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## **Module**

### **Private households and consumption**

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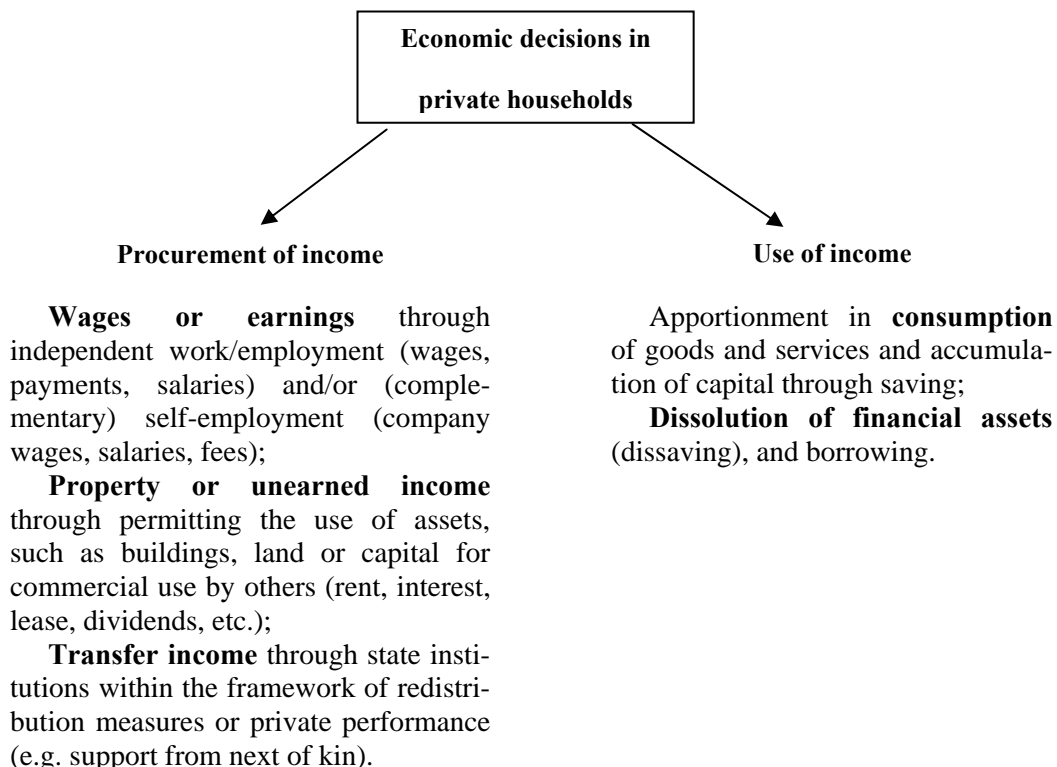
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## 1. Private households and consumption: an overview

In addition to registered business enterprises private households represent the second group of active participants in the market economy. They fulfil the following functions in a national economy:

- as consumers of goods produced domestically and abroad;
- as suppliers of production factors (work, capital, real estate or property and raw materials);
- suppliers and consumers of capital (saving and dissaving).



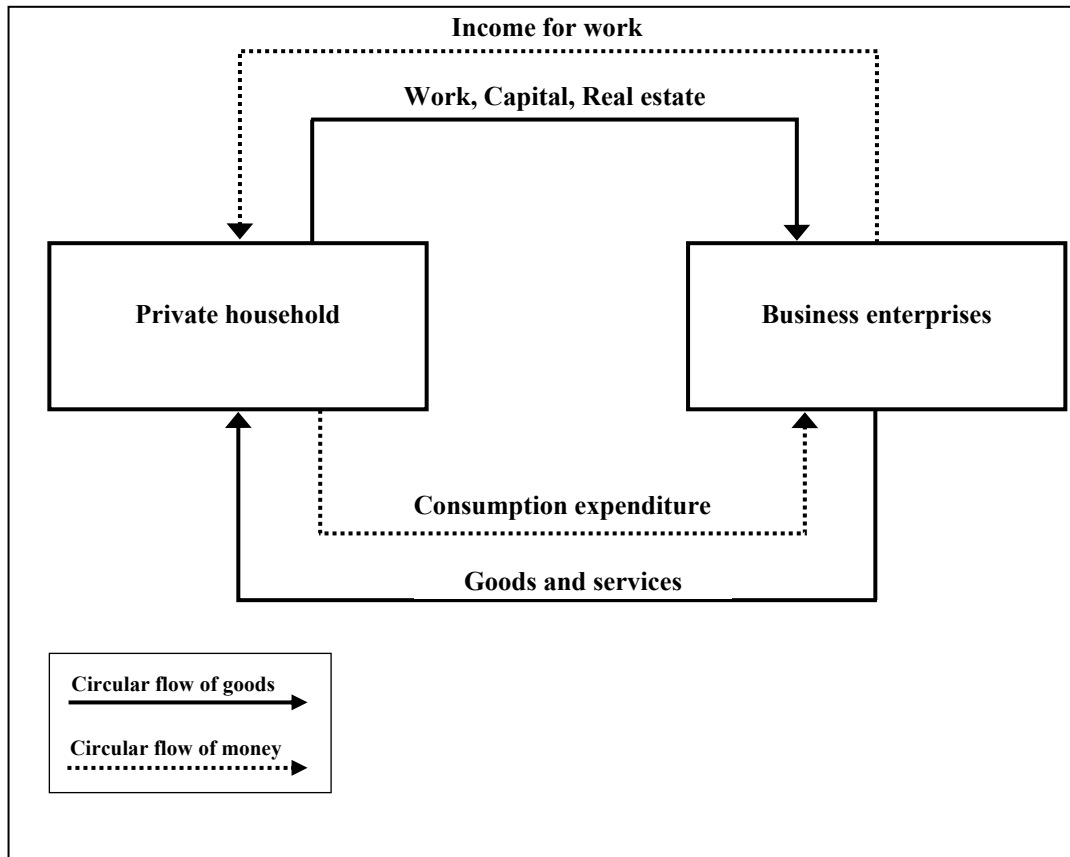
### Illustration 1: Economic decisions of private households

**Factor Payments**

For the supply of the means of production, private households receive so-called factor payments. These include earned incomes (for example, wages and salaries) as well as the yields from letting and leasing and from securities. One's own behaviour primarily serves individual utility maximisation, but in addition by providing means of production as well as through consuming and saving, private households benefit society as a whole, since their incomes are subject to taxation.

With respect to how money and goods flow, the functional differences between a private household and a registered business can be seen in the following diagram of the so-called small economic circular flows:

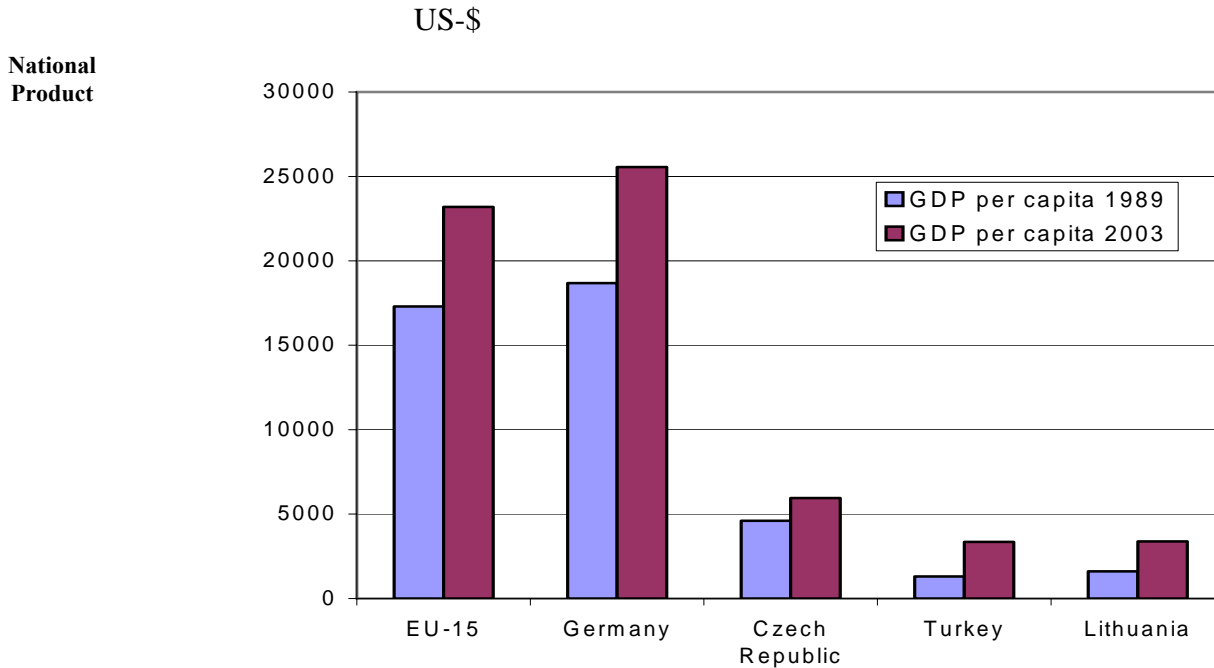
**Circular  
Flows**



**Illustration 2: Circular flow of goods and money between private households and business enterprises**

Private consumption expenditure is an essential pillar of a country's economic performance, comprising in 2004 some 60% of the Gross Domestic Product (GDP) in the EU. This expenditure consists of the value of goods and services that indigenous citizens buy for their own use, such as furniture, cosmetics, motor vehicles, holiday trips and jewellery.

Often, however, private households in their function as consumers are put at a disadvantage because they lack an overview of the market or the markets are not organised in a competitive way. Therefore, comprehensive consumer protection that helps consumers to make informed purchases or at least to understand the market is needed.



