Economies and Needs

2

We require little when we are unhappy; happiness in turn makes us insatiable.

Words of Wisdom

Opening Vignette

Miriam Hoffman got onto her scooter and drove the five kilometres to the nearest shopping centre in Hellersdorf. She could still not quite believe that she lived in this suburb on the outskirts of Berlin after living for many years in the Neukölln area. "How did I end up here?" she asked herself. She answered her own question: "The situation I found myself in and my needs."

Neukölln had been a working-class area and in the 1960s had become the home to immigrants from many countries, firstly from Turkey and then more recently from different places in the Middle East. Rents had remained low during all this time. Neukölln lies next to Kreuzberg, which had been the trendier area when Miriam moved from Cologne to Berlin in 2005. Miriam had lived in an area in Neukölln that was on the border to Kreuzberg and she had experienced how the neighbourhood had changed.

First, students and artists looking for cheap places to live and work moved in. New bars opened to serve the students, and the artists opened spaces where they could show their work. More students came to drink in the bars, and more artists arrived to use the galleries and studios that had been opened. This influx made the area attractive to people who had more money than the artists and students, and who were looking for somewhere interesting and alternative to live.

The part of Neukölln where Miriam lived started to become known as Kreuzkölln, reflecting its location, and word of its attractiveness began to spread. When some friends from England had visited, they had shown her some websites that positively raved about that part of the city. As wealthier residents started to

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move in, rents started to rise. “Too many people want to live here now,” she told herself in 2012, “but it won’t last.”

But it did last. International investors had been fairly uninterested in Berlin for a long time. Property prices were much lower than in any other major German city, which meant that rents were comparatively low and this made Berlin property a relatively unattractive investment for property owners and developers. This started to change towards the end of the 2000s, and areas like Kreuzkölln were the first to provide evidence of this as the process of gentrification started. Developers began to buy properties in the area, renovate the apartments in them and then either rent them for much more or sell them to the kind of affluent purchaser that could afford them. Property developers constantly flipped the buildings they owned, with Miriam’s building changing hands three times in two years.

The latest of them started renovating her building—putting up balconies, redoing kitchens and bathrooms—and offering the apartments for sale. Miriam’s apartment was bought by two lawyers and she was forced to move out. She tried to find another apartment in Kreuzkölln, but it was simply impossible—rents were so high. She went to the public viewings of a couple of apartments whose rents were still reasonable, but she was discouraged both by the unbelievably long queues of people waiting to view the empty flats and by the very poor condition they were in. She had no choice but to move out of Kreuzkölln.

Miriam asked a friend for advice, hoping for a brilliant suggestion. Ludwig thought for a second and then confirmed what was obvious. “You’ll have to do what Greta and I did. Move out of the area. You’ve visited us in Hellersdorf, it’s OK there and rents are lower than where you are now. Lots of people are doing it, I saw Heinrich there last week.” “Lower rents because nobody wants to live there,” replied Miriam. “That’s partly true perhaps,” replied Ludwig, “but there’s also quite a lot of choice, so it’s easier to find a place and much less stressful.”

That conversation had taken place 2 months ago, and Miriam reflected, it had indeed been much easier to find an affordable apartment than in Kreuzkölln, where it was more or less impossible. “Supply and demand—that’s how the market works,” she said to herself as she parked her scooter and prepared to do some shopping.

2.1 Needs

2.1.1 Shortage of Resources

Business activity is driven by the tension between unlimited needs and the fulfilment of these needs on the one hand and the limited supply of goods on the other. A **need is the perception that something is lacking,** and the ultimate goal is the relief of this feeling. This perceived lack is the result of the inaccessibility of a good of a certain kind, quantity and/or quality. The reason may have natural origins or be influenced by others—we eat when we feel hungry and we buy new clothes to look fashionable. From the standpoint of economic efficiency and effectiveness, limited goods must be distributed in such a way that the largest possible fulfilment of needs is achieved.

Goods provide the means necessary for need fulfilment. All goods that are limited in quantity but suitable and available for the intended purpose are **economic goods**. These include tangible goods such as land, buildings, machinery, office equipment, tools, raw materials and supplies as well as intangible goods such as laws and services.

In practical terms only economic goods exist, for what were traditionally seen as **free goods,** such as air and water, are now being used as economic goods. Space and time are scarce goods, whose combination with factors of production and other goods is not straightforward. Valid information and relevant data, the creativity of employees, the willingness of negotiating partners to compromise and the attention of television viewers are also scarce goods. If it is not possible to increase the amount available of these goods, they have to be used more efficiently and more effectively so that needs can be met.

2.1.2 Types of Needs

When individuals or societies have needs, there then exists a demand for goods to satisfy them, but the argument that total needs are the sum of active demands **within the market** is unconvincing, because by only considering needs that can be satisfied by buying something, it ignores needs that can be satisfied **through non-market activities**. These are activities that we do not directly pay for, such as activities that take place in households, government offices or in courts or volunteer services. The creation and delivery of such services must also be efficient and effective.

We also do not see it as helpful to classify needs as **objective** and wants as **subjective**. Should one nevertheless wish to do so, one can understand needs as relating to a physical and/or psychological state, and wants as being an economic category.

Given the nature of humans as individual and social beings, we can identify **individual and collective needs**. The former are felt personally, the latter by society. To which category particular needs fit is not intrinsic to them, but rather depends on the characteristics of the state, law, civil society and the environment where the need is being experienced. How the need is characterised is significant from an economics point of view because it determines the way in which the need will be met. Taking education as an example—everybody needs to be educated so that they can live and work. Society also has a need for education, because if employees do not have the appropriate skills and competencies, nothing can be produced. In this case, individual and collective needs are met through the provision of education by the state: individuals themselves do not have to find teachers to educate them.

The characteristics of governmental, legal, social and economic frameworks originate in the **need for organisation** that develop when people come together in communities and societies. **Needs for controlling** develop to deal with coexistence itself should function; they are concerned with how things can and should run and take the formal form of laws, rules and regulations and the informal form of expected patterns of behaviour.

Needs can also be differentiated on the basis of whether they are those of economic entities, local, regional, national or supranational economies or the global economy. When compared to the needs of individuals, **institutional and societal needs** do not arise from the feeling that there is a lack of something, but from a more rational process that determines as objectively as possible that something is lacking, with the objective of obtaining what is missing. Businesses and other types of organisation have human resource needs, capital needs, needs for space, needs for information etc. In local economies there is a need for school places and jobs, property, cultural facilities, transportation, etc. Within regional economies it is necessary, for example, to establish plans for meeting the needs for hospital beds, the requirements for higher education, energy needs and the disposal of hazardous waste. Needs that must be met at the level of national economies include the money supply, pensions, telecommunications, transport and so on. A supranational economy such as the European domestic market has needs like tax rate harmonisation, compensation funds for the agricultural sector and common legislation regarding the freedom to set up subsidiaries and freedom of services in member states. In the global economy there is a need for food and medical care in developing countries, disarmament, global postal services etc. Figure 2.1 provides examples of needs at the various levels of the economy.

The definition of needs and the gathering, appraisal and satisfaction of these needs—no matter at which level the need exists—is done by economic entities, be they companies, universities, public authorities or international organisations. Needs can be obvious, but often they are not so a wide range of instruments exists to determine which needs exist. A company, for example, can carry out an analysis of its weaknesses which will, of course, depend on the company's goals: if customer service is to be improved, then any informational, human resource or financial limitations should be identified and, where appropriate and possible, removed. Wherever needs are established—in individual economic entities or at higher levels of the economy—management activities should follow.

