Chapter 7 The system of credit money

7.1 The basic principles of the system of credit money

It is not necessary to describe in detail the process of development of the model of society considered in the previous chapter. It is sufficient to assume that we begin to observe it again after a certain period of time, and that all of its members continue to have those characteristics and follow those rules that were assumed at the beginning. These can be encapsulated in the statement that these people are absolutely honest and do not harm others in any way. For this reason, no institutional form of authority has emerged in this community.

Thus we now see an advanced civilization of free people who have discovered all the benefits that can be derived from mutual cooperation if only the three fundamental rights of the human person are respected. Recall that these rights include the right to life, the right of ownership of the results of one's own effort, and the right to freely shape the quality of one's own life provided that the quality of life of others is not harmed. The source of these benefits is, on the one hand, the objective diversity of the knowledge, abilities, and skills of individuals, and on the other, the progress of science, technique, and production technology.

Each member of the community under observation meets his or her needs in whatever way he or she deems best. Some goods people produce by themselves, but the vast majority they buy in a store. What can be discovered is that all payments and monetary settlements are carried out exclusively on a cashless basis using an electronic payment card assigned to the holder's current account. Payment cards are issued by a special non-profit institution, the Global Settlement Agent, which maintains the settlement accounts of all participants in the system, including minors. The task of this institution is to organize and operate all the settlements from the technical, record-keeping and accounting side and to guarantee security and reliability of the system.

Accounts of persons who have full legal capacity may have an unlimited negative balance. On the other hand, accounts of minors and those who, for various reasons, do not have legal capacity, may only show non-negative balances. Thus, if the balance of such a person's account falls to zero, it is no longer possible to pay until the account is topped up.

Restricting minors and other dependents from spending more than they have received from their relatives or caregivers is not necessary from the point of view of the payment system, but it was dictated by the concern that young people, not yet fully formed as members of society, as well as those who as a result of illness have lost or never had the ability to think rationally, should not make hasty purchasing decisions. This could conflict with the principles of their parents or guardians. It is up to the parents or guardians to decide whether to remove such restrictions earlier or to keep them in place until the age of majority.

A logical consequence of the rules of this model community is the right of inheritance of both property and liabilities of the testator, which is inscribed in the rules of the settlement system and does not provide for the possibility of rejection of the inheritance.

For purely organizational reasons, accounts and cards for company settlements were also introduced. Because some companies are group-owned, it was considered necessary to separate company payments from the personal payments of their co-owners. However, a rule was introduced that company accounts, like those of dependents, could only show non-negative balances[1].

On the technical side, all transactions and transfers are settled immediately in real time by simultaneously debiting the payer's account with the payment amount and crediting the payee's account with the same amount, regardless of whether the payment is made in person or remotely. The system is organized in such a way that there is no possibility for any payment to "go missing", whether due to technical problems or because the card is lost or misplaced due to fortuitous reasons.

Each member of the monetary system described here gets a card with a zero balance in his account and can immediately use it according to the rules given above. The basic unit of account of the monetary system described here is the aurus (AUR). This name comes from the time when a gold coin was the commonly used medium of market exchange in this community. This is the only association of this unit with gold. As a result of the described rules of the payment system in this model community, the sum of the balances of all accounts at any time is zero.

7.2 The "genesis" of the Credit Money System

If one wanted to present the "historical" roots of the settlement system described above, one could use the following story:

“This system was introduced not long after gold became common as a universal equivalent, with which payments were made for purchased commodities[2]. The fact of using gold as a means of exchange, that is, as money, caused a breakthrough in exchange transactions. The act of direct exchange of a commodity for other commodity (C1 - C2) occurring at the same time and place between two market participants was broken and replaced by two acts of exchange occurring at different times and places, involving three participants. The first act of exchange is the sale of a commodity by person A to person B for money (C1 - M) at a given time and place. The second act of exchange is the purchase at another time and place by person A of the commodity he needs from person Z for the money obtained in the first transaction from person B (M - C2).