**Details for 1989: Estimates related to the regional status quo 2003**  
**Source: OECD in figures, Eurostat, Fischer World Almanac**

**Illustration 3: GDP per inhabitant in U.S. \$**

**Household Sizes**

## 2. Characterization of private households

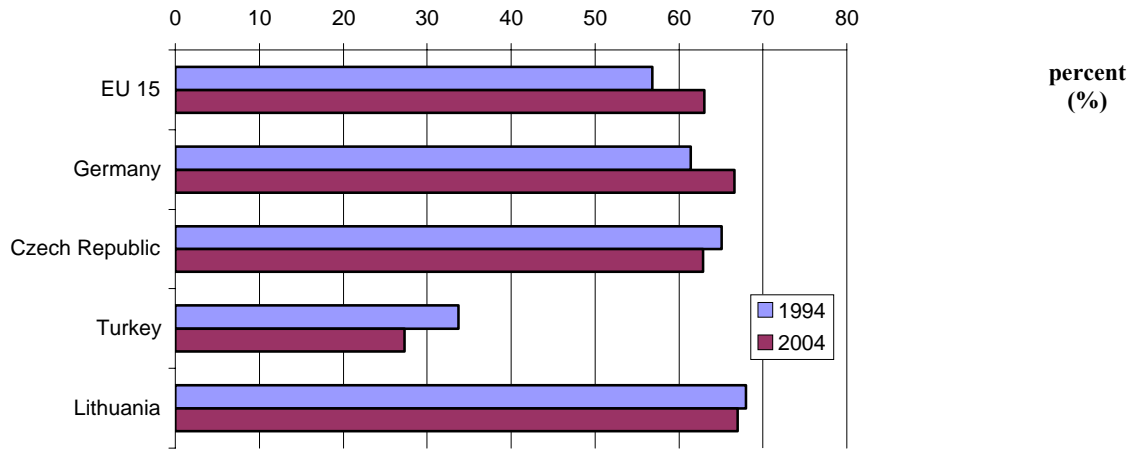
*Private households* is a collective term for different social groups in the market that do not act as producers or have public budgets. As families or single persons the households can vary in the course of time as regards:

- Size (the number of family members who live in a flat);
- Spending power (income which flows into consumption);
- Employment (proportion of household members in gainful employment).

Different factors are influential, such as

- Status and dynamics of economic development;
- Degree of urbanisation (ratio of people living and working in towns);

Cultural and geographical dimensions (for example tradition, religion);  
 State and ideological models and market regulations.



Source: OECD, Department of foreign affairs, Germany

**Illustration 4: Persons in gainful employment (percentage of women in gainful employment)**

**Life Forms**

In general it can be observed that in countries in which industrialisation is highly developed, such as the countries of western Europe where administrative professions are numerous, the size of households is relatively small. But in less industrialised areas, such as parts of southern Europe and Asia Minor, the households are generally larger. With increasing technological development population size also initially increases, since progress in medical and hygienic care results in longer life spans. If births decrease in the further course of development, because, say, social systems, such as old-age and health insurance coverage, develop independently of the families, the qualitative demand structure of private households changes too. More goods are then demanded by middle- and higher-age groups.

The number of single urban households is also correspondingly high; more than 60% of the people in European cities live in single households. Even people living in marriage or marriage-like households sometimes maintain separate flats.

**Stereotypes**

Furthermore, religion and other traditions in an economic area influence the social system. Many, if not all, societies are constrained by role stereotypes that govern expectations of how people are to behave. Young women, above all, can often have difficulty in choosing a career if stereotypes work against their wishes.

Particularly during the socialistic era in eastern Europe the widespread role of a woman in employment created a climate in which women normally pursued a profession. This stereotype also applied to

women who had children. The employment rate was, thus, correspondingly high. (*Employment rate* is a statistical term that refers to the ratio of working people in the whole population or groups of the population.) At the same time, state housing control (and the absence of a private-sector housing market) led to an insufficient housing supply, so that individual living space was usually less than 20m<sup>2</sup>—at a simultaneously high occupancy rate—while in western Europe the norm has been over 30m<sup>2</sup> for many years.

These characteristic features influence not only the size of the households in particular, but also their significance for the national economy in general. With the increasing size of households, certain goods, such as cleaning agents, kitchen equipment and so on, are demanded more frequently because they comprise the minimum furnishing of a flat.

The really tense situation in the labour markets in some countries in Europe also contributes to a change in personal behaviour and the size of the household. New challenges arise primarily through the demands for more flexible working hours and for increased mobility. Both lead to considerable changes in households that must coordinate family and professional needs spatially, temporally and financially. As a general rule, the larger the household group (for example a family), the higher the costs. Some countries, however, have also managed to use these developments to create more jobs by utilising the circumstances of private life in developing job-sharing schemes. Thus—even if only primarily in double-income households of the middle and upper educational classes—new household-directed services in child care and household organisation are established.

Where the incomes of the households preclude any paid jobs for outsiders, the compatibility of family needs and professional duties is to an increasing extent more difficult, particularly if no help from an extended family is available. Because a lot of work carried out in households is not calculated in the economic performance of a country, problems arise. For example, the work of women in households or the education and care of children is not always adequately appreciated. A paradoxical example demonstrates the problem. The work of a housewife is not counted in calculating the GDP in Europe since there is no price attached to it. On the other hand, the work of domestic help is counted. Thus the economic performance of a country declines statistically if a confirmed bachelor marries his domestic help.

### **3. The demand of private households**

#### **3.1 The principle of maximum utility**

From an initial, methodological point of view economic analysis regards private households as people acting rationally. This applies both on the supply side (private households as workers) and on the demand side (private households as consumers). Private households endeavour to maximise their utility. People wish to obtain a maximum income for the work they do. They also desire the maximum in consumption in exchange for the income they spend. Thus private households have to decide where and above all to what extent they want to market their work or their private real estate. This applies in a similar way to the decision as to whether they want temporarily to relinquish access to part of their income and instead—again for as high a return as possible—to save it. Here private households decide between instant access to income or being rewarded for delaying consumption through saving.

**Universal  
Rule of  
Efficiency**

Behind this decision is the universal rule of efficiency of economic behaviour, the so-called economy principle. The attempt can be made either to obtain the greatest possible utility (the principle of maximum utility) or to accomplish a certain goal with as low an effort as possible (the principle of minimum utility). An example: A pupil wanting to receive the best possible mark in an examination will expend all of his energy in pursuit of his goal. Alternatively, a pupil whose goal is simply to pass the examination would invest comparatively little effort. So the economic principle demands thrift as a minimum principle of utility and the largest exploitation of resources as a maximum principle of utility. Any other choice produces a worse result.

In using the universal rule of efficiency, the utility (U) of the individual unit of goods is of interest. A change in the utility level by adding one more unit of goods or by removing one is termed marginal utility (U'). Marginal utility or the subjectively felt utility value of an additionally consumed commodity now crucially depends on how many units of this commodity consumers already has at their disposal. As a rule, marginal utility will decline when the quantity of goods increases.

HERMANN HEINRICH GOSSEN (1810-1858), in his work, *The Development of the Laws of Human Intercourse and the Consequent Rules of Human Action* (1854), formulated two economic laws:

Gossen's First Law ("repletion law"): the additional utility or the marginal utility of a commodity always decreases as consumption increases; it even becomes negative when a "saturation point" is reached.



Gossen’s Second Law (“law of equalisation of weighted marginal utility”): the complete utility of a consumer is maximised if the utility of the last money unit spent is the same size for all kinds of utilisation.

If, for example, you drink several glasses of Coca Cola, the utility of each additional glass of Coke decreases through the continued consumption until you do not want to drink any more.

Correspondingly, a thirsty consumer will be ready to spend a relatively large amount of money on the first glass of Coke; for the following glasses with an increasing degree of repletion he will be prepared to spend less and less.

0.3 l glasses of Coke	Complete utility (U) in €	Marginal utility (U') €
1	3.00	3.00
2	4.50	1.50
3	5.00	0.50
4	5.00	0.00

Table 1: Complete utility and marginal utility for the enjoyment of Coke

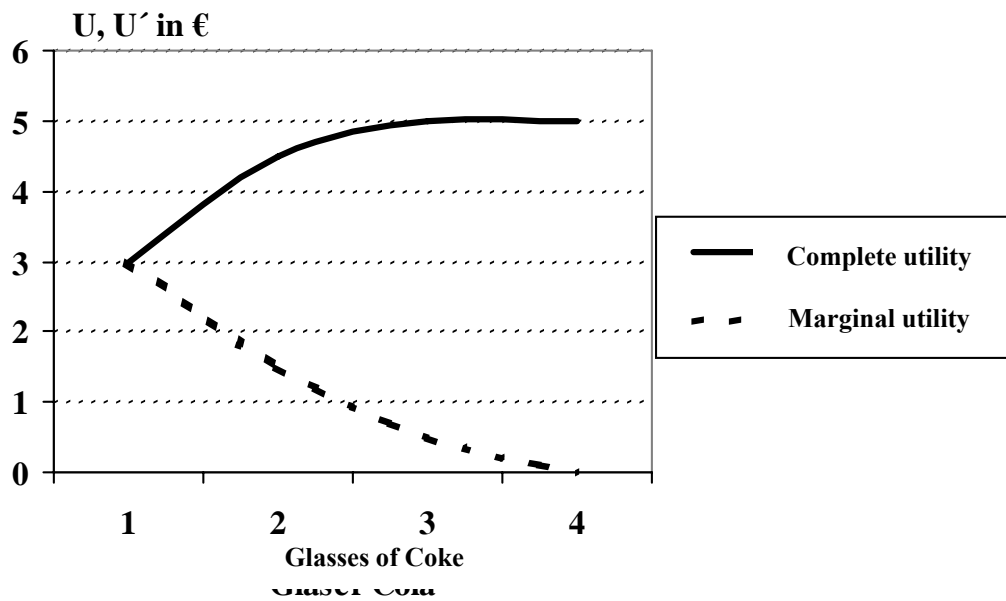


Illustration 5: Complete utility and marginal utility in Coke consumption

According to Gossen’s Second Law, consumers maximise utility if they try to divide up their available income for consumption purposes in such a way that on the acquisition of different goods higher utility standards through a new arrangement of the income cannot be achieved. If, for example, the utility in the purchase of an additional glass of Coke is larger than the utility in the spending of this money for a piece of cake, it then makes more sense to buy Coke with the money. Not until the utility of the last euro for Coke is commensurate with the utility of the last euro for cake is the complete utility the greatest. A consumer acting rationally who follows the economic principle will preferably distribute his income

available for consumption in such a way that the marginal utility is same in all manners of use.