2.1.3 Need Creation

It is not easy to answer the question of whether a need actually exists or not. Indeed, it is often impossible to draw the line as to where a vital need begins and ends. When one considers physical needs such as food, clothing and shelter, it is necessary to take into account the various forms these take, bearing in mind socio-cultural considerations that influence what the minimum for existence is, and what this means in terms of quantity and quality. Oranges, radio, television, refrigerators and mobile phones are part of the basic lifestyle for all but the very poorest in affluent societies, whereas in other societies such items count as luxuries.

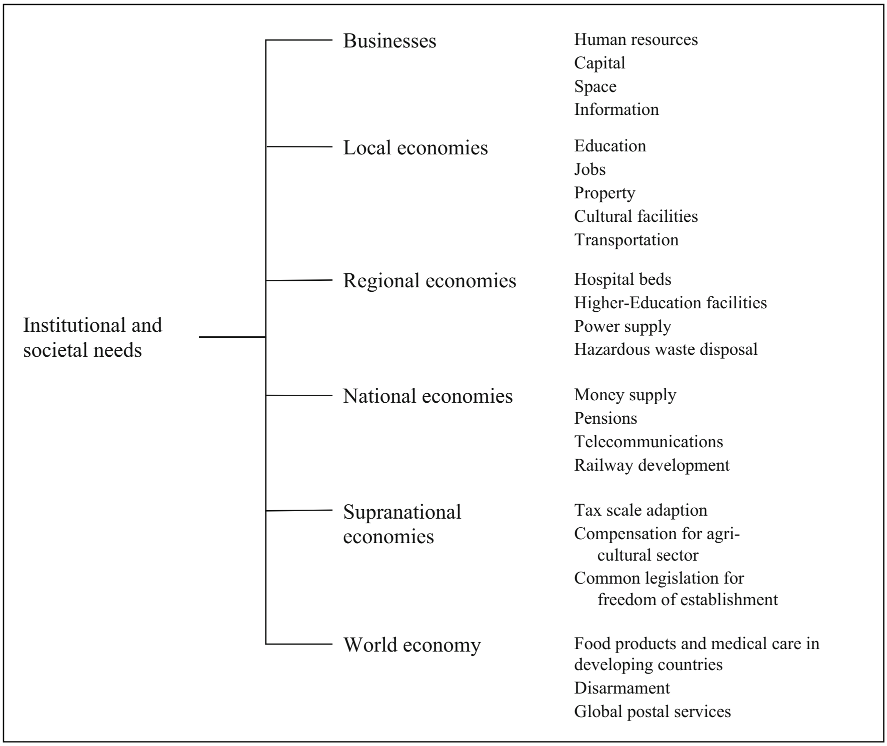


Fig. 2.1 Examples of needs

Even within an affluent society distinctions can be made: some people feel they must have a BMW or Mercedes while others are happy to take the U-Bahn even if they can afford an expensive car. **Does an individual really know his or her needs?** Are an individual's needs for things like education, culture, cleanliness, sport, mobility and travel real or imagined? What is a true need and for whom? Who stimulates true and false needs?

We cannot afford to satisfy every need, either as individuals or as a society, so it is necessary to prioritise them. How societies prioritise needs is often a political decision, but individuals have to prioritise for themselves. Of the many approaches that have studied how we prioritise, Adam H. Maslow's (1908–1970) original hierarchy of needs model is one of the most widely known. He distinguishes primary physiological needs (shelter, clothing) from secondary needs of safety (health, financial security), belonging (friendship, family), esteem (being respected) and finally self-actualisation (achieving one's full potential). He argues that individuals begin by satisfying needs at the lowest level, and then move to the next level after all needs at the lower level have been met. The model has been criticised because Maslow suggests that people do not satisfy needs higher up in the pyramid until all needs below have themselves been met. In addition a single item can meet needs at more than one level—a T-shirt with the name of a band on it satisfies physiological needs, but also shows other that the wearer is a fan of that band, which is meeting a social need. Nevertheless, the model has many strengths and is widely used.

There are of course other relationships at play here. How can the various prioritised and coexisting individual needs within the hierarchy be met at the general level of the economy and society? Need creation and need fulfilment may, for example, occur because a company wants to make a profit or a political party wants to win an election. An economic challenge is to align **personal needs** (of employees, customers, voters) with **institutional needs** (of a company or political party). Need creation is in effect demand creation, and represents a way in which individual and institutional needs can be harmonised.

Need research is concerned with the discovery and creation of needs and their fulfilment. The tools of need research have in common that their first task is to meet the need for information. The following **five instruments** are used in internal and external **need research**:

- A vulnerability analysis can help determine weaknesses in companies, individuals, different areas of business operations, facilities etc. This is a part of a SWOT analysis as discussed in Chap. 9.
- Market research is concerned with finding out about supply and demand, consumer preferences and motivations etc.
- Empirical economic and social research can be used for example to identify the positions, bargaining power and behaviour of negotiating parties so that their room for manoeuvre in pay negotiations can be assessed.
- Electoral research and political behavioural research aim to understand citizens' political perceptions, attitudes, motives and wishes.
- Legislative and impact research (e.g. on taxation) helps determine which legal and administrative measures are necessary so that specific public duties can be fulfilled.

2.2 Fulfilment of Needs

2.2.1 Types of Goods

The production, supply and use of goods and services to fulfil needs are the result of economic activity. Goods used to produce other goods are **factors of production**. Such factors form the **input**; they are then combined (production), and this process results in an **output** (products and/or services). These outputs may be used immediately or stored for later use. **Diseconomies** are to be avoided—machines that are not being used, defective products, waste or other harmful emissions are examples. Management's goal for the production of goods is to produce value-added goods and to avoid the production of diseconomies. Added value is in itself a good when this characteristic fulfils a given need. The fundamental characteristics of the good

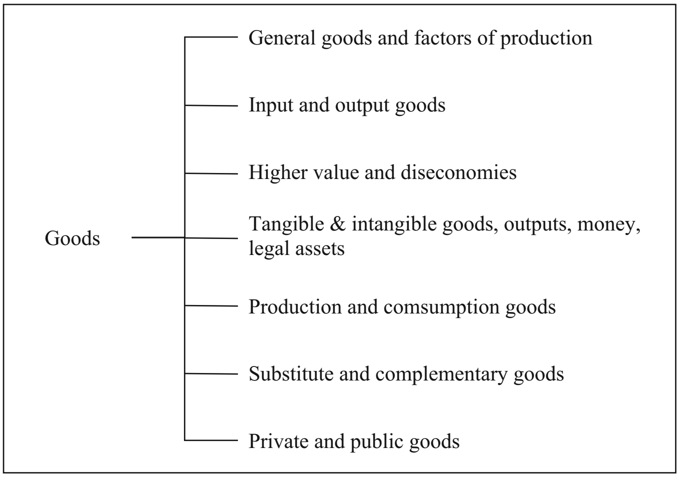


Fig. 2.2 Typology of goods

itself need not change, but the water that a consumer receives in a bottle has added value due to its transportation and the fact that it has been bottled adds convenience.

We said that goods are used, but it is important to keep in mind that goods do not disappear once they have been used up. As physicists tell us, nothing physical in our world simply vanishes, so consumption is itself in effect part of a process of transformation. The book you are reading has been printed and is an input; you are reading it, transforming you (we hope!) into a more knowledgeable person; and if you recycle the book, it becomes paper waste (output), which itself is the input for recycled paper, and so on. In terms of ecology, the transformation of a good from having higher value to having a lower value takes place when the resources that have been transformed into a product "vanish into thin air".

