Putting forward weak members**: demands are more easy to substantiate if the position of the economically weakest members of the group is stressed. If their demands are met, the benefits accrue to all their members.

9. What is log rolling? Please explain the phenomenon of the “log rolling paradox”.

Log rolling

- Explicit or implicit (package deals)
- Expansion of government budget
- Exploitation of non-participating groups
- „Log Rolling Paradoxon“

Section: 4.7 Public Bureaucracies

1. According to Downs (1965), what is the chief motivation for the bureaucrats? Explain at least 3 exclusive features of a bureau which distinguishes it from an organisation?

Bureaucrats are motivated in part by self-interest, as much as other agents in society: power, income, prestige, security, convenience, loyalty, pride and desire to serve public interest. We recognise an organisation as a bureau when it has the following characteristics:

- Large: highest officers know less than half of members in person
- Most of the members are full-time employees, whose income depends on the employment in said organisation
- Their hiring and career path within the organisation should be based on (expected) performance rather than characteristics (race, religion, class) election from an outside constituency
- Output nor measured through transactions in a market in the fashion of quid pro quo (something for something else)

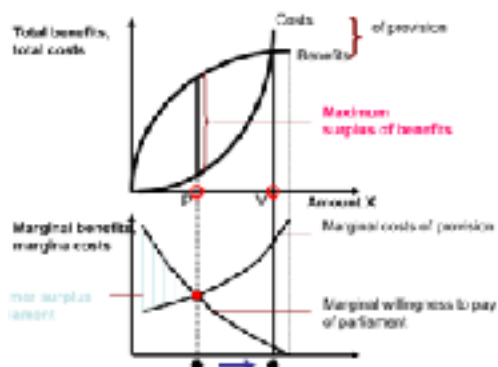
2. What is the difference between Climbers and Conservers? Please explain.

Climbers: aim at maximising own power, income and prestige push forward (through promotion, another job etc.)

Conservers: aim at maximising own security and convenience preservation of status quo

3. Why do you think that an attempt to control one complex organization leads to the creation of another? Kindly explain using an example.

Monitoring often requires yet another organisation and usually requires more reporting in greater detail, which increases the need for staff to deal with monitors. **Example:** Bureau of the Budget and the General Accounting Office



4. Explain using a diagram, why Niskanen believes public bureaucracies will lead to oversupply of output.

•**Explanation:** The assumptions are that bureaucrats aim at maximising their budget, that they are able to impose their preferences and that they know about the legislature's preferences. (Graph to be read bottom-up)

•The optimal point should be in the citizens (here equalled to the marginal willingness to pay of parliament) perspective where the maximum surplus of benefits is (the most efficient point with output P). Bureaucrats however are interested in the point where cost=benefits of the service they provide, so as to ensure maximum expenditure for the budget they are endowed with. This leads to point V where there is oversupply.

5. Do you think a political firm is the same as a business firm? If not, please explain at least 2 differences.

No, there rules they are subject to are very much different:

- The economic incentives and sanctions are more lax than for their business counterparts (low risk of losing the job, wrong decisions on budget not imposing too high a risk)
- Exaggeration of demand and understatement of cost: political firms act budget-maximising, business firms act profit-maximising
- Inflexible administrative rules reduce incentive to work and make reassignment and restructuring of tasks difficult

6. Why do politicians and interest groups want to control the bureaucracy? Please illustrate using a real or a hypothetical example.

- They want their objectives and legislations to be carried out. However they might case a principal-agent problem (agent is the bureau) in which the agent knows more about the other two (adverse selection.
- Other views (Horn) see the necessity of bureau for the exchange between politicians and interest groups: interest groups offer legislator support in the campaign etc. and politicians can create policies and agencies favourable to the groups. Legislature cannot however commit also for future legislatures, which is why they create then bureaucratic agencies free to pursue the groups' interests and insulated from unwanted future influences
- An example could be the political nomination of former powerful exponents of firms and interest groups to roles such as the Secretary of the Treasury (Geithner, Paulson)



3.9 Models of Policy Making and Change

1. What are the basic levels of social analysis the approach called “policy analysis” focuses on?

Policy arena, cycle, network and discourse

2. What is a policy network? Where can policy networks be found and what are their main characteristics? Please show examples.

• **Policy Network:** relationships and flows of resources such as information between various groups and actors social capital clusters of actors, each with an interest, or ‘stake’ in a given policy sector and the capacity to help determine policy success or failure

- They can be found wherever public policies are made via some hybrid arrangement involving different actors from private, governmental and non-governmental institutions (as opposed to traditional hierarchical forms).
- They are defined by higher fluidity in political manoeuvring, higher cohesion and aggregation given by converging interests and actors. Example: EU, based on experts and “government by committee”

3. What is a policy arena? Please discuss the statement given by Lowe “policies determine politics”. Why is the distinction between distributive and redistributive policies relevant?

Policy arena defines the processes of conflict resolutions which are influenced by the content of policies affecting individual preferences.