**Water-Diamond Paradox**

Gossen's laws also provide an approach to the solution of the so-called water-diamond paradox. The commodity water, which is vital and thus valuable for everyone, costs less than the commodity diamond, which has a very high price but a very low usefulness. The utility value of water is high, whereas the utility value of a diamond is relatively small. The exchange value of these goods acts conversely. Generally, the commodity water would have a higher marginal utility than the commodity diamond even if on a quantity basis it were available to the same extent. Nevertheless, the last water unit (marginal utility of water) is appreciated less, because water, in comparison with the available quantity of diamonds (marginal utility of diamonds), exists in abundance. Individually and regionally differentiated, other marginal utility conditions can nonetheless exist, e.g. with people who live in arid environments of the earth.

**3.2 Regulation factors of consumption**

Rational behaviour in the consumers will make their purchase decisions dependent on different factors of influence, above all:

- their income
- their savings
- their needs
- their preferences
- their life situation
- their alternatives

An important regulatory dimension of the consumption expenses of all households is the income which the private households have at their disposal in a month or a year. The consumption demand increases with an increase in this so-called disposable income; consumption falls if the disposable income decreases.

**Giffen Paradox**

The Scot, ROBERT GIFFEN, however, had observed already in the nineteenth century an apparent anomaly in demand behaviour. Private households that live at existence level react to an increase in the price of bread with an increased demand for this commodity. This anomaly can be explained simply: an increase in the price for a basic foodstuff in poor households reduces the available income for other, relatively expensive foodstuff so much that they go without it and instead buy more bread in order to safeguard their nutritional base.

Consumption, however, can also depend on so-called permanent incomes. This is an average dimension over a longer time period that consumers can rely on because of long-term employment. A temporary income reduction, therefore, does not lead to a mandatory reduction of

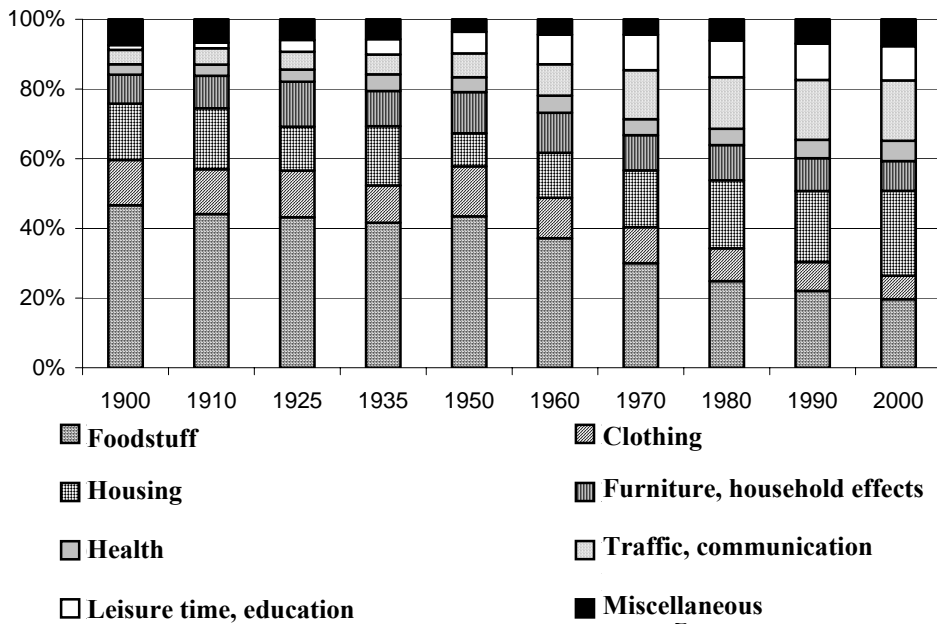
consumption expenditure. Nor does a short-time rise in income lead to increased consumption expenditure. For example, families with strongly varying incomes, such as the self-employed or farmers, maintain a steady consumption rate, and if they happen to earn more, they prefer to increase their savings.

**Engel-Schwab  
Law**

The structure of consumption also changes in relation to economic development or increased income of private households. ERNST ENGEL had established in an empirical analysis in the middle of the nineteenth century that with increased household income, expenditure for foodstuffs only increases at a disproportionally lower rate. Hermann Schwabe found at roughly the same time a similar conformity to a law for housing expenditure (inferior goods).

Illustration 6 demonstrates Engel’s observations very clearly for the founding states of the EU. Food and luxury goods definitely become inferior goods in the development process of this economic area. Expenses for housing, furniture and household effects in contrast show an apparently different picture. Here the SCHWAB LAW is overlaid by the increasing living-space needs per inhabitant.

**Life Cycle**



**Illustration 6: Share of the consumption expenses of private households in the foundation states of the EU**

Consumption expenditure can also increase if accumulated savings grow. It is highly probable that of two households with the same income and different financial assets, the household with the higher financial assets will effect larger consumption expenditure. In connection with savings, the acquired interest can influence consumption expenditure. The interest

is commensurate with the reward for nonconsumption. So a high interest rate brings about larger savings and thus lower consumption.

All consumers have desires or wants that they would like sooner or later to satisfy. Wants drive many markets. Where a consumer's wants exist, demand follows. In the terminology of economics, wants as an option represent the preliminary stage of a need. A want turns into a need if adequate spending power is combined with the want. In the market a need becomes a demand if and when sufficient buying-power manifests itself as buying-intention. There are basic wants, such as the desire to eat and drink. What this demand-food looks like, however, is different from country to country, because not only do the perceptions of what the commodity *food* should look like differ culturally and geographically but also the possibilities of meeting the wants vary. According to one theory, higher-ranking wants cannot be met until basic wants have been satisfied.

Traders or business enterprises try to satisfy consumer wants as well as possible depending on the consumers' spending power or on the desired goods' being provided at an acceptable price. Furthermore, consumers can sometimes be persuaded that products are essential for them. The flexibility of these needs presents the suppliers with great latitude in presenting their goods and services in such a way as to create *ex nihilo* a desire for them.

In order to meet their existing or suggested wants, people must either offer their labour to be able to consume or they must spend what they have saved (dissaving). If consumers urgently need a certain commodity but lack the necessary buying power for its purchase, they borrow money—at an interest surcharge—from a lending institution. If, through making their labour available, they generate more income than they need at the time, they save money for future needs.

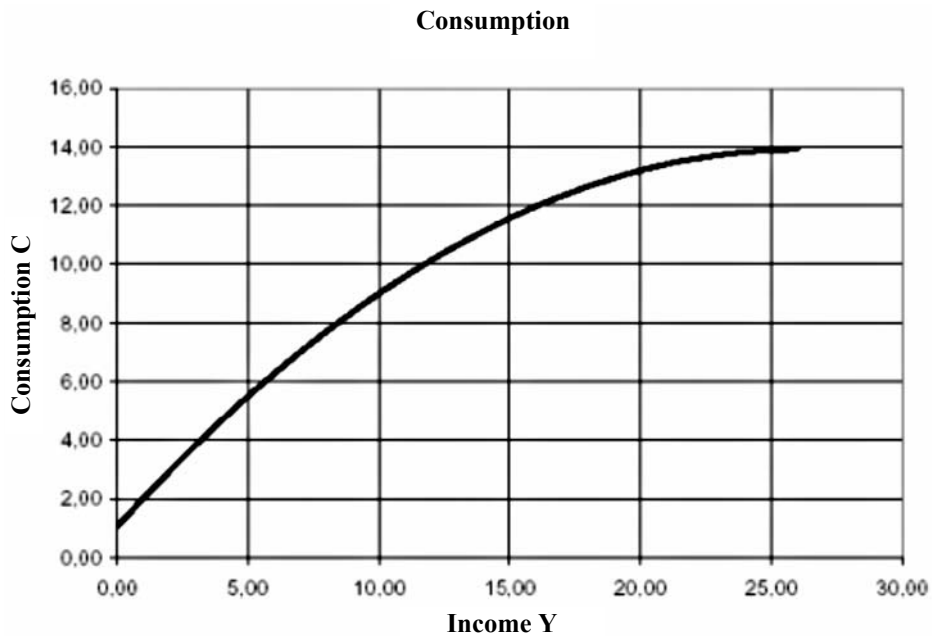
Social  
Models  
Status  
Symbols

However, consumption in private households also depends on their social position. In a society featuring social mobility, households orientate their consumption pattern towards a model, say a certain social group that they would like to join. The target social group's consumption pattern (for example, a second car)—which can be ascribed to how the consumption goods market, particularly its abiding consumption goods—gives the household status symbols that influence its social standing and is often anticipated before the move actually takes place. Household consumption that imitates social groups with a higher income results in an increased consumption expenditure for the upwardly mobile, even if their income does not increase. Saving is then curbed, and a vicious circle sometimes begins: a short-term reduction of available income for the upwardly mobile does not lead to reduced consumption, because the individual does not want to give up the status consumption typical of the group. In this case a consumption standard once reached is maintained by reducing savings.

Consumption also varies during the life cycle of a household. Young families will use up a greater share of their income in expectation of increasing macroeconomic income. In addition, they demand permanent consumption goods (e.g. their own house) when they are still young, and as a rule these goods incur debts. On the other hand, families must accumulate capital for old age. Consumption-demand thus also varies with the age structure of a society. Furthermore, consumption-expenditure depends on a number of additional factors. So expectations of price increases are a basis for deciding on more rather than less consumption. Also the supply of new goods, those not yet offered on the market, can lead to increased consumption as one ages.

The ongoing integration of the European Union also has ramifications for the structure and habits of consumption. With the abolition of internal borders within the EU, the potential supply of goods to other EU countries has improved, since transportation of goods and reduction of customs barriers have facilitated market access. On the other hand, the prices for many of the goods produced in the EU have declined, because the enlargement of the internal market has increased competition.