A classification of goods is shown in Fig. 2.2.

Material goods are tangible and can be stored (frozen pizzas, laptops), unlike **intangible goods** such as a haircut. In addition, there **monetary assets,** as well as **legal assets** (like patents, copyright, contracts etc.) and **environmental assets** (climate, sun, lakes, forests etc.).

Goods can be classified based on their use. There are **production** and **investment goods** and **commodities and consumer goods**. Such classifications can be helpful in accounting, as when determining requirements for capital on the one hand, and amortisation and depreciation of goods on the other hand. Consumer goods can be further classified, depending on their use, into consumer durables and non-durable goods. Economists also talk of **substitute goods** (e.g. car and tram), where either one can be used, and **complementary goods** (e.g. printer and ink), where both goods are required to achieve the desired goal.

Based on the differentiation between individual and collective needs, we can identify **private goods** and **public goods**. In essence, private goods fulfil individual needs, whereas public goods satisfy collective needs. Figure 2.3 illustrates how

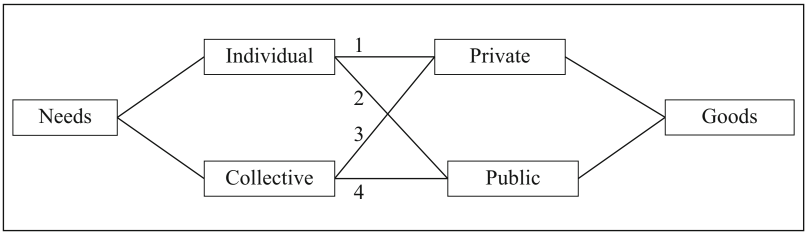


Fig. 2.3 Four alternative methods of need fulfilment

these types of good complement each other. Private goods include products from the local bakery that will be used to fulfil the requirements of a single person's breakfast (no. 1). In contrast, public goods such as fire services, coast guards and police fulfil a collective need for security and protection (no. 4). As there are many points at which these types of goods overlap, it is sometimes difficult to draw a clear boundary between them. There are of course individual needs that are fulfilled using public goods, such as the demand for cultural activities that is met by publicly owned theatres (no. 2). Private goods can also be used to satisfy collective needs. Self-employed physicians provide emergency medical services, for instance, and car workshops check the roadworthiness of cars (no. 3).

In the first instance it depends upon time and place as to which the best goods are to satisfy specific needs. The **Theory of Public Goods** deals with the characteristics that distinguish public goods from private goods. The rationale for having public goods dates back in public finance literature to Richard A. Musgrave (1910–2007) who was among the first to introduce the concepts of non-excludability and non-rivalry. Non-excludability refers to the financial or technical impossibility of preventing individuals from consuming the good—anyone can watch a fireworks display. Non-rivalry indicates that the use of a good by one individual does not prevent another from using the good—only one person can wear a shirt, but anyone can use a park. If both characteristics are present, this is a **pure public good**, such as national defence. This is different from **merit goods,** which are goods that the market does not offer or cannot provide in sufficient quantities, such as educational services, basic research, environmental protection agencies and medical emergency services.

We have so far discussed goods with a focus on their characteristics; to this we can add a **Theory of Public Tasks** that centres on institutions, where the central questions are: which public tasks develop to deal with need fulfilment? And which economic entities can best carry them out? The starting point for public tasks is the public interest, which political parties, interest groups, opinion leaders and others all seek to identify. From here—sometimes contradictory—political objectives are set which represent the desired situation. We are talking here about a complex set of goals, which may have to do with any one or more of such areas as education, energy, finance, health, youth, communities, small businesses, security, social issues, national issues, environment, defence, economic issues and the political objectives of various legislative bodies, governments, ministries or councils. Public tasks then develop out of these political objectives and they lead to actions; the tasks are expressed in the form of laws, acts, decrees, charters and other forms of legislation, government statements and programmes, legal decisions or the decision of those who carry out public tasks. We see the end results in educational, research and defence programmes, for example.

The two central aspects to public tasks are their **definition** and **fulfilment**. As already seen in the discussion of the four alternative methods for need fulfilment (Fig. 2.3), public tasks need not necessarily be administered or carried by public bodies. Other economic agents may also play a role—from households who look after their own children and non-profit organisations that act as broadcasters to companies that provide transport services. What they do and how they do it depends on how the tasks are defined, how they are compensated and also on the nature of the contract. The economic agents have to organise themselves so they can carry out the tasks for which they are now responsible, which means that they must plan the procurement of the necessary resources, the details of the product and/or service they are to provide, timelines and so on. Then based on these considerations, they plan and carry out their own internal operations.

Figure 2.4 details how public tasks become operational activities, showing the feedback loops which are always in place.

The circumstances in which these activities take place and the ways in which the stakeholders act greatly influence whether or not needs are fulfilled in a manner that is efficient and effective. Typically, the work involved in public tasks is shared between **many participating parties**. Who is involved in determining the necessary characteristics, quality and quantity of national or local tasks? Who checks that the tasks are being carried out and makes sure that all is well from the organisational and financial perspective? Doing all this is the responsibility of parliaments, local councils and their representatives, ministries and supervisory authorities (e.g. a local government responsible for waste disposal), the funding bodies (such as an insurance company that is entrusted with the financing of long-term care), the economic entities that are actually performing the task, public auditors and courts of justice.

These issues do not play much of a role in **privatisation discussions**, being often simply ignored from an ideological perspective as discussion focusses more on the privatisation of public tasks and less on the transfer of task fulfilment responsibilities to the private sector. **Public-Private Partnerships** exist where the tasks themselves remain within the public sector but are executed by private companies on behalf of the public sector. We see this in areas like education, waste management, health services, postal services, social care, transportation, housing and so on, where certain public tasks are outsourced to private partners who are responsible for carrying them out in a satisfactory manner in return for compensation. The other aspects of these tasks, such as political and administrative planning, supervision and controllership—all of which have costs associated with them—remain the responsibility of the public authority.

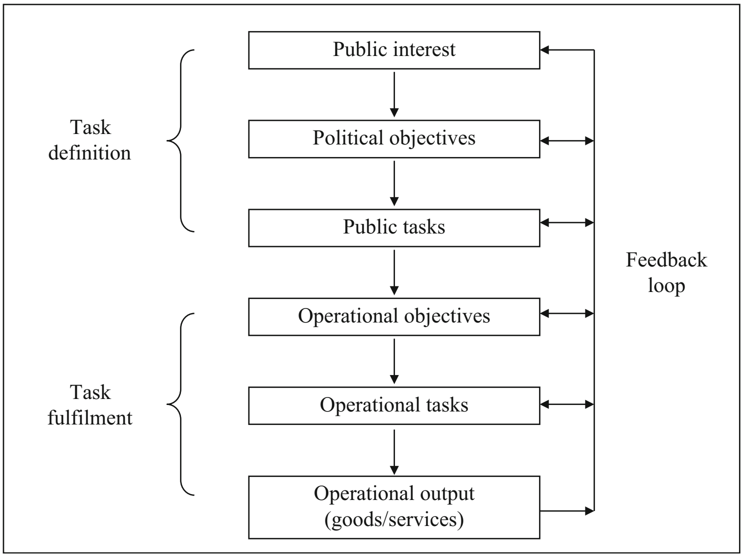


Fig. 2.4 Public tasks and operational activities

2.2.2 Provision of Benefits

Based upon the **Theory of Value** as outlined by Adam Smith (1723–1790) and other classical economists, a given good has both an exchange value and a use value. The exchange value, in essence the price, is based upon the costs required for production of the good. The exchange value for water is small and this is reflected in the price. On the other hand, its use value is very high. The difference between these two values cannot be explained by trying to establish the exchange value objectively so we also have to take into account the subjective value that the consumption and enjoyment of a good brings—this is **the benefit**, which **is the value of a good for satisfying needs**. Goods should therefore provide benefits. Just as needs cannot be described precisely, it is also difficult to provide a precise answer to the questions of which goods provide which benefits and to which extent. In addition, benefits depend upon circumstances, on time and place—a glass of water is worth more to a person lost in the desert than to someone in a bar. Quantitative and qualitative aspects of benefits of course also vary from person to person; a good which appears useful to one person (a cigarette to a smoker) may be perceived as dangerous by another, and this makes it problematic to assert that a good has an overall benefit just on the basis of benefit it has for an individual.