[1] The reasons for such limitations are explained later in this work

[2] The term "commodity" should be understood as any good and any service that is the subject of a sale and purchase transaction in the market

In the period between the first and second transactions, person A has an income from the sale of her commodity, which is represented by the amount of money received from the buyer. This income gives her the right to receive the equivalent in other commodities at any time. If she exercises this right, she disposes of the money. Only under such circumstances does it make sense to accept payment in money. For exchange serves only to satisfy one's need with less effort by the effects of someone else's labor.

Here we can clearly see the role of money as a guarantor of reciprocity[3]. Such a guarantor proved necessary in our community, because even the most honest person (and such are, by definition, the people in our model) cannot be sure that the actual state of his or her settlements with other members of this community is consistent with what memory tells. Especially since everyone is constantly buying and selling something, causing the balance of accounts to constantly change. If not for that deficiency, money would not have been necessary for anything[4]. A statement that a person is acting in accordance with the principles of reciprocity and equivalence of exchange would suffice to conclude the transaction. For the same reason, it was necessary for a time to have bankers who lent gold to those who wanted to buy something but did not have sufficient income. Such loans were repaid with interest when the borrower earned an income by selling something to others.

Having perceived and understood that money only confirms the right to an equivalent, which results from the principle of reciprocity of exchange, the use of gold coins as a medium of exchange was quickly abandoned. Instead of paying and receiving money in settlement of a transaction with goods and services, people simply began to record their buying and selling transactions in their transaction books, using a gold unit as the unit of account. Everyone set up such a book and every time he bought something, he immediately recorded the amount he spent on it. The seller recorded the same amount in his ledger as his income. The balance, i. e. the difference between the amount of income and expenditure, was also calculated on an ongoing basis.

In this way, the problem of imperfect human memory as a factor threatening the principle of reciprocity of exchange ceased to exist, because the current balance in the ledger unambiguously informed about the state of a person's settlements with all other members of the community. A positive balance meant that the owner of the ledger delivered more of his own commodities to others than he received from them. A negative balance proved the opposite. The former testified to a creditor's position, that is, the possession of an unused right to an equivalent in goods; the latter to a debtor's position, that is, an obligation to provide one's own goods or services to others.

Such a system of settlements has been in operation up to the present time. Only the information carrier has changed; the transaction book and manual records have been

[3] For an elaboration on this issue, see Chapter 13.

[4] Let us remind that members of this community are (by assumption) absolutely honest, therefore always for goods or services received on the market with a certain monetary value (price) they return the equivalent in the form of their own goods or services, giving them to those who want them.

replaced by a payment card and an electronic record on its holder's account, but the principle of the system has remained the same.”

7.3 The essence, features and mechanism of the credit money system

As can be seen from the above "historical outline", the discovery of the three principles of market exchange, i.e. the principle of voluntariness, the principle of reciprocity and the principle of equivalence, and later the recognition of the fundamental role that money plays in market exchange, which is the role of a guarantor of reciprocity, allowed for its definite elimination from the economic system. Along with money, loans have disappeared as a way to finance a purchase when someone has not yet earned an income. And as a consequence, bankers also became redundant, since the observance of the principle of reciprocity is guaranteed by the settlement system described above. Of all the functions that money has hitherto performed, in the new system adopted in this model community only the function of a unit of account remained; the unit of money serves only to express commodity prices and the balance of people's receivables and payables arising from transactions. As mentioned above, the fact of having a positive balance in a clearing account means that up to that point the owner of the account has delivered goods of greater value to others than he has received from them, and so has an unexercised right to receive an equivalent. A negative balance indicates the opposite.

It is worth emphasizing again that the only object of these receivables and payables are commodities, i.e., goods and services. There is no other way to settle the balance. This is also true in the case of giving or receiving a financial donation. In such a case, the balance changes not as a result of a reciprocal transaction, but as a result of a unilateral transfer from the donor's account to the recipient's account. This is the only pure financial flow possible in this system, but it only replaces the in-kind donation. In this system, there are no other titles of payment.