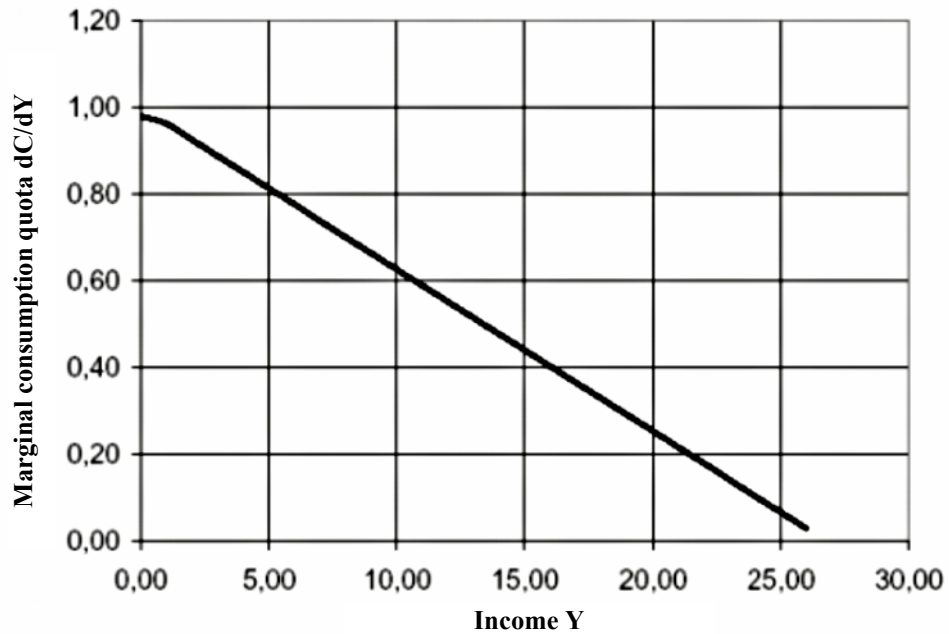
### 3.3 Consumption Function



**Illustration 7: Consumption function**

In a national economy consumption in relation to its most influential variable, income, can be expressed by the formula  $C = f(Y)$ , where  $Y$  is income, and illustrated by the following graph:

## Marginal consumption quota

**Illustration 8: Marginal consumption quota**

With increasing income in a society macroeconomic expenditure for consumption increases. However, the increase in consumption ( $C'$ , = marginal consumption or marginal consumption quota) becomes smaller when income increases. This means conversely that with increasing income the tendency to save increases, since as with consumption saving depends on income. The savings are then the part of the income that is not consumed.

$$S = f(Y) \text{ whereas } S = Y - C$$

### 3.4 The spatial distribution of consumption

Theory of  
Central  
Places

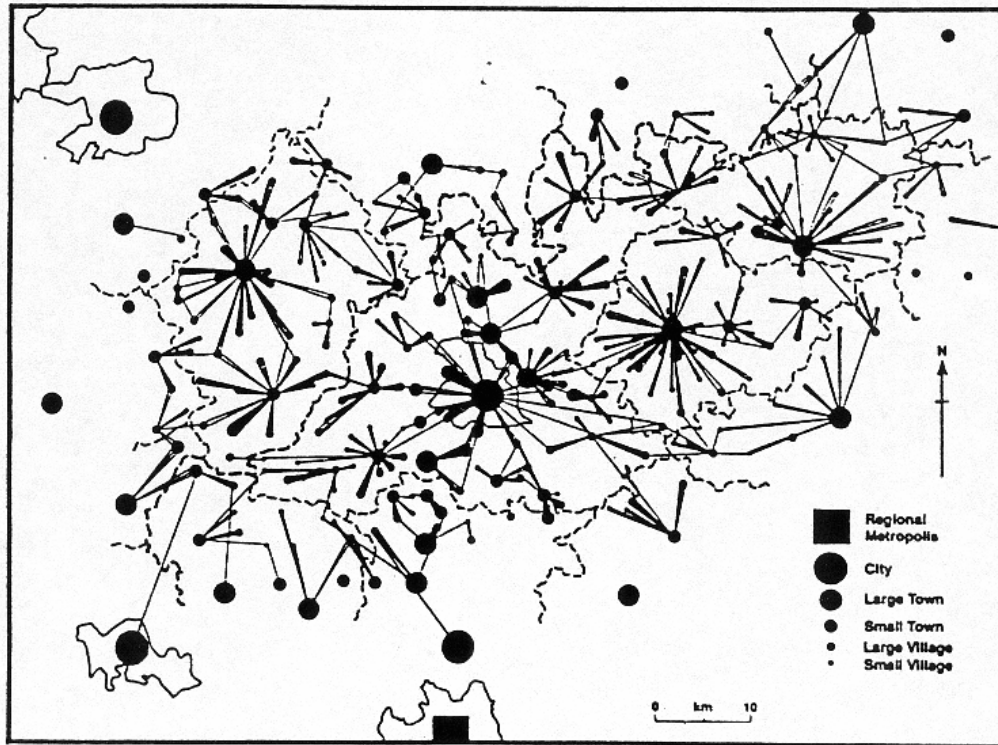


FIG 5.4a First-choice retail patterns in Baden-Württemberg for pharmaceutical chemists (source: Barnum, 1966 p. 60)

#### Illustration 9: The demand pattern for medicine

Consumers also behave with regard to their consumption decisions according to where goods are obtainable (the spatial pattern, illustration 9). Whether they consume a commodity willingly or not depends on the value of the goods as well as the frequency or nature of the demand. Private households demand goods for daily use, such as basic foodstuffs or medicine, comparatively often; these goods must be available in the short term. In this case the so-called range of coverage of the goods is small. Accordingly private households expect the supply to be on offer non-centrally, i.e. at as many places as possible in a marketing area.



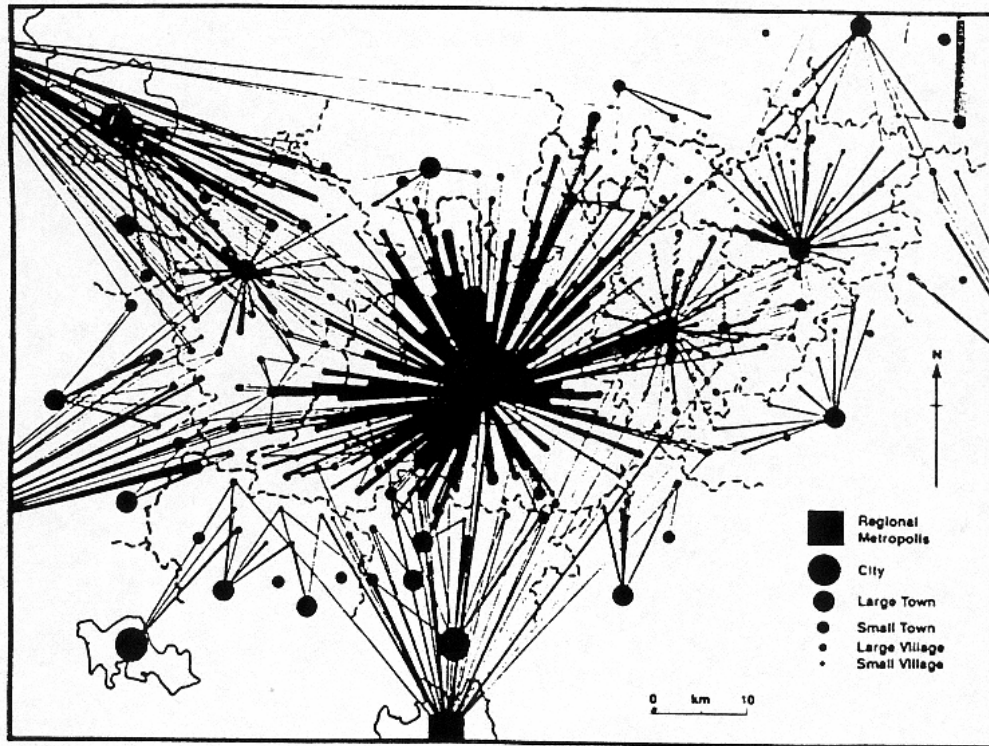
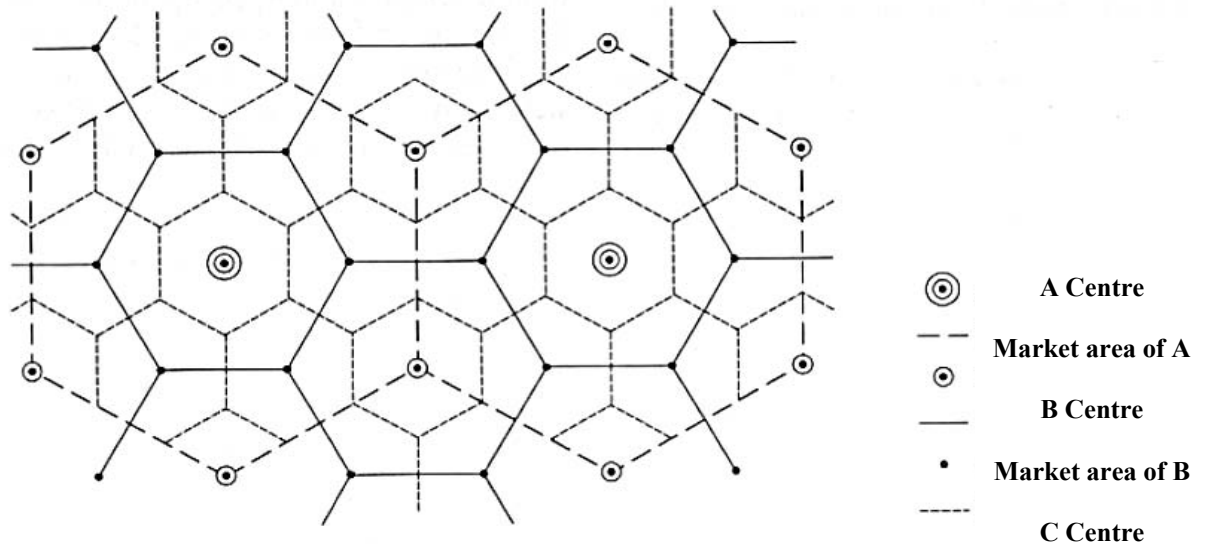


FIG 5.4b First-choice retail patterns in Baden-Württemberg for clothes (source: Barnum, 1966 p. 77)

**Illustration 10: The demand pattern for high quality textiles**

With the increasing value of the goods and with a decreasing demand frequency, consumers are ready to range further to procure the goods; here the range of coverage of the goods is *large*. These are the goods of periodic need (clothes) and episodic need (jewellery). Thus the demand-place and consumption-place diverge.