- Lowi’s “policies determine politics”: starting point is Easton’s model of the political-administrative system as a black box connecting the political input (demands from the citizens) and the output (laws, programs etc.), black box where the processes of the political systems remain unanalysed.
- Lowi says that the answer is to be found in the content of a policy and the problems associated.
- A content of a policy – whether (re)distributive or regulatory – implies particular outcomes, which result in particular responses from those affected, which have in turn an impact on the political debate both in terms of decision-making as of implementation, giving shape to the arena.
- Distributive vs. redistributive: relevant on the grounds of consensus (difficult for redistributive, as there are winners and

Policy Type	Characteristics of the Policy	Characteristics of the Arena	Examples	Guiding Principles
Distributive	Collective public provision	Consensual No opposition/resistance	Research grants General tax reduction	Incentives
Redistributive	Relation between costs and benefits obvious	Conflictual Polarization between winners and losers Ideological framing	Progressive taxation Labor market policy Social assistance	Imposition by the state

losers) and means (incentives vs. imposition)

4. What is a policy cycle? Which phases are typical for processes of political decision making? What do you think about this concept of a policy cycle and its applicability?

Policy cycle: sequential categories of policy making. It is a concept that serves more as a stylised ruled of thumb, rather than a realistic portrayal. It does not explicitly consider other actors such as civil society, media, lobbies etc. Furthermore the limits of the categories might be blurred in reality. Advantages might be that it simplifies the analysis of issues within each step of the cycle.

5. Please explain the reasons for the introduction of the Advocacy Coalition Framework and the basic assumptions it is built on.

Reasons:

- to provide a causal theory of the policy process which would serve as one of several alternatives to the “stages heuristic” (which proved dissatisfactory).
- lack of theory and research on the role of scientific and technical information in the policy process
- desire to synthesise top-down) and bottom-up approaches to implementation (top down: system of command and control from the government to the people in which target groups are actual implementors, reflects a need of policy be adaptable to local conditions)

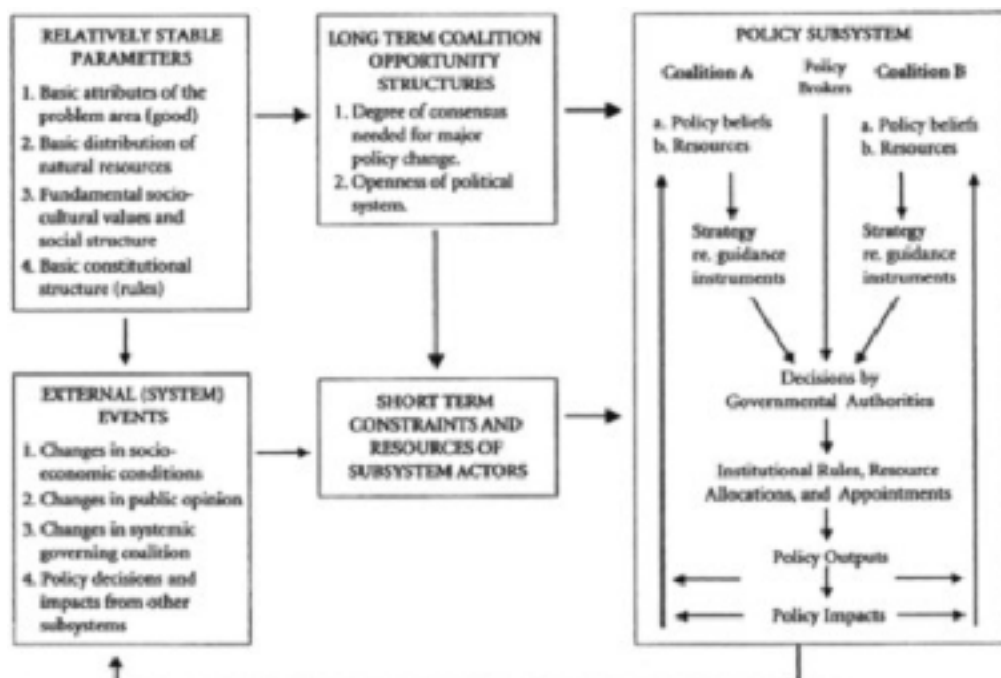
Assumptions:

- central role of scientific and technical information in policy processes
- long-term perspective (10+ years) to understand policy change
- primary unit of analysis are policy sub-systems (i.e. interaction of actors from different institutions who follow and seek to influence governmental decisions in a policy area)
- many and diverse sub-system actors (scientists, consultants, media)
- policies and programs best thought as translations of beliefs (i.e. as sets of value priorities and casual assumptions about how to realise them)

6. Please explain what role beliefs and consensus play in the Advocacy Coalition Framework.

People engage in politics to translate their beliefs into action. There are three main types. 'Core' are fundamental and unlikely to change (like a 'religious conversion') but too broad to guide detailed policy (such as one's views on human nature). 'Policy core' are more specific (such as the proper balance between government and market) but still unlikely to change. 'Secondary Aspects' relate to the implementation of policy. They are the most likely to change, as people learn about the effects of, say, regulations versus economic incentives.