Other theories of value have been developed since Adam Smith, of course. Representative of the older ones is the **General Theory of Marginal Utility** developed by Hermann H. Gossen (1810–1858). His first law states that the consumption of an increasing quantity of a good creates a decreasing supplementary benefit (marginal utility) and may indeed create an aversion to the good. For example, if you are thirsty, you drink water so that you are no longer thirsty; the first few sips have a greater benefit than later sips, and once you get full, drinking more water will make you feel ill. His second law focusses on the maximisation of utility rather than on measuring utility in a numerical sense and according to it economic agents spend their income on various goods in order to maximise utility. For example, if a person has 200€, she will allocate the money among her various wants in a way that produces the maximum utility given her resources, taking all wants into account. Each of the goods provides her with the same amount of marginal utility.

The somewhat more recent **Ordinal Utility Theory** was developed by Vilfredo Pareto (1848–1923). Here the form of utility is of greater interest than the degree of utility. There are many possible bundles of goods with comparable benefits, and consumers rank not the individual goods in the bundles, but the bundles themselves.

A less theoretical but more practical approach suggests that purchasing decisions and voting (and other such behaviours) can serve as **indicators of benefits**. The first of these is related to market processes, and the others to decisions made by the majority. Analysing behaviour as an indicator of utility should be done with caution, as the analysis must be done in terms of who or what benefits and who or what is hurt, i.e. whether or not a person or thing is capable (financially or technically) of providing a benefit or preventing damage. When there are several possible ways of generating benefits, the most efficient and effective alternative should be chosen, but this in turn does not mean that efficiency and effectiveness should be the only measures.

2.2.3 Optimum Welfare

Individual economic agents are economically active in order to satisfy their own needs; ideally, this coincides with the satisfaction of others' needs. This individualistic (as well as liberal) concept of market economy was described in Adam Smith's "The Wealth of Nations", written in 1776. To summarise Smith's work: **self-interest is the driving force behind the common good**. He argues that each individual ought to act in enlightened self-interest and that as long as this happens in a framework of basic rights and liberties established by the state, the "invisible hand" will create general prosperity.

Smith was one of the fathers of economics, and since his time this social science has developed a theoretical construct in the search for the common good: the welfare of a country, region or community is maximised when the **social welfare function** takes its greatest value. The social welfare function allows us to consider what social conditions should look like, and its value is dependent upon the extent to which society's social welfare objectives have been met. There are of course limitations: all societal objectives cannot (yet) be determined and the extent to which objectives have already been met is also difficult to establish. One way round these difficulties is to view economic welfare as being dependent upon the quantity of goods available to society and how they are distributed.

The establishment of an **economic welfare function** is not easy because the total welfare function can only be partly derived from individual welfare functions. Kenneth J. Arrow (1921–2017) was one of the first to point out the difficulties implicit in aggregating individual preferences or group preferences to generate a consistent total welfare function. Arrow demonstrated the impossibility of determining a consistent order of preference from majority decisions. This can be illustrated using a simple example. Three groups are sitting in a local pub. They are trying to decide how to spend the rest of their evening. Their preferences are as follows:

Group I

Most preferred: (A) watching football on television
Moderately preferred: (B) watching a televised boxing match
Least preferred: (C) not watching television.

Group II

Most preferred: (B) watching a televised boxing match
Moderately preferred: (C) not watching television.
Least preferred: (A) watching football on television

Group III

Most preferred: (C) not watching television.
Moderately preferred: (A) watching football on television
Least preferred: (B) watching a televised boxing match

The barkeeper would like to end the disagreement between the three groups. He can offer two alternative solutions:

Solution 1
A choice between football (A) and boxing (B)—groups I and III would prefer football to boxing.

Solution 2
A choice between watching football (A) and not watching television at all (C)—groups II and III would prefer not watching television.

Combining these two results gives the following order of preferences: (1) no television, (2) watching football, (3) watching the boxing match.

To ensure that the best decision has been made the barkeeper allows the groups to vote a third time:

No television (C) versus the boxing match (B)

One might assume that the greatest preference would be for not watching television (C), however the results show something different. Groups I and II

Fig. 2.5 Aggregating individual preferences

	Order of preferences		
Group I	A > B > C		
Group II	B > C > A		
Group III	C > A > B		
		For:	Against:
1st Vote	A : B	I & III	II
2nd Vote	A : C	I	II & III
Expectation	C > A > B		
3rd Vote	B : C	I & II	III

would prefer the boxing match (B) over not watching television (C). This is contrary to expectations.

Figure 2.5 illustrates the impossibility of aggregating individual preferences to an uncontested total welfare function:

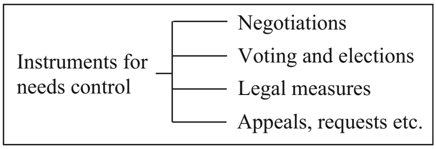
Individual welfare functions in a pluralistic society are either very different from each other or unknown. It is, however, possible to make a statement about economic welfare without having to use a welfare function. It is enough to assume (a) that a worthwhile goal is to increase the quantity of all existing goods, and (b) welfare can no longer be increased once an increase of the welfare of one individual serves to decrease the welfare of another individual (this is the Pareto criterion).

In the economics literature there is discussion about the satisfying of (marginal) conditions guaranteeing welfare maximisation or optimisation. The argument is advanced that economic measures which improve the situation of an individual to a lesser (marginal) or greater (total) extent should implemented as long as this happens without worsening the relative situation of another individual. The **compensation principle** captures this idea: the harm caused to the disadvantaged individual should be compensated for by the individual who gains an advantage. Benefits must outweigh costs.

2.2.4 Needs Control

There is always a tension between needs and the goods that satisfy them, i.e. between demand and supply. Unlimited needs are faced with limited goods, so we need to take needs as the starting point for resolving this challenge. It is necessary to set priorities regarding the type, quantity and quality of needs, and their distribution should also be considered. We discussed above the different types of need and their nature leads us to conclude there are two possibilities: global need management or a more differentiated one. These possibilities match those in other spheres—in the political-economic context one refers to micro, meso and macro control, companies have strategic and operative planning, and there are overall budgets and budget line items.