Sources: Walter Christaller, 1933; Peter Dicken, Peter E. Lloyd, 1998

**Illustration 11: The Theory of Centrality: an explanation of the supply and demand maturation process, as well as the breadth and depth of product assortment in the trade- and service-sector**

The hexagons illustrate the geographical boundaries of supply for goods with a surplus significance for their surrounding area (so-called centrality). The frequency of the goods' supply corresponds to consumer behaviour, according to which high-quality (very central) goods are in low demand and are thus offered less frequently in the area (A centre). Goods needed daily and periodically are in regular demand in the B and C centres.

The claims on certain services also show this spatial pattern of demand. Access to nursery schools, elementary schools or family doctors require geographical proximity; they must be reachable quickly and easily, and are to be found in most larger cities. On the other hand, secondary schools and medical specialists have, respectively, either a lower number of pupils or patients who frequent them less often. In the so-called highly centralised places, however, there is provision of services such as universities and specialist clinics which are geared towards a large supply area. WALTER CHRISTALLER had already made

these observations in 1933 as part of his so-called Theory of Centrality. Six places with a smaller centrality are assigned to a higher central place (supply centre, illustration 11). In practice this even distribution pattern represented by the hexagons is never apparent, because the theoretical suppositions are very restrictive. Nevertheless, a hierarchical construction of consumption and supply, as well as a structuring of goods according to assortment breadth and assortment depth,<sup>1</sup> similar to the one offered here can be found anywhere in the world, if state interventions in the market and competition mechanism are not too drastic.

From the point of view of business management, the most influential features in the theory of buyer behaviour are:

- consumption of certain goods types (daily, periodic or episodic need);
- the choice of the purchasing centres (department stores, malls, centres, sub-centres etc.) and their accessibility and furnishing;
- the service orientation for the consumer.

## **4. The supply side of private households**

### **4.1 The consumers as suppliers of work in labour markets**

#### **Work Suppliers**

Income can always be seen in relation to anticipated expenditure. A difference is made between expenditure to guarantee one's livelihood and additional expenditure. Households have a certain scope for deciding how much they want to earn as additional income.

Some private households offer their services on the labour markets to generate income for consumption. They thus become suppliers of the productive factor of work; the demanders are primarily business enterprises and the state, and, to some extent, other private households. Work is defined as purpose-directed physical or intellectual activity,

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<sup>1</sup>Assortment breadth: different goods on offer; assortment depth: similar goods of different producers or quality.

which by definition is deemed useful and therefore scarce, and thus is rewarded in the form of wages, salaries or fees.

In the EU the group of those people offering their capacity to work comprises some 45% (persons in gainful employment). This group is formed by people who are at least 15 years old. The in-work rate<sup>2</sup> fluctuates in the individual national economies depending on

culture and tradition;  
income expectations;  
needs and preferences and  
the economic system.

**Labour Force  
Participation  
Rates**

Thus the east European countries have in general an in-work rate that exceeds the EU average (52%), the south Europeans are at 41% and Turkey ranges somewhat below the average at 35%.

The availability of the production factor work is disproportionate with regard to quantity and quality (hereafter, qualification). In addition, work is often static, particularly in western and northern Europe, which means that people rarely leave their place of residence to work elsewhere. The reasons for this lack of mobility are languages differences and high unemployment compensation (above all in western and northern Europe). Both reduce the incentive for work migration (that is, moving the place of residence to the workplace), particularly among workers with poor qualifications. The readiness to leave a place of residence for a job is cultivated considerably more in other parts of Europe, for example in Turkey.

**Migration**

The unwillingness of workers to move large distances in pursuit of gainful employment depends largely on the a given country's demographic situation. In the EU total population, with the exception of some southern European regions, is shrinking. This demographic development, therefore, is likely to produce an improvement in employment opportunities within the next few decades, since a constant

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<sup>2</sup> Share of persons in gainful employment in the resident population.

demand for work by business enterprises will be met by a smaller number of people seeking work.

The individual supply of work through private households is primarily dependent on the actual level of payment or income expectations. These comprise:

- qualification (supply of human resources)
- consumer prices
- needs (consumption wishes)
- leisure-time preferences.

In deciding where and when to work, a household must economise with its limited time resources. Working-time first of all produces income for consumption and savings. By the same token, households profit from not investing all their work in the production process, but rather cultivating hobbies and social contacts or simply enjoying acquired consumer goods in their leisure time. Provided that paid work or gainful employment does not become an end in itself, the opportunity to work less increases when income rises and consumption preferences, prices and working hours remain constant. Essential time for eating and sleeping has to be estimated from the overall individual time budget.

**Illustration 12** (below) shows that the work time on offer varies directly with the size of the income aimed at and indirectly with the size of the pay rate attained in the work process. The line  $Z_1$  to  $Z_4$  represents all the combinations of leisure time ( $L$ = labour) and income ( $Y$ = yields) among which a single-person household at a given rate of pay ( $W$ =wage) can choose. In this case it is assumed that of 168 hours in a week, 56 must be available for a period of regeneration. Only if the household chooses less than 112 hours of leisure time does it achieve an earned income. This is measured along the abscissa to the origin. The ordinate intersection point arises as a product of the maximum possible working time (=no leisure time) and the hourly rate of pay ( $w$ ) agreed on .

The representation contains five so-called indifference curves ( $I_1$ - $I_5$ ). These represent combinations of maximum utility of leisure time and working time for the worker; the standard of living (=utility standard) that the household reaches is higher the further away an indifference curve lies from the origin. The alternative combinations of work or income to leisure time are represented along these curves of the same utility by the standard of living aimed at. Where an indifference curve touches the income-leisure time line, the household has made the optimal decision for work and leisure time from the point of view of utility.

Among other things it becomes clear from **illustration 12** that the size of the rate of pay is of decisive importance for the utility maximum decision between working time and leisure time. The reason for this is

that a decision favouring leisure time is accompanied by a waiving of income at the chosen-leisure level multiplied by the hourly rate of pay.

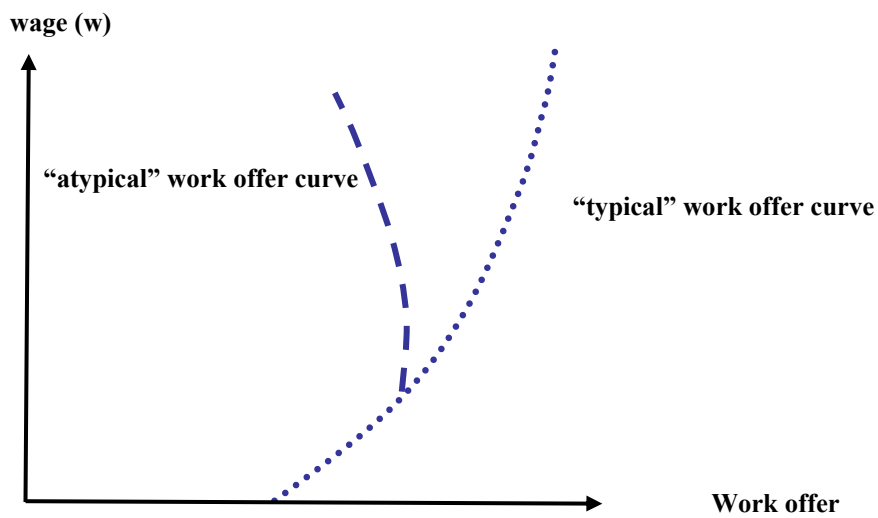
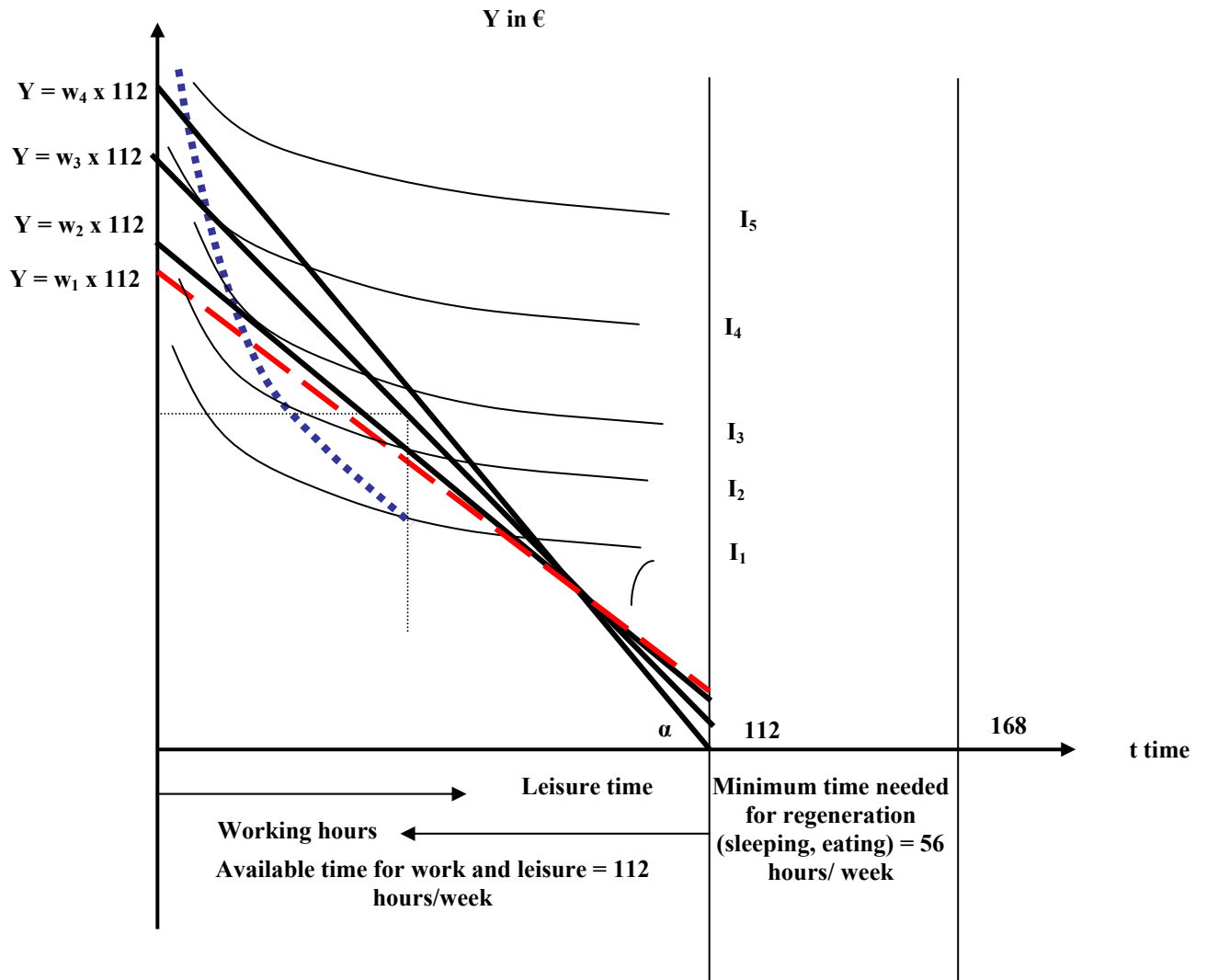