Consensus: actors within an advocacy coalition will show substantial consensus on issues pertaining to the policy core but less so on secondary subjects

7. What are the components of the Advocacy Coalition Framework (draw a graph) and how are they interrelated?**8. How are reforms interpreted by using the Advocacy Coalition Framework, what are the drivers of political change?**

Reform only happens if hierarchically imposed, otherwise the policy core of a governmental program in a jurisdiction will not be significantly revised as long as the subsystem advocacy coalition which initiated the program remains in power within that jurisdiction.

Drivers of policy change:

- External subsystem events, for example change in public opinion
- Policy-oriented learning resulting in alternations of thought and behavioural intentions
- Internal subsystem events, in particular failure of subsystem practices
- Negotiated agreements between two or more coalitions

9. What is characteristic of organised anarchies in the Garbage Can Model and what are the challenges of making the concept of organised anarchy operational?**Characteristics:**

- Problematic preferences: inconsistent and ill-defined unclear decision technologies: learning by accidents and trial and error, management processes not understood by all members fluid participation: differing contributions both in time and effort, boundaries of organisation are blurred

Challenges:

- How is it possible for organisations to make choices without clear and consistent objectives?
- How to activate its members?

10. How would the proponents of the Garbage Can Model respond to the statement that decision making is systematically organised?

- They would argue it is a statement based on unrealistic assumptions. Decision making is NOT a rational, sequential and ordered process in which alternatives, outcomes, and impacts are known.
- Instead it is like a garbage can where the actors, the problems, the decisions and the choice opportunity are thrown independently of each other.
- Decision-making happens when these four factors meet and the leaders have enough energy to tackle a problem.

11. Please discuss the following quote: „... an organisation is a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues which they might be the answer, and decision makers looking for work“ (Cohen et al. 1972: 2).

This is the basic statement of the Garbage Can Model, stemming from the ambiguous behaviours that appear in organisations (see assumptions above). It takes all rationality away from the decision-making process and redefines it as a (sometimes randomised) match-making operation between all these factors.

- Problems of the GCM are that it does not help the understanding of decision-making processes. Stability and regulation are also left out the equation.

12. What kind of streams are crucial elements for operationalising of the Garbage Can Model and why do they present an organisational challenge?

3 policy streams (Kingdon):

- Problems stream (issues that reach the political agenda)
- Policy solutions stream (proposals for change)
- Politics stream: political issues like election results, changes of administration, interest group campaigns or changes in public opinions

The organisational challenge is convergence. In this formulation, an issue gains traction in the policy agenda only when the three streams couple with a choice opportunity. When this window opportunity opens, policy entrepreneur use the chance to gather attention on their problems and solutions.

13. Please discuss the relationship between the communicative functions of language, the social construction of the policy process and real action such as policy reform.

Language attaches meaning to physical things and changes --> enables shared understanding but also varying interpretations this meaning flows into negotiations, reflection and discussion (process) turns into actions (reform)

14. What distinguishes the Foucauldian and the non-Foucauldian perspective on discourse analysis?

- Non-Foucauldian is concerned primarily with the structures of interaction that produce meaning, starting from the assumption that communication is structured, stable, contextual, organised and sequential.
- The Foucauldian (from Michel Foucault) focuses on the rules of meaning-making, on the power inherent in language and seeks to understand how historically and socially instituted sources of power construct the wider social world through language.

15. Why is policy reform, in the Foucauldian view, a result of the strategic functions of discourses? Why and how, that means by which factors, does discourse shape reality?

Because policy reforms stems from the direction of the discourse. This direction is given by what meaning a concept has and power shapes this meaning.

So, power "...produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge that may be gained of him belong to this production." (Foucault 1991:194)

16. What is "communicative rationality"? What are the conditions for a discussion to be "communicatively rational" and what the objective of a communicatively rational discourse?

- Communicative rationality is an actor's ability to give reasons or good reasons.
- **Conditions:** empirically true, subjectively sincere or normatively right
- **Objective:** since through successful communication (mutual understanding) we achieve rationality, we can enable social coordination and effective policy and act on it.

17. Please compare and criticize the Foucauldian and the non-Foucauldian perspective on discourse analysis.

Foucauldian:

- Discourses are where struggles are found and where power constrains or enables actors
- If policy discourse is legitimate and why based on socially accepted models of knowledge production
- Direction of the discourse and outcome shaped by power, strategic function of discourses determine reform

Non-Foucauldian:

Discourse based on language and its connections to ideas and concepts about different topics, especially related to the cognitive processes that define public problems.

- The Foucauldian perspective, presents however methodological problems: how can one include it in empirical investigation? Further critiques: Foucauldian approaches do not provide explanations on how the use of language and other discursive strategies actually works. The Habermasian approaches remain large normative accounts of the policy process, falling short of a thorough critical analysis. In both no causal explanations of policy outcomes is provided.