Fig. 2.6 Instruments for needs control



Need control is necessary in economies when the “free play of forces” has a negative effect on welfare—market failure, cutthroat competition, exploitive monopolies, no liability for product defects, poorly managed waste disposal, negative external effects etc. When the market is not capable of acting as a control mechanism, there are four instruments of control:

- Negotiations: for example, when employers and employees agree labour relations contracts about compensation; an industry association voluntarily agrees to actions that will be taken by their members, as when an automotive producers body sets up processes that their members must follow for the disposal of old cars.
- Voting and elections: in elections voters make choices based on the economic concepts of the parties; a regional assembly decides how much to invest in hospitals.
- National, regional or local regulations with requirements and prohibitions that set binding specifications.
- Appeals and calls for particular behaviours in order to reduce or prevent desirable needs, such as campaigns to encourage people to stop smoking.

The instruments are shown in Fig. 2.6.

Comparable instruments are available for **individual companies**. The concept of the profit centre creates an internal market to which the needs for input factors are initially directed before the company releases anything on the external market. In-house there are such needs as budget funds, diversification, market research, equipment maintenance and so on—these are managed via agreements, votes (e.g. on the supervisory board), specifications, directives or non-binding appeals to goodwill, and this is always done with a view to achieving the relevant goals. Companies that are committed to shareholder value meet in the first instance the demands of the shareholders for higher share prices, while on the other hand, community-based or cooperative enterprises influence the needs of often economically disadvantaged parties such as the unemployed, trainees, the disabled, children, the ill, individuals requiring care, recipients of social assistance and so on.

2.3 Economic Systems

The **economic system** is the way in which economic life and its related activities are organised in a national economy. We can differentiate between models of economic systems on the basis of the interdependencies and transactions between the various system elements. When analysing a system, we often use the term **economic order**; how it is organised is the outcome of the **regulatory process**. This regulatory process is steered by politics, and among its tasks is determining the rules for competition among economic actors. At the same time, processes are put into place that deal with the economy and growth and in addition, there are structural policies that are concerned with the various sectors of the economy

2.3.1 Market Economy

Characteristic of the market economy as an economic system is that the providers and buyers of goods and services are autonomous in their decision making and are in a state of competition with each other. The term **competition economy** can also be used; this emphasises the fact that providers strive to make a profit and are involved in price competition. We talk about the **private sector** when market participation is based on possessing private property. A **free market economy** exists when the providers and buyers enjoy complete freedom in making decisions such as choice of profession, school or place of work; when there is freedom of trade, there exists the ability to set prices and set up subsidiaries, and there is also freedom of association and of contract. An **open market economy** exists when these freedoms extend beyond a single national economy; relevant freedoms in this context include the free movement of goods, services and capital with other national economies. Cornerstones of an open market economy are the principle of most-favoured-nation, no trade restrictions and a ban on discrimination. Since the 1970s most countries have followed the path of liberalisation in order to create such an economy—opening up markets, introducing processes of deregulation (i.e. a reduction of bureaucracy and regulatory overhead), integration, harmonisation, establishing external trade initiatives, and cutting back subsidies, taxes and duties.

If an economy is allowed to operate with very few restrictions it is said to be extremely liberal, reflecting a "laissez faire" philosophy, which means that just about anything is allowed. This can lead to economic anarchy and social chaos, with few winners and many losers. It is generally agreed today that a firm hand is needed to establish ways in which to protect existing freedoms, meaning that the preferred alternative to a completely free market (which has never existed, even during Victorian times), is a **mixed market economy**. Such an arrangement is based on economic actors enjoying fundamental freedoms in their relationships with each other, society as a whole and the natural environment, but with some restrictions, the extent of which is always a matter of debate between different interest groups. In the search for finding the correct balance, many advocate "more market and less state", or "as much market as possible and as little state as necessary". There is a continuum; the United States economy is organised on the basis that the state should play as small a role as possible, while the state is much more active in the Scandinavian countries, for example. Some people call for social justice or emphasise the boundaries of growth as they argue that the economic order should emphasise social justice or sustainable development. These demands can be met by organising economic activities so that one of the following emerges: a **social market economy** (such as in Germany), an **ecological market economy**, or, combining both aspects, a **socio-ecological market economy**. These are theoretical constructs and rarely found in practice, but Costa Rica could arguably be said to have more of an ecological market economy than other nations, while Denmark has more of a social market economy than, say, Australia.

It is of vital importance to be aware that the market—within the constraints established by governments or similar bodies at the national and international level—determines how the goods that are produced are distributed to economic agents, and this in turn determines how income is distributed. The state and the many public authorities and institutions create the structures in which the market operates, decide on the extent of competition and intervene (or not) in times of market failure. Among the many areas of activity where they are active are promoting and subsidising research and technological development, supporting business start-ups, developing policies for industrial sectors and generally encouraging businesses of all kinds in all areas of the economy in many business activities. States make long-term plans for their economies, setting goals and priorities. In some economies, the state is less directive about what it wants companies to do (eg **planification** in France), while **interventionist states**, as Japan is argued to be, are more directive.

In a **socialist market economy**, decentralised economic entities drive supply and demand, but their room to manoeuvre is significantly restricted. Private ownership is limited in its extent, being found mainly in households' consumption and living arrangements and small businesses although there may also be a degree of private ownership of medium-size companies. The must usual form of ownership in agriculture are cooperatives. Companies in the coal and steel, health care, and transportation industries are generally owned by socialist market states, as are banks and insurance companies. The ratio of expenditure of state owned and run companies and bodies compared to the gross national product is very high (70–80%). Nevertheless, it is still essentially through the mechanism of the market that economic activities are coordinated. The former Yugoslavia had such an economic system.

Figure 2.7 summarises the different types of market economy.

2.3.2 Planned Economy

In contrast to a market economy, a planned economy is an economic order in which the objectives and strategies, structures and processes of a national economy are determined by one or more central authorities. The economy is steered through plans, which generate norms and targets that must be met by the actors in the

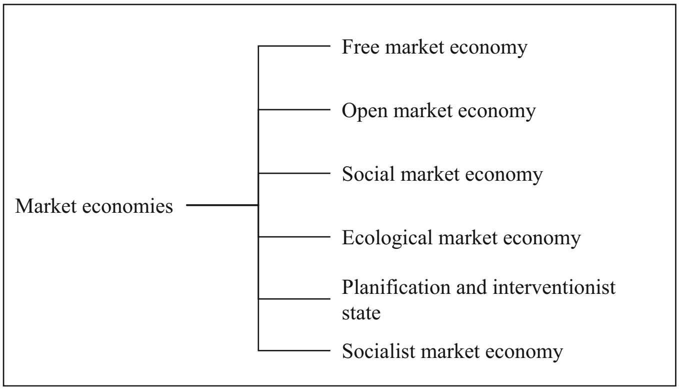


Fig. 2.7 Types of market economy

economy. We can distinguish between **partially** and **totally planned economies,** depending on whether the planning system concerns itself only with individual sectors or regions or the entire national economy.

Another classification of planned economies is based on the extent to which central bodies provide direction and establish targets. In **economies with indicative planning**, the state does not compel, but uses its influence to direct behaviours and actions by economic entities, while in **command economies**, central state bodies produce detailed plans that are binding. Planned economies do not require socialism or communism to exist. Both of these political systems, where private property plays a subordinate role, take advantage of planned economies, but it is theoretically possible for a planned economy to exist in an economic order with private property.

A pure planned economy is as unfeasible as a pure market economy. The centralised directives and obligations in a planned economy must allow for an element of individual freedom in economic activities. In a **mixed planned economy**, small scale individual private business activities are possible; small businesses producing tangible and intangible goods or selling them to consumers and other businesses can exist, as can small scale farming. This was the case in the German Democratic Republic and other countries to the east of the Iron Curtain.