Illustration 12: Utility working time (leisure decision of a one-person household and the labour supply)

If one follows the intersection points of the different income-leisure time lines (Z) to the different rates of pay on the indifference curves assumed here, one gets the picture of “typical” supply behaviour on the labour market: if wages are continually increased, the household might advance into such a high income group that new consumption habits become an option. To be able to afford these new consumption goods the suppliers of labour work more and forgo a permanently increasing part of their leisure time (up to a maximum of 112 hours).

**Work  
Supply  
Curve**

One talks, however, about an “atypical” course of the work supply curve if when wages increase, the market labour supply initially increases and later decreases. The higher wage ( $W_1 < W_2 < W_3 < W_4$ ) poses an incentive to forgo leisure time and thus increase the labour supply. With a continual wage increase, a situation then arises in which leisure time has more significance for the household than the additional income gained through working longer.

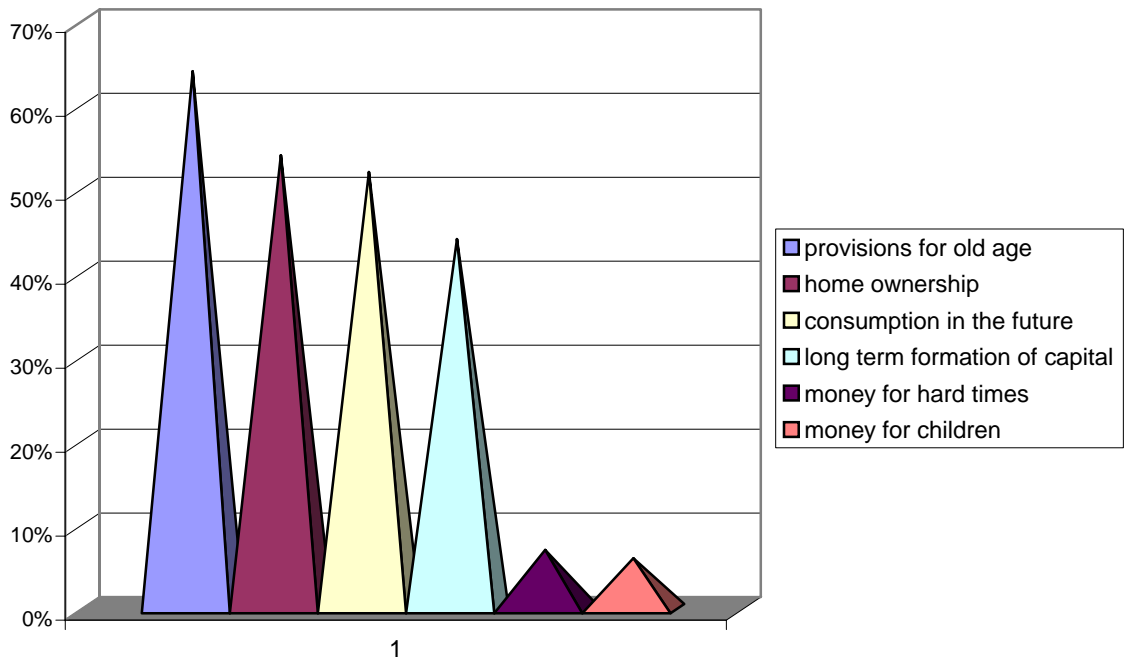
If the national macroeconomic level of income increases in real terms for an extended period of time, then one will more frequently observe an atypical course of the labour supply. For these private households a saturation point in consumption is then reached. For the lower- and middle-income brackets, however, the typical course of labour supply is the norm. The size of substitute wage payments has a modifying effect on the labour supply, as does unemployment benefits and the taxation of income.

Saving vs.  
Delayed  
Consumption

4.2 Capital supply in private households

As a rule, household income does not tally with consumption expenditure. In fact, the planned consumption sum can be lower, i.e. the non-consumable share of income is saved. Saving means forgoing present consumption to guarantee consumption in the future, say in old age. An essential motive for saving is accounted for by the uncertainty of expected future income. One can observe that households with jobs and incomes at risk—in comparison to guaranteed income—tend rather to forgo consumption and “put money aside for a rainy day”. The social security system seems to have a modifying effect here: in countries with low standards of social security, consumption and saving behaviour are more strongly influenced by the workplace or income risk than in countries with “high performance” systems.

A household’s saving habits protect its consumption prospects in the future. But they also are sources of capital in financial markets .



Source: Association of building and loans in Germany

Illustration 13: Motives for saving (in Germany) (multiple citations)

Like savings, the planned consumption sum can exceed household incomes; provided that the household does not have the assets that can be brought to bear in such a situation (so-called dissaving), it must finance consumption that exceeds income by borrowing.

Both saving and borrowing are, in addition to the factors already mentioned, influenced by:



preference structure of the households with respect to present and future consumption;  
present income;  
expected income in the future;

and above all by interest rate ( $i$ ) as a debit and credit rate. Households normally follow savings habits in which they are more prepared to sacrifice consumption in direct relation to interest rates. Usually interest increases when consumption in the course of time is reduced, which is what makes saving in the long term interesting. Only in times of large capital requirements can there also be an inverse interest structure in a national economy, such as during the first years after German reunification, featuring high interest for short-term investments and relatively low interest for long-term investments.

The motives for saving part of one's income, and therefore making it available to the money market, are quite different among individual national economies. While in the USA, for example, the savings rate—representing the share of the savings deposits in relation to income—lies at only 2%, it is at about 10% in most EU-countries. The majority of Americans assumes that a sufficiently high rate of economic growth, combined with the creation of new jobs, will finance their consumption. In many Europe states, on the other hand, there is a certain anxiety that the social security systems will no longer offer adequate protection against old age, poverty and illness. Thus they save more in order to provide themselves with additional security.

## **5. Consumer protection**

### **5.1 State consumer protection**

The term *consumer protection* refers to all the measures taken to protect private households in their role as consumers of goods or services. The need for protection is based on the experience that manufacturers and dealers of goods and services far too often take advantage of consumers. This disequilibrium results from consumers' lack of expertise or experience, which businesses often shamelessly exploit. The aim of consumer protection is, as far as possible, to counteract this imbalance.

Today's consumer protection policy presupposes "responsible consumers" who are willing and able to make their own decisions. Making conscious consumer decisions, however, depends to a large extent on "decision criteria", i. e. information available to the consumers. In some areas this is largely guaranteed by legislation, for example in the content description stipulated for packaged foodstuffs; in other areas—such as textiles—many consumers would wish that more detailed information were available.

European governments and the EU support consumer protection with prohibitions and ordinances (such as, obligatory identification of foodstuffs), as well as financial support for consumer-protection centres, usually independent, non-profit organisations financed publicly. Their aim is to inform, counsel and support consumers. Counselling takes place, for example, on the following subjects:

- investing and borrowing money
- insurance and financing of building projects
- health services
- energy
- nutrition
- leisure time
- telecommunications.

The consumer advice centres also offer legal advice and represent consumer interests. In particular, it is the task of the consumer advice centres to proceed, in and out of court, against inadmissible business terms and conditions, business practices detrimental to consumer protection, and dishonest advertising on the part of a supplier.

Most importantly, modern consumer protection supports consumer education. This support aims at enabling households to understand and handle the various areas of consumption according to individual and social needs. As such, consumer education endeavours to demonstrate, in the long term, the connections between production and consumption in their economic, ecological and social aspects and to enable people, responsibly and independently, to structure their consumption. In order for consumers to achieve this level of competence, they must have some insight into how they spend their money and how their consumption will affect the macroeconomy. For example, consumers will become in time better able to assess the negative health effects of consuming luxury items (alcohol and cigarettes). This approach can also be applied to the problem of debt plaguing many households, making them aware of the long-range consequences of living beyond their means (borrowing from Peter to pay Paul).

## **5.2 The best consumer protection: functioning markets**

The proper functioning of the market price mechanism is one of the most important guarantees that a national economy and its business members do not overexploit the available resources, but rather are capable of producing income and welfare benefits to an equal extent. The price mechanism also applies to private households, since in functioning markets they also are protected from excessive prices and can expect a high level of product quality for their money.

**Price and  
Competition  
Mechanism**

Markets which fulfil these requirements show the following features:

The price mechanisms fulfil their functions;

The competition mechanisms fulfil their functions;

Ideally this is true for:

The demand for a commodity being expandable only when the market price drops;

The supply for a commodity only being expandable when the market price increases.

Under normal conditions of supply and demand only one single market price is then formed. This balanced market price has four functions:

Market clearance function

Information function

Co-ordination function

Sanction function.