The settlement system described above is in fact a moneyless system, because it has neither a means of exchange, nor a means of payment, nor money-as-a-store of value. It is worth noting that the essence of each of these three functions of all forms of traditional money is the possession and transfer of ownership of what fulfills those functions, that is, what is the actual money. For that to be possible, someone has to create such money, that is, to call it into existence either in physical form (coins, banknotes) or in symbolic form (bank money). What is needed, then, is either a mint, in which metal money is minted, or a bank, in which symbolic money is created. Only when such money is created can it become an object of ownership, serving as a store of value, and when ownership is transferred - as a means of exchange or means of payment.

In contrast, in the credit money system analyzed here, which is essentially an improved real-time multilateral commodity clearing system, only a unit of account is needed in which prices of commodities exchanged and the value of receivables and payables arising from those transactions are determined. The only reason for such receivables and payables is the time difference between the purchase and sale transactions of goods and services by each participant in the system. The objects of these receivables and payables are, as mentioned above, only goods and services. Each purchase and sale transaction changes the previous balance of both counterparties by the same amount, so the sum of these changes is always zero. This is a logical consequence of the principle of reciprocity; if any participant in the system is entitled to receive goods of a certain monetary value, then there must be at least one person who has an obligation of the same value. Balances are thus merely a confirmation of the existing creditor-debtor relationships between participants in the system, the object of which is goods and services. Only a common measure is needed to record the size of these balances, which for obvious reasons is not the subject of any operations.

Liabilities decrease whenever the account owner sells something, because then his account is credited with the amount of the transaction (and the account of the counterparty is debited with the same amount). Conversely, the receivable balance decreases whenever the account owner buys something, because then his account is debited with the corresponding amount (and the seller's account is credited). Analogically, it works the other way round. Thus, looking from the point of view of settlement technology, we are dealing here with a certain analogy to the effects of transactions in the classical monetary system.

But the analogy is only apparent, because the credit money system described here differs from the classical one in at least two aspects. First, in the classical money system, debt can arise both from buying commodities on merchant credit and from borrowing money. In the credit money system, money lending does not occur because it is not needed for anything, and debt is only created through the purchase of commodities when there are not enough funds in the buyer's account. Secondly, in the classical money system, every debtor always owes a debt to a specific creditor and pays this debt by paying the creditor a certain amount of money. In the credit money system, on the other hand, a person with a negative balance on the account owes a debt to all those anonymous members of the system who have positive balances, and the debt can be only paid off by selling own commodities to any member of the system.

Despite all these differences, and despite the fact that in the model of economy considered here no money as such exists, but only a monetary unit of account, we will hereafter refer to this model as the credit money system, and the unit used in it as credit money.

The above discussion leads to the following conclusions about the functioning of the economic system under the assumptions made.

First, it is always man who decides when and what he needs and what he does not need; need is therefore always the result of conscious choice.

Second, under all circumstances, a person can satisfy his needs on his own by doing whatever is necessary to do so. If, however, there is a possibility of market exchange and a person wishes to take advantage of it, then he can acquire the goods he needs with less effort. A prerequisite for such exchange is the reciprocity of services.

Third, an act of market exchange does not increase the wealth of any market participant, but only changes its structure.

Fourth, if the reciprocity of market exchange is ensured by other means, money is not needed for this. Only a unit of account is then needed for exchange settlements.

Fifth, one of the material effects of human activity may be an increase in the amount of goods at his disposal, i.e., an increase in his wealth. However, the amount of goods owned does not provide any basis for assessing the quality of life of their owners, but only shows the role they play in the structure of needs of their owners.