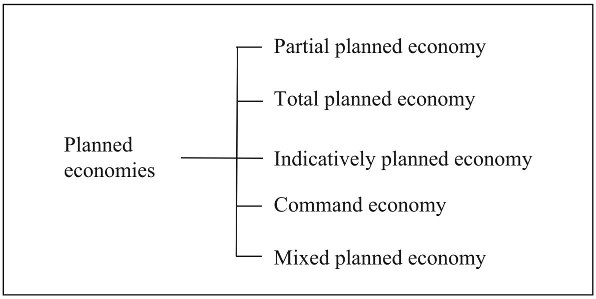
Figure 2.8 illustrates the different types of planned economy.

2.3.3 A Third Way?

Market and planned economies represent the extremes on a continuum of ways in which economic activities can be ordered in a society. Many have tried to find a **third way** which would combine the advantages of these economic systems while at the same time avoiding their disadvantages.

Over time, the following advantages of **market economies** have emerged: they encourage a strengthening of individual initiative, commitment, motivation and

Fig. 2.8 Types of planned economy



personal responsibility. They promote competition and a willingness and ability to react to the market. They lead to the production of cost-effective goods, high productivity, and these in turn contribute to high incomes and a generally high level of satisfaction of needs. In short, market economies produce affluent societies. Their disadvantages are clear. Long-term recessions and costly economic crises, destructive competition, mass unemployment, extreme economic disparity, social tension, unsatisfactory public services and a low level of public and community spirit are very frequently found.

Planned economies too have their advantages. They offer the standardised provision of public services, a high degree of manoeuvrability which allows them to react quickly to emergency situations (man-made or having natural causes), prevent unnecessary production (e.g. of luxury items) and consumption of goods (through rationing). On the other hand, there is a significant amount of evidence of problems (not that some of these problems cannot be found in market economies, but not to such a great extent). Their bureaucracies are complex and sluggish, advantage is taken of the weaknesses in their administrations, corrupt officials, an unwillingness to take responsibility, and low entrepreneurial spirit and attitudes of dependency on the state. The goods tend to be hard to differentiate from each other and not available in the quantities needed. Labour as a factor of production is very strictly controlled, meaning that there may be no freedom to choose a profession and no freedom of association, of contract or movement. Capital may be poorly invested and other serious mistakes made because the central authorities themselves make errors.

The third way would be a combined market and planned economy. As desirable as this may be, it is not even theoretically possible because a given economic system has fundamental characteristics and in the case of planned and market economies these cannot coexist because the way economic activities are ordered is based either on people being free to act in the market or on their following plans that have been established by a central authority. Mixing the two is possible: a market economy can have elements of a planned economy and vice-versa, but in each case, the underlying order remains unchanged. Market economies dominate in the twenty-first century, and in the next section we discuss their most important features.

2.4 The Economic Constitution

2.4.1 The State

The economic constitution is based on all the laws and regulations that relate to business and these determine the ways in which the various actors in the economic system interact; the central role of the state in developing and setting standards and norms that determine how the economy works is evident. The systems that coordinate economic activities are the outcome of the complex relationships between the form of the state, state authority, state territory, state sovereignty and powers, political parties and lobby groups, all of them being influenced by the power of the media. The most appropriate option for a market economy is a liberal state because it limits government authority and emphasises individual freedoms, whereas an authoritarian type of state is most appropriate for a planned economy, as it possesses extensive authority over economic entities.

2.4.2 The Legal System

The legal system of a state determines the **principles of the rule of law** on which the state bases its actions. Under a liberal rule of law, paramount are the guarantee of individual freedoms and human rights, the protection of minorities, the prevention of the misuse of power through a balance of powers, an administration that acts lawfully, equality, the assurance of legal certainty, the principle of proportionality and prohibition of disproportionality in actions, as well as the maintenance of rule of law by independent courts of justice.

The question as to whether and to what degree the legal system determines the way in which economic activities are arranged, thereby determining a particular economic system, must be examined on a case by case basis. There are three possible answers. The state's (written or unwritten) constitution can: (a) allow only the presently existing economic system; or (b) accept (as in Germany) that the current economic system is one of several possible systems among many; or (c) remain neutral so that a completely different economic system would be possible. It is important to remember that theory and practice need not be identical in this regard. The legal system must not be overwhelmed, and in any case it only provides a basic framework, because ethical behaviour, voluntary self-restraint and how we interact with others are also important factors in determining how an economic system functions in practice.

2.4.3 The Social Order

An economic order that is based purely on the mechanism of the market would be counter-productive because it would ignore the necessity of striking a balance between the interests between different groups, regions and generations, as well as between man and nature. The goal should be to achieve a fair and just society, a principle which is enshrined in Article 20 of the German constitution: "The Federal Republic of Germany is a democratic and social federal state." Article 20 has of course influenced Germany's **social market economy**, whose aims are to avoid the "ugly face of capitalism" (as former British Prime Minister Edward Heath (1916–2005) said) through a free, but still regulated, market economy which allows the economically disadvantaged to lead a dignified life and benefit from the general level of prosperity. The term *social* represents solidarity, the collective and pluralism.

The concept of **solidarity** is reflected in five social insurance programmes that were established by the German government. These contributions-based schemes are: public compulsory health insurance, long-term care insurance, unemployment insurance, accident insurance and pensions. There also exist other forms of social assistance for specific circumstances, such as family allowance, housing allowance, study grants and loans, as well as the reimbursement of school fees, tuition costs and school supplies. The rights of individuals within a system of social solidarity are matched to responsibilities; owning property brings with it obligations in respect of the social good. There is great deal of debate about the degree of solidarity. On the one hand there are those who advocate a system that provides only the most basic services in order to reduce the demands on it—and consequently costs—to a minimum. Others fear this will cause social unrest and lead to people not receiving the services they need.

Collectivity refers to a social partnership between employers and employees with such characteristics as free collective bargaining, employee participation (e.g. workers' councils, representation on the company board), wages being paid in the event of illness or injury, job security and protection against the unjustified termination of employment. German employers' bodies sometimes criticise this, arguing that small or struggling companies suffer through collective labour agreements that cover a whole industry. They also say that worker participation is a disadvantage for companies based in Germany. The success of the German economy would appear to indicate that this particular criticism is not well founded.

Plurality in the market economy seeks to ensure social equity. It emerges from the processes in which many and various industrial, non-profit and government organisations meet and deal with the interests of individuals and institutions. Plurality is achieved through the harmonious coexistence of small and large companies, mixed-economy and public enterprises of different sizes, with different legal forms, with different interests. The relationships and interactions between these economic actors are the basis of plurality.

2.4.4 The Ecological Order

A country will develop an **ecological market economy** when it sets the protection of nature and the environment as a priority and actually acts on it. The basis of an ecological market economy lies in what is to be found in the constitution, in laws, regulations and administrative rulings as well as in relevant court rulings. Environmental objectives, principles, instruments, departments, institutions authorised to act in this field and penalties for non-compliance all come from these sources.

Objectives Germany is one of the countries that has gone furthest down this path. Article 20a of Germany's basic constitution states, "Mindful also of its responsibility toward future generations, the state shall protect the natural foundations of life and animals by legislation and, in accordance with law and justice, by executive and judicial action, all within the framework of the constitutional order."