A market clearance is carried out by means of the equilibrium price: supply=demand. A surplus supply (waste) results from a price higher than the balanced market price, and a surplus demand (deficit) follows a lower price than the balanced market price. The following illustration shows a stable balance in the status quo:

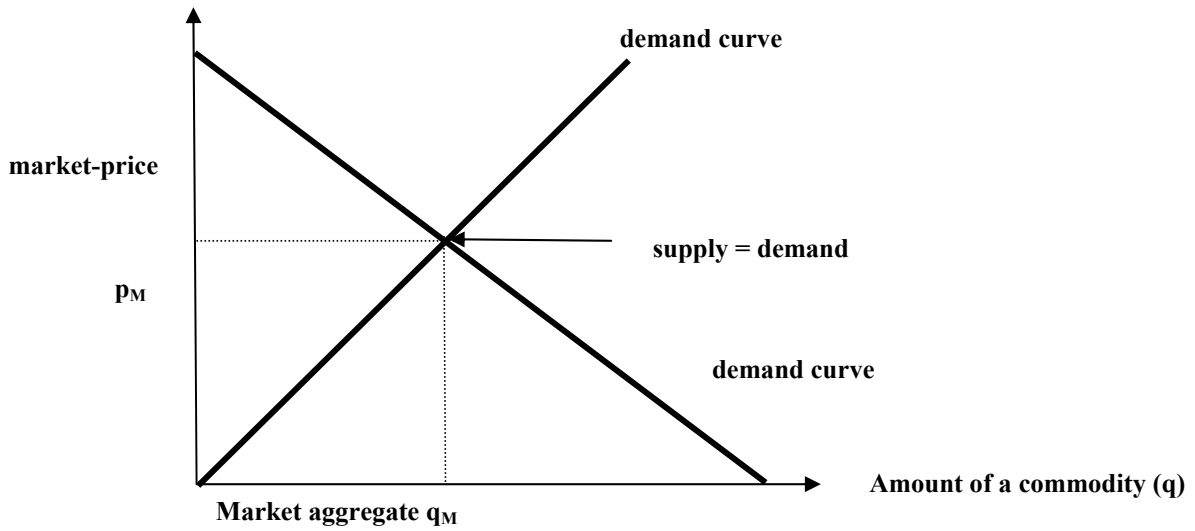


Illustration 14: The regulation of the market price

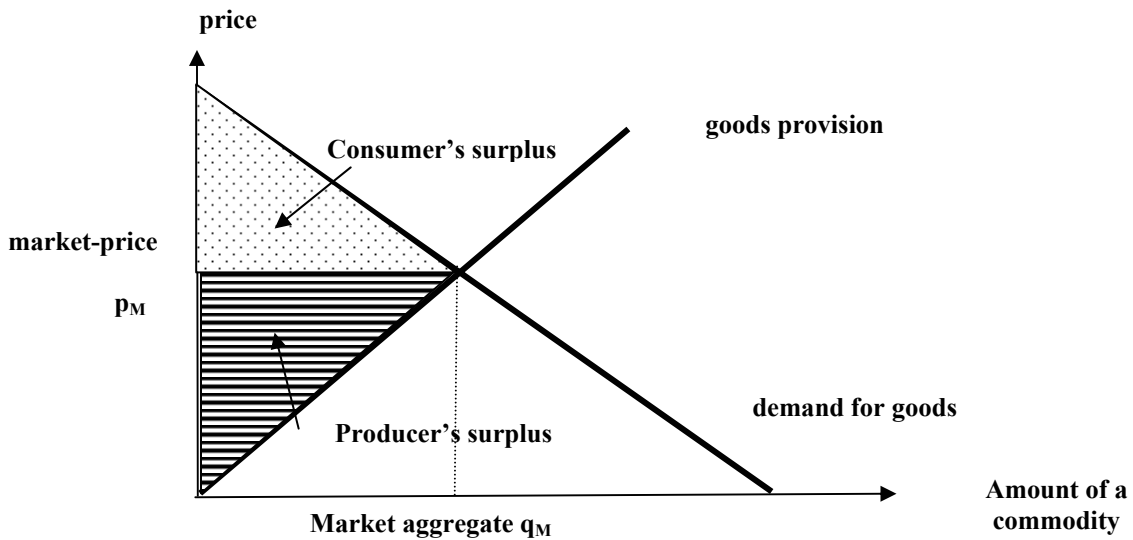


Illustration 15: Producer's surplus and consumer's surplus

In practice, there are winners and losers with every equilibrium price: all the suppliers who on the basis of their economic situation have to offer goods more expensively than their competitors are forced from the market. The other suppliers who can offer goods under the equilibrium price make a producer's surplus at the level of the difference between the equilibrium price and the lower price at which they could have offered it. The consumers who would have bought only at a lower price than the equilibrium price receive no product. All the consumers who would have been prepared to pay a higher price than the equilibrium price now pay less, namely only the equilibrium price; they benefit from a consumer's surplus.

The market price mechanism helps consumers decide to purchase certain products. A change in price informs us about an increasing shortage (rise in price) or a decreasing shortage (fall in price) of the commodity in question. All those concerned receive this information: the consumers because they must pay the price, and the suppliers because they receive income dictated by the price. The dissemination of information about the increased or decreased shortage is efficient and cost-saving.

Independently of each other, consumers and business enterprises determine their demand and supply wishes, respectively. In doing so, every consumer plans his individual demand at the going market price today. In a market economy there is no central mechanism—as in a planned economy—that tests in advance the compatibility of supply (business enterprises) and demand (consumers). If, in practice, the amounts provided for a product do not correspond to the amounts demanded, changes in price set in. The customers with their demand and the business enterprises with their supply adapt to these changes in price.

Furthermore, the price system in a market economy also functions as a sanction. The consumers react by purchasing alternative goods (goods substitution) at an increased price, since by exercising their buying desires they endeavour to obtain an optimum utility standard. If they do not adapt by substitution, their utility standard sinks at a greater rate. In a similar way, business enterprises are sanctioned if they do not react correspondingly. Enterprises that offer a commodity that increases in price are rewarded by the price mechanism (market entry signal). A dropping market price leads to losses for the enterprises. Enterprises which offer a lower-priced commodity are punished (market exit signal).

In practice, prices for many goods change almost continually. The causes of change are manifold. On the demand side of private households the following factors play a role:

- income changes;
- fashion changes (shift in preference);
- changes of the price of substitute and complementary goods.

But consumers notice only the actual change in prices or price relationships:

- if the enterprises do not (or cannot) adapt their cost structures to the changed prices;
- if there is no or moderate inflation;
- if the price elasticity in demand is so great that it brings about adjustments, customers react.

**5.3 Competition functions as instruments of consumer protection**

Market  
Forms

On the part of the market the second prerequisite for consumer protection is the functioning of competition mechanisms. The market price mechanism can only solve changes which are satisfactorily triggered by competition if pricing takes place in competitive markets. Such markets are described as polypolistic. In all other market forms competition is limited (oligopolies) or completely abolished (monopolies).

**Market forms**

		Demander		
		many	some	one
S U P P L I E R	many	<b>Polypoly</b> (many butchers' shops/many consumers)	<b>Demand oligopoly</b> (few dairies/many farmers)	<b>Demand monopoly</b> (a train society/many suppliers of engines)
	some	<b>Supply oligopoly</b> (few petrol stations/many drivers)	<b>Bilateral oligopoly</b> (few airline companies/few aircraft manufacturers)	<b>Limited demand monopoly</b> (State that would like to build bridges (few building contractors)
	one	<b>Supply monopoly</b> (a railway company/many rail passengers)	<b>Limited supply monopoly</b> (a manufacturer of special medical equipment/few hospitals)	<b>Bilateral monopoly</b> (a state/a manufacturer of warships)

**Table 2.: Market forms**

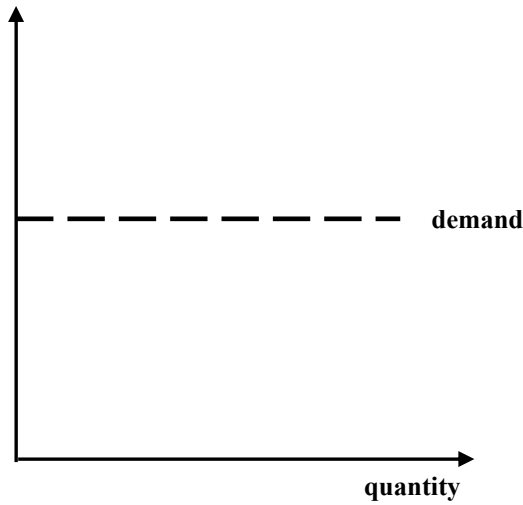
If consumers buy a commodity on a polypolistic market, they thus have a choice between several suppliers. Every one of these suppliers can only maintain a small portion of the market for herself. If one contrasts the consumers' price expectations for a commodity with the suppliers' price, only one price, as described, is adopted, for which there is more or less consumer surplus or producer surplus. Enterprises have to adapt this price to the amount of goods they are prepared to manufacture at a profit for this price (quantity adjuster). Represented graphically, an enterprise is confronted with a demand that accepts only one price.

Monopoly

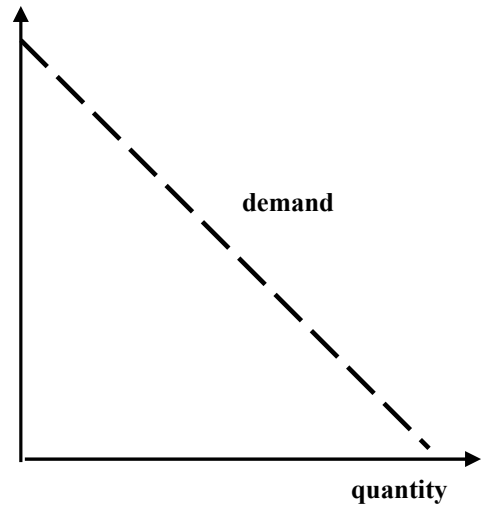
If, on the other hand, the markets do not function, as for example in a monopoly, then the monopolist differentiates his suppliers according to their readiness to pay (price adjuster). The price differentiation can have different forms, such as:

- Spatial price differentiation (distinction between towns and rural areas or between foreign countries and inland);
- Temporal price adjustments (who buys first gets the "best" price!);
- Personal price differentiation (no sale of goods to teachers!)