Thus, if one wanted to capture the relationship between market exchange and people's quality of life, one would have to conclude that each person's quality of life depends not on whether and to what extent he or she uses market exchange, but primarily on what that person does to achieve the desired quality of his or her life. Material goods may or may not play a large role here. If they matter to someone, he acquires them in one way or another. If not, he focuses on aspects of his life that he considers more important. But in any case, donations aside, a person meets his needs through his own efforts.

Market exchange becomes important for people's quality of life only when they have the opportunity to use it and when they choose this way of acquiring tangible and intangible goods and services. Then they can achieve their desired quality of life with less effort. It is to this extent alone that market exchange is relevant for the quality of life.

7.4 Market roles of people

At birth, every human being finds the world in some objective state, regardless of where and when this happens, and in this objective state he must arrange himself somehow. In the model community considered here, the most important objective element in the world for every human being is other people who, according to the assumptions made, exercise their freedom in a way that does not violate the freedom of others or harm their lives and property. The second objective element of the world is all goods, both tangible and intangible. Each of these goods has some owner, who became that owner either as a result of his own actions or as a result of the actions of his ancestors. The third objective element of the world is material things that do not belong to anyone, i.e. all material elements of the environment. In the model, they are available to everyone and everyone can make any use of them, under the obvious condition of not violating other people's right to life and property rights. The last objective element of the world surrounding every human being is natural conditions and the laws of nature.

After the period of childhood, in which everyone undergoes the process of upbringing and preparation for life[5], a person reaches maturity and becomes a full member of the community, who - according to the assumptions - obeys all the rules of coexistence. Then the person takes full responsibility for the quality of his or her life. The assumptions made with regard to the members of this community impose on everyone, among other things, the obligation to respect the property of others, but they do not exclude or limit any form of charity. Therefore, the quality of life of each person depends primarily on what he or she is willing to do for that quality, but others can also contribute to improving the quality of life of each member of the community.

The development of civilization does not change the principle that every person, with the exception of children and others who are unable to do so for various reasons, satisfies his or her needs by his or her own efforts. However, as civilization develops, the proportion of needs satisfied by oneself decreases and increases the share of those in which one's own needs are satisfied by the effects of the work of others acquired through voluntary and mutual exchange. This process is a feedback loop. On the one hand, it requires progressive specialization that results in the creation of new goods offered to others, thus increasing the product offer. On the other hand, specialization entails the increasing dependence of people on market exchange. This does not mean, of course, that everyone must use the market when in need of a good or service, because in any case the alternative to the market is self-sufficiency. However, as mentioned earlier, market exchange allows people to satisfy their needs with less effort and is therefore usually the first choice where this possibility exists.

For the essence of what happens in the sphere of market exchange in a developed economy, it does not matter at whose initiative the transaction takes place or what is the object of it. For in every case we are dealing with a transaction in which each party receives what it needs and gives in return what the other party needs. The only difference is that in direct exchange, as was said earlier, the market participants achieve their purpose in a single act of exchange between two people at the same time and in the same place, while in a system of monetary exchange it is always done in at least two acts of exchange taking place at different times and in different places, involving at least three people. One of these acts is the sale of some own good or service and the other is the purchase of some other good. The order of these acts is irrelevant in the model under consideration, since market participants observe the principle of reciprocity.

From the principles of the market described above, then, it is clear that every market participant must act in two roles in the market: supplier and receiver. In direct exchange this is obvious; one cannot receive anything without immediately giving something back. But it is also obvious in indirect monetary exchange, as well as in the credit

[5] It is a process of socialization that essentially boils down to the human individual learning to exercise his or her unlimited freedom in a way that does not harm the freedom of other members of the community. The greatest part of this process is played by the parents and close relatives of the individual, who directly transmit a system of moral norms and rules of social coexistence. Observance of these norms and rules promotes the process of integration and development of such a community.

money system described here. In each of these systems, the market participant must be both a buyer and a seller. It is impossible to act only as a buyer there at all, because the right to buy belongs only to those who have already earned income from the sale, or who undertake to do so. And acting only as a seller, however formally possible, makes no sense; what is the use of sales revenue if one does not intend to buy anything. So long as the market is one's principal source of goods and services, he must perform each of these roles in any order, taking care only that the discrepancy between his expenditures and income remains within a reasonable range.

The second issue related to the roles of people in the market concerns the object of purchase-sale transactions. For obvious reasons, such an object can be either goods, tangible and intangible, or services. There is no other possibility. Therefore, taking the source of income as a criterion, i.e. looking at the market from the supply side, market participants can be divided into two groups. One includes those who supply the market with various goods, and the other - those who provide services. The fact of appearing in some transaction as a seller of goods does not exclude the possibility of appearing in another transaction as a provider of services, and vice versa.

7.5 Conditions of establishment and mechanism of operation of an enterprise

Similarly as in the real economy, also in our model, production of the majority of goods and rendering of many services takes place in enterprises, i.e. in appropriately organized groups of assets intended for conducting business activity, separated from the owner's property and existing under its firm. Thanks to such separation, the matter of satisfying the life needs of business owners is separated from their needs connected with running the business, i.e. from the needs of the company. It is then also possible to calculate the economic profitability of business activity. Only the so-called independent professions (freelancing) and trade and service activities conducted personally and on a small scale do not require such a form of separation.

Whether an enterprise has one or many owners, and whether it is a manufacturing, trading, or service enterprise, it is always just a tool for its owner. A company differs from a spade or an excavator only in the number of its components and in the degree of its complexity. In all other respects - toutes proportions gardées - these tools are similar. In each case, creating a tool requires a certain amount of effort and resources from a person or a group of people. In each case certain expenditures are also necessary for maintaining these tools in a proper condition, as well as for their operation, which must be borne by the owner of a given tool. All these expenditures are incurred not so that the owner has the tool, but so that he can use it to more easily satisfy his needs. This is the primary function of any tool.

In order to present as precisely as possible the essence of the processes occurring in an enterprise understood as a special form of organization, and also - the essence of relations between people involved in these processes in different roles, we will use the example of a man from our model, who decided to earn a living as an entrepreneur producing parts for machines. For this purpose, he creates a production enterprise, which he must equip with appropriate assets.

Let us assume that the business plan developed earlier shows that the entrepreneur has to allocate AUR 1 million[6] for the purchase of fixed assets and AUR 30 thousand every month for the purchase of materials, energy, etc. He must also cover personnel costs, for which he needs a further AUR 20 thousand every month. According to the business plan, the first sales revenue is expected to come in the month following the completion of the first production cycle. The calculation made in this plan at the assumed prices shows that the sale of 80% of the products from each batch will cover all the costs of a given cycle. The rest will constitute his profit. Believing in the success of his plan, the entrepreneur sets to work.

In order to start implementing this plan, the entrepreneur must transfer AUR 1,050 thousand to the company account, as this is the necessary amount of capital to finance all planned expenses. Assuming that our entrepreneur does not have any funds in his account (the balance of his personal account is zero), the transfer of funds to the company account will create a debit (negative balance) on his personal account in the amount of AUR 1,050 thousand. This is a personal obligation of the owner, which he will have to fulfill according to the rules of the credit money system described above, which is valid in this model.

The situation of the enterprise on the date of its creation is shown in the following balance sheet No. 1 (in thousands of AUR), in which there are only two items; in assets the funds in the enterprise's account, and in liabilities the source of these funds, i.e. its equity.

Balance Sheet No. 1: Status at the time of incorporation

Assets		Liabilities	
Funds on the account	1 050	Equity	1 050

In the next step, the entrepreneur purchases the necessary fixed and current assets, paying for them immediately - in accordance with the rules - from the company account AUR 1,030 thousand. And when everything is ready, he starts to produce the first batch of goods. At the beginning of this cycle, the situation of the enterprise is as in balance sheet No. 2:

[6] AUR is a fictional monetary unit appearing in the "history" of the monetary system from the previous chapter

Balance sheet No. 2. State at the beginning of the first production cycle

Assets		Liabilities	
Fixed assets	1 000	Equity	1 050
Raw materials, supplies, fuel, etc.	30		
Funds for salaries and wages	20		
Total assets	1 050	Total liabilities	1 050

Immediately after the completion of the first production cycle, i.e. one month after the start of production, the company's balance sheet is as follows (balance sheet No. 3):

Balance Sheet No. 3. State at the end of the first production cycle

Assets		Liabilities	
Fixed assets[7]	1 000	Equity	1 050
Finished products	50		
Total assets	1 050	Total liabilities	1 050

If it is assumed that the whole batch of finished goods will be sold successively and proportionally to the passing of time until the end of the next cycle at assumed prices, the enterprise will achieve income from sales in the amount of AUR 62.5 thousand in that month (50/0.8=62.5), 12.5 thousand of which constitutes its profit. At the same time, however, the company must spend another AUR 50 thousand (AUR 30 thousand for raw materials and AUR 20 thousand for wages) to start the next cycle, so that at the end of the second month its balance sheet will show the following (balance sheet No. 4):

Balance Sheet No. 4. State after the end of the second production cycle

Assets		Liabilities	
Fixed assets	1 000	Equity	1 050
Finished products from the second cycle	50	Profit for the first batch	12,5
Funds on account (62,5-50)	12,5		

[7] For simplicity, depreciation of fixed assets is not figured in the calculation.

Total assets	1 062,5	Total liabilities	1 062,5

Assuming that such an optimistic scenario will be realized constantly, after one year from the beginning of production the balance sheet of the company would look as below, with the additional assumption that the achieved profits were not used for investments enlarging the production potential of the company, nor paid to the owner.

Balance Sheet No. 5. State after 12 months

Assets		Liabilities	
Fixed assets	1 000	Equity	1 050
Finished products from the 12th cycle	50	Profits for 11 batches	137,5
Funds on account	137,5		
Total assets	1 187,5	Total liabilities	1 187,5

There is no need to continue this example, because under the assumptions made, the balance sheet of this company at the end of each month would differ from the previous one only by the amount of AUR 12.5 thousand and by this amount - ceteris paribus - the balance of the company's account would increase every month. This AUR 12,5 thousand is the profit from each batch of goods sold in full.

Based on this example, interesting findings can be drawn. Firstly, at the moment of starting production the entrepreneur has a tool ready to use for this purpose. This tool is a company equipped with fixed and current assets, including funds necessary for wages (balance sheet no. 2). The goal of the entrepreneur's efforts to date has therefore been achieved at this point.

However, the point is that the entrepreneur bought everything necessary for the establishment of the company without having any funds in his personal account. The evidence is the negative balance of his personal account, from which he transferred the amount of AUR 1,050 thousand to the company account as initial capital. This amount therefore determines the value of the equivalent that the business owner must provide in the future to the members of this community in the goods they need in order to comply with the principle of reciprocity of market exchange. Until he does so, he will be a debtor.

Second, nothing has increased in the company after the completion of the first production cycle. Only the structure of the company's assets has changed; before it was fixed assets, materials, and cash on the account, but now it is fixed assets and finished products (see balance sheets 2 and 3). This is evidence that there are qualitative rather than quantitative changes in the production process. The finished goods created in the production process are not a mere "compilation" of the goods and services that went into their production, but are quite different goods, they are new qualities. Nevertheless, their value is determined by what the owner has sacrificed to produce them. In our example, he sacrificed working capital purchased for AUR 30 thousand and the services of his employees purchased for AUR 20 thousand[8]. For the entrepreneur, therefore, the value of the goods produced in his company at the end of the production cycle, i.e. here and now, is equal to AUR 50 thousand, because this is what he paid his suppliers and employees to have these products.

Third, finished goods were manufactured solely so that the income from their sale would enable the entrepreneur to purchase goods and services necessary to satisfy his needs, both his life needs and his needs as an entrepreneur. Applying K. Menger's hierarchy of goods (Menger 1871, chapters I and II), all the fixed assets of an enterprise should be classified as intermediate goods of the second order, i.e. tools used to produce other tools, while finished goods should be classified as intermediate goods of the first order, i.e. tools used by people to obtain goods directly serving their needs, which is why they are called direct goods[9].

By completing the first production cycle, the business owner completes the stage of capital creation. This capital is a complete enterprise ready to be used as a tool. The condition of its creation is the founder's resignation from allocating a part of the effects of his activities to current needs in favor of future ones. It is not, however, about "eating tomorrow what can be eaten today", but about allocating these effects to satisfy future needs more easily and effectively. This is the purpose of creating any tool, including the tool that is the enterprise. This is how the first farmer must have acted in the past, when he gave up eating the harvested grain in order to use it for sowing, or the first hunter who devoted his time and effort to making a bow and arrows and learning how to use this tool, and this is how entrepreneurs who invest in their own companies still act today. Capital always becomes those results of work that have been allocated to satisfying future needs.

At this point, it could be argued that the entrepreneur in the example does not meet the condition of capital formation given above, because he has not yet saved anything, and still has capital in the form of a complete company, that is, everything that makes up the assets of his company (fixed and current assets, including finished goods). It is of course true that our entrepreneur hasn't saved anything yet. However, it is worth noting

[8] As mentioned in the previous footnote, for simplicity we omit here the partial consumption in each production cycle of fixed assets, which is reflected in the depreciation expense appearing in the normal income statement.

[9] The place in the hierarchy of goods is not determined by any characteristic of the good, but solely by the function for which it will be used. To illustrate, three examples: a potato bought by a housewife for dinner is a direct good and a potato bought by a merchant for resale is a first-order intermediate good; a shotgun for a sportsman is a first-order intermediate good because it makes it possible to win a championship in a competition, which is a direct good that satisfies the sportsman's need for success. For a hunter who delivers his game to a dealer, on the other hand, a shotgun is a second-order intermediate good (the first-order intermediate good is the hunted game, and the direct good is what he buys with the payment). However, if the hunter buys another game for his own table, the shotgun becomes a first-order intermediate good and the boar is a direct good.

that although this entrepreneur has an enterprise, he also has personal obligations which he has incurred for this purpose so far (AUR 1,050 thousand after the transfer of funds to the enterprise account as initial capital). These liabilities the entrepreneur will have to pay off personally in the future by supplying the market with what others want to buy from him, and he will have to do so until his liabilities in the form of a negative balance in his personal account disappear.

It is true, of course, that the source of these repayments will be profits from his activity as an entrepreneur, and that these profits are to come from the sale of his enterprise's products. This is what our entrepreneur is counting on when he decides to take on this debt. If these products were sold as envisaged in the business plan, then at the time of achieving sales income equal to the costs incurred in a given cycle, i.e. AUR 50,000, the entrepreneur would still have a stock of finished goods representing 20% of the volume of production in that cycle. Only the sale of this remainder would ensure a profit which, if transferred to a personal account, would allow the entrepreneur to reduce his personal account liabilities by this amount. If, therefore, everything went steadily as in the adopted optimistic assumptions of the business plan, our entrepreneur would be able to pay off his entire liability from these profits after 84 months, i.e. after 7 years (1 050/12.5=84), under the additional assumption that all of these profits will be saved, i.e. that during this time he would incur absolutely no personal expenses nor expenses for repair and maintenance of machines and equipment, and other capital expenses. Such an assumption is, of course, untenable in the real world, so that the period of "getting out of debt" must be the longer, the more of that profit will be used to cover the entrepreneur's living needs[10]. Thus, despite the fact that in the example under consideration the capital was transferred to the enterprise before its owner earned