Significantly more concrete than these state objectives is the concept of sustainability. This approach was adopted at the 1992 conference organised by the United Nations in Rio de Janeiro but it has still not been ratified by every country. Sustainable development aims to satisfy the needs of the present generation without disadvantaging future generations. **Sustainable developmen**t can be achieved by:

- Exploiting nature and its resources with consideration for how it can recover and renew itself,
- Placing limitations on the use of pollutants based on how well they can be absorbed by the environment,
- Taking of risks in the use of technology in so far as these risks can be measured and managed
- Frugal use of natural resources.

Follow-up conferences have been held on a regular basis, with the most recent taking place in Paris in December 2015. At this conference, the twenty-first to have been held, 196 countries agreed to reduce emissions by reducing their carbon output "as soon as possible" with the aim of keeping global warming below 2 °C (although countries like the Republic of Seychelles wanted a target of 1.5 °C). Newly elected US President Trump (born 1946) announced in June 2017 that the US would withdraw from the Paris Agreement with the argument that ecological objectives conflict at least in part with objectives such as growth, mobility, competition and development. Our view is that nature is the good with the highest value of all and that the cost of using it should reflect the demands that are being made of it.

Principles The **precautionary principle** states that damage to the environment should be avoided as far as possible. For instance, a priority should be to avoid waste, but should this not be possible, the next best thing is to reuse the waste, and then—only if reuse is not possible—dispose of the waste using the most environmentally-friendly methods possible. The circular economy should be the goal of all actors in the national economic system. The **polluter pays principle** seeks to assign to those that (might) cause damage to the environment the costs required to avoid harm in the first place or to remedy the damage once it has occurred, even though it may be difficult to determine the origin of a problem or the extent of a given organisation's contribution to environmental damage. An

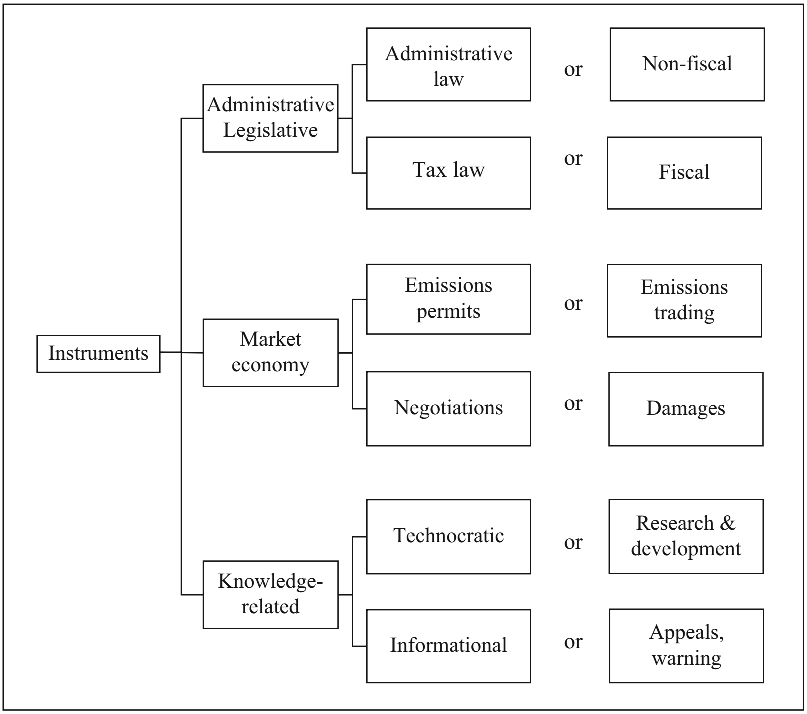


Fig. 2.9 Instruments for governmental environmental protection politics

alternative in such circumstances is to follow the **burden sharing principle**, where costs are met by the government using revenues gathered from the broader community. Under the **cooperation principle**, stakeholders are involved in the relevant processes with the goal of allowing wider input into decision making about environmental issues, leading to an improved quality of decisions and a broader consensus.

Instruments Administrative, legal, market-related and analytical instruments exist (see Fig. 2.9). Administrative and legal instruments include requirements and prohibitions in areas like production and emissions, in the shape of regulations, statutory processes and recommendations; court cases and damages are measures of performance (see Fig. 2.10). These essentially non-fiscal instruments are complemented by financial stimuli such as tax relief and deterrents (e.g. an eco-tax: see Fig. 2.11). **Market economy** instruments may also be used in this area, as shown by the example of the trading of emissions permits. For instance, emission rights for sulphur dioxide for power plants are traded on the Chicago commodity futures exchange and on the European Energy Exchange in Leipzig, Germany. Knowledge-related instruments may be technocratic (research and development)

Type of regulation \ Approach	Input-oriented	Output-oriented
Performance-related	Requirements & prohibitions concerning resources & production processes	Requirements & prohibitions concerning products
Financial	Financial levies & tax relief on resources & production processes	Financial levies & tax relief on products

Fig. 2.10 Administrative and fiscal law regulations

Eco-tax as a tax against pollution

Requirement: measurment of quantities of emissions (CO_2, hazardous waste, etc.)
Tax amount? High enough to ensure the desired environmental quality
Tax as revenue resource and instrument of control
Effect of tax on innovations and cross-border initiatives?
Not suitable for contaminated sites and incidents since they do not happen continuously

Eco-tax as an energy saving tax

Eco-tax on nonrenewable energies (like coal, petroleum, nuclear energy)

Eco-tax for financing groundwater protection

Tax collected based on industrial water consumption; subsidies for farmers in order to reduce nitrate fertilization

Fig. 2.11 Types of eco-tax

or informational (appeals and pleas for desired behaviours, warnings against unwanted behaviours).

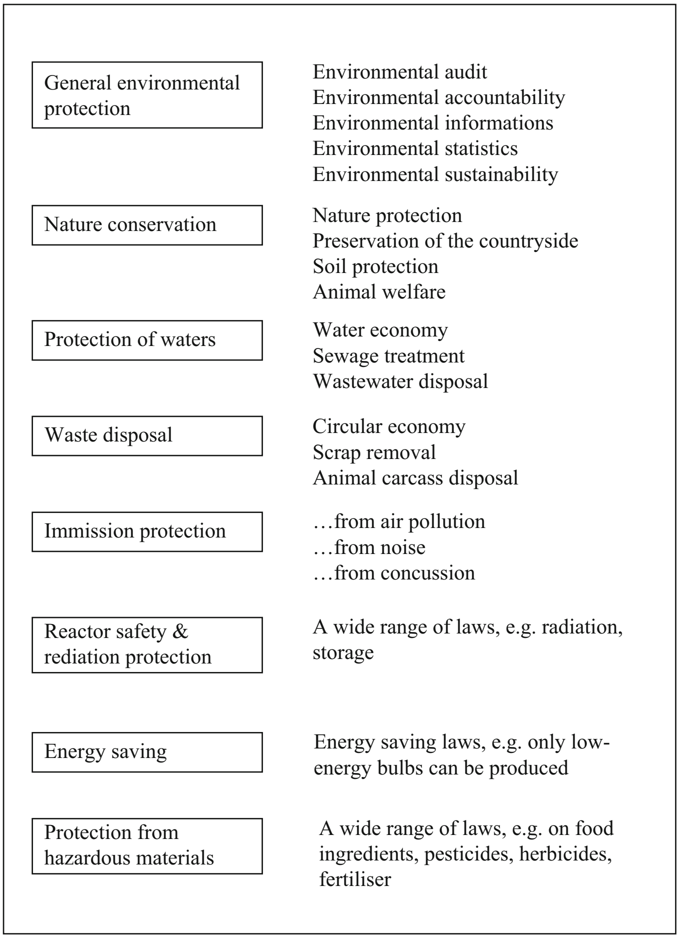


Fig. 2.12 Areas of environmental law

Scope Many areas of human existence and activity are affected: people, animals, plants; land, water, air and space; general environmental care, management of natural habitats, water protection, waste disposal, emission protection, nuclear reactor security, radiation protection, energy-preservation initiatives and protection from hazardous materials. Environmental legislation includes constitutional law, administrative law, eco-tax law, criminal law, civil law, international law and European environmental community law.

The most important areas of environmental law are illustrated in Fig. 2.12.

Responsible Parties Aside from various levels of government, most countries have national, regional and local environmental bodies. There are also special offices, institutes, state-owned and municipal enterprises that take on various environment-related tasks and responsibilities such as research, occupational health and safety inspection, food analysis, protection of natural habitats, water protection, land use planning and waste disposal.

Sanctions When the environment is damaged, the consequences are outlined in the relevant legislation dealing with liability and compensation; environmental crimes are punished with fines and/or imprisonment. Endangering the environment may itself be a crime regardless of whether damage actually occurs.

2.5 Examples and Exercises

Here we present two cases that demonstrate some of the concepts we have discussed. In the first case we show the relationship between national and international government actions and business decisions. It deals with how EU regulations have created a market on which firms can become active; the goal is to meet collective needs within social market economies. The second case deals with the provision of public goods and how this can best be organised, taking into account concepts like non-rivalry and non-exclusivity.

2.5.1 A Market-Based Instrument for Environmental Policy

Situation

In the Kyoto Protocol adopted in 1997, the participating States undertook to reduce or limit their climate-damaging greenhouse gas emissions. The European Union pledged to reduce its emissions by eight per cent by 2008 compared to 1990 levels. In 2012, the signatories agreed to extend the Kyoto Protocol to 2020. The European Union has announced a 20 per cent reduction in emissions by 2020. Even greater reductions were agreed at the Paris Conference of 2015.

The targets of reduced emissions must be achieved through national and EU instruments. The European Emission Trading Scheme (EU ETS) is the EU's central climate protection instrument for meeting the Kyoto Protocol. The basic idea of this trading system is based on Ronald H. Coase's (1919-2013) thoughts on the problem of social cost and targets the internalisation of external effects.

Solution

The EU ETS has existed since 2005 and includes the trading of certificates which allow their holders the emission of carbon dioxide. It is the first international trading system for emissions permits and is currently the largest. Some 12,000 companies from the energy and energy-intensive industries (e.g. steelworks, refineries) participate in the EU ETS, as well as around 2500 aerospace companies.

Principle of "Cap and Trade"

First, an upper limit is set as to how much CO_2 can be emitted at most. This upper limit, which is as narrow as possible, is the **cap**. The companies that participate in emissions trading as a result of the statutory provisions are then allocated a certain number of emission allowances from the cap; this number is based on Europe-wide rules of allocation. One emission allowance is equivalent to one tonne of CO_2. By limiting the available allowances, companies are given specific targets for the reduction of their emissions. The allowances are **tradable** and thus serve as a kind of credit note. By converting CO_2 into tradable credits, one tonne of CO_2 is given a concrete value and this value is determined by the market on which they are traded.

Every year companies have to surrender a number of emission allowances based on their actual emissions. If a company reduces its output enough that the amount of its actual emissions is less than the number of emission rights it possesses, it can sell the remaining emission allowances it no longer requires on the market. In the opposite case, it has to buy allowances to comply with its emission obligations. If the company does not meet these requirements, penalties are levied. These were initially 100€ per tonne of carbon dioxide; this number is adjusted to reflect increases in consumer prices. Companies that do not reach their goals must meet them the following year. A company can also purchase allowances on the market if this is less expensive than implementing its own measures for reducing CO_2. This also means that reduction measures are implemented where they make the most economic sense.

Example

Companies A and B emit the same amount of carbon dioxide and each has now to reduce its amount by 500 tonnes—a total of 1000 tonnes CO_2. Company A is able to significantly reduce its emissions by investing in modern technology but Company B is not ready or able to do so, so its emissions remain constant. As a result of emissions trading, it is more economical for company A to reduce its emissions of CO_2 by 1000 tonnes and to sell its unused emission rights for 500 tonnes to company B, which itself has not implemented any emissions reduction. In this way, the overall ecological target is achieved, since the total emissions of these two companies were reduced by 1000 tonnes CO_2.

Questions

- Company B is still polluting—is this ethically acceptable?
- What other ways exist that could get companies to reduce their emission of carbon dioxide?
- Should companies in developing countries have to behave in the same way?

2.5.2 Provision of Public Goods

Situation
A city council is planning a fireworks display to mark the end of a festival. The leader of the council has a degree in economics and decides that the principles of non-rivalry and non-exclusivity should apply to the fireworks display: She argues that the enjoyment of the fireworks by an individual spectator does not decrease even if another spectator sees the fireworks. Similarly, it is not possible to exclude people from viewing the fireworks.

The leader of the council has been provided with the following information:

- The cost of the fireworks is 100,000€.
- Each of the 100,000 inhabitants of the city is willing to pay 4€ to see the fireworks, bringing in 400,000€.

Since the benefits of the fireworks display are more than the costs, she decides to go ahead.

The issue: Who should provide the fireworks?

There are two alternatives:

(A) A private company could offer the fireworks and sell tickets for 2€ per person. This price is under the amount of 4€ that individuals are prepared to pay. However, no one would buy a ticket, since everyone could behave as a "free rider" and watch the fireworks for free.

(B) The city could levy a tax of 1€ each inhabitant, bringing in revenues of 100,000€. With this amount, the city could hire the private enterprise to arrange the fireworks. The inhabitants could enjoy the fireworks and enjoy a consumer surplus of 3€.

Questions

- Which alternative would you choose?
- There is a third alternative: the council could arrange the fireworks itself. What are the arguments for and against this?
- Do you think there are some public tasks that should never be carried out by private companies? Which ones?

2.5.3 MyCompany Project

Your fair-trade and vegetarian café is going to be supplying food and drink. As you start to think about your business plan, you realise that there are some basic questions that you need to answer.

- What needs are you going to be satisfying? Think about Maslow's hierarchy of needs—does an organic chocolate brownie satisfy only physiological needs? How can you find out about demand for your product and what consumers are looking for?
- What needs do you have in the cafe?
- What benefits are you going to be supplying?
- Your cafe is (probably) in a market economy of some kind. How are you as a business person running a cafe affected by the state? Could your type of cafe exist in a planned economy?
- The chapter discusses the ecological order. Which principles and instruments would apply to you?

2.5.4 Self-Test Questions

– *What is a need?*
– *What are the differences between individual and collective needs?*
– *What are examples of needs in local economies?*
– *What is Maslow's hierarchy of needs?*
– *Which instruments in need research do you know?*
– *What distinguishes private and public goods?*
– *What are substitute and complementary goods?*
– *What four methods exist for need fulfilment?*
– *What is the core of the Theory of Public Tasks?*
– *Which economic entities can carry out public tasks?*
– *What is Gossen's first law?*
– *Why is it difficult to aggregate individual preferences?*
– *What kinds of market economy are there and what characterises them?*
– *What are the advantages and disadvantages of a planned economy?*
– *What characterises the social market economy?*
– *Why can there never be a 3rd Way?*
– *What is meant by the concept of collectivity in the context of the social market economy?*
– *What are the basic objectives of the ecological order?*
– *Which principle is the eco-tax based upon?*