Represented graphically, the monopolist must confront the complete demand curve of the consumers.



Demand curve of an enterprise under polypoly conditions: the individual enterprise can offer goods at market price. It cannot influence the market price itself.



Demand curve of an enterprise under monopolistic conditions: the enterprise is confronted with a demand curve aimed downwards.

Illustration 16: Demand curves in a polypoly and a monopoly

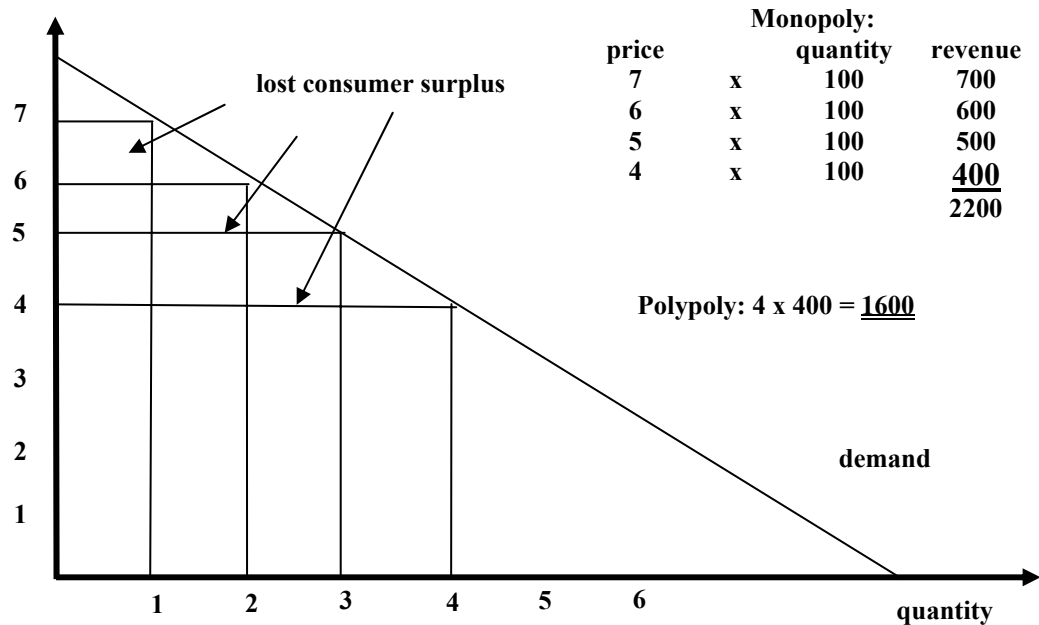


Illustration 17: Revenue differentiation of a monopolist

The monopolist, however, still has another option. He can adapt a quantity just as a polypolist does, only at a certain price. But this quantity of goods is then smaller and at the same time more expensive in comparison with the supply of a polypolist.

The monopoly price does not show the shortage of the commodity for the consumer, but it is an expression of market power, namely that of the monopolist. Market power only can be prevented if competition works and the corresponding price and quantity reactions occur. Under competitive conditions, the enterprises can only promote their income interest by producing goods which are demanded. Competition, therefore, solves the power problem. The state must do everything to prevent market power from arising, i.e. it must promote competition in order ultimately to protect the consumers.

It must be the aim of a profit maximising enterprise to work with low-resource effort. This condition is reached in the so-called ideal capacity. The static functions of competition consist in its approximation of this ideal economic state of affairs. Here production or sales cannot be additionally increased by an alternative combination of the incoming factors of production; the structure of goods is optimally adapted to the structure of demand. These static conditions exist until changes on the cost side for production factors or changes in the demand behaviour make new static conditions necessary.

Competition between businesses leads to the development of new goods and new production methods (technological progress). The enterprises that implement innovations reduce costs and thus increase profits. The new products enjoy a temporary monopoly. Competition therefore also fosters innovation. Costly innovations require time-limited protection through patent law (protective function of the state). In order for the innovations to become disseminated, however, additional imitative competition must be able to adopt the innovations.

#### **5.4. Financial policy in the service of consumers**

Stable  
Money

Another player in the area of consumer protection is a country's central bank. The European Central Bank in Frankfurt, Germany, is responsible for the money in the euro zone in Europe. It works independently of the national governments. Among its tasks—of great importance for the consumer—is the safeguarding of different functions of money (here: the euro). By *money* one understands an asset that is accepted

- in general as a means of exchange or payment;
- as an accounting unit;
- as a store of purchasing power.

The function of exchange and means of payment exercised by money facilitates the trading of goods. Money simplifies the transaction costs of goods and services as well as the provision of production factors. Assume that a householder (A) needs an accelerator pedal for his car. He possesses, say, a golf club which he would like to trade for the accelerator pedal. But he must first find someone in possession of the



required accelerator pedal (householder B). Now B must also be ready to exchange his accelerator pedal for a golf club. Obviously, the wishes of A and B must harmonise. Moreover, it might not be the case that the golf club matches the accelerator pedal in value. Perhaps, A must exchange the golf club with (C) for a third commodity which B will then accept. As the example shows, job sharing and specialisation in a national economy would break down if the money that everybody accepts in transacting business did not exist.

**Functions  
of Money**

Money makes it possible for the goods to have value; this is the accounting unit function of money. Were it not for this unit, one would soon have an unwieldy number of exchange conditions: if in addition to the accelerator pedal and the golf club, two additional commodities are added to the example, for example 10 kilograms of wheat and one DVD player, then six exchange conditions must be met:

<b>Accelerator pedal: golf club</b>	<b>Golf club: wheat</b>
<b>Accelerator pedal: wheat</b>	<b>Golf club: DVD player</b>
<b>Accelerator pedal: DVD Player</b>	<b>Wheat: DVD player</b>

Half a million exchange conditions would already have to be established with 1,000 goods.

The third requirement with money is the function as a store of purchasing power. This is to ensure that the money received in a sale does not have to be used directly to buy another commodity. Consequently, in the course of time the same quantity of goods must be able to be bought with one unit of money. Thus the store of purchasing power is tied to a stable monetary value.

For this reason, depletion in monetary value, so-called inflation, can be guarded against. If money decreases in value in the course of time, it manifests itself in the consumers receiving fewer or poorer goods than if the monetary value were stable. This situation would result in

- a weakening of spending power as well as
- a distortion of the price relationship on the goods markets.

This does not mean that single prices do not increase or drop. This was an important prerequisite for markets to function. But the level is not meant to develop a life of its own. The lower inflation is, the greater are the incentives to save, which on the one hand favours the investment activity of business enterprises and, on the other hand, maintains the consumption opportunities of the consumers in hard times or in old age.

**Inflation**

A slight inflation (to max. 4% depreciation per annum) has under certain circumstances a beneficial effect on demand in the short term since, on the basis of imminent depreciation, consumers spend their money more quickly or want to invest. Admittedly, they still ask for a liquidity bonus for investments, i.e. the credit balance interest must be

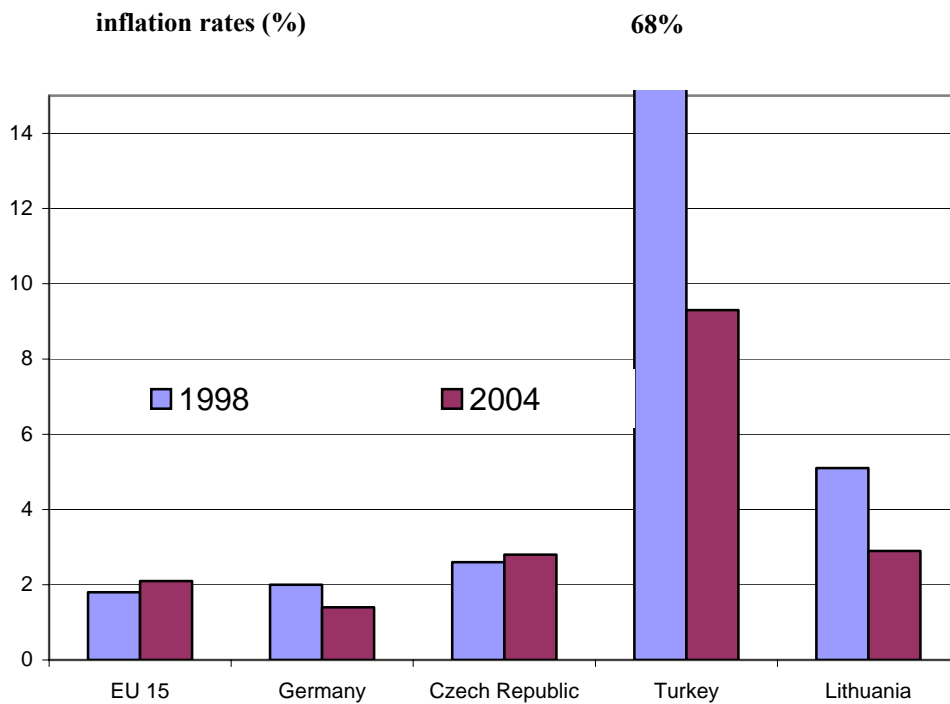
considerably above the rate of inflation. If they do not do this, the attempt is made to invest the money elsewhere (for example abroad).

Once inflation commences (a rate of price increase of more than 2% per annum), a wage-price spiral threatens. Employees try to get higher wages as compensation for increasing prices, thus increasing production costs; employers then try to pass on the increase in production costs in higher prices to the consumer. A vicious circle begins, in which as a rule the consumers and employees suffer the most, since some employers, if they feel the pinch unduly, can also switch to inflation-free foreign countries. Severe inflation (over 4% depreciation per annum) immediately has a demand-restricting effect. Money loses its value quicker than other goods (for example, real estate, shares, real capital in general) and is therefore no longer accepted by market participants. From then on people only pay with the goods they possess in order to get goods they need.

**Wage-Price  
Spiral**

If the state tries to regulate free price formation, inflation will look for other ways in the form of covert or built-up inflation.

Source: Eurostat, OECD, UN



**Illustration 18: Development of inflation in selected national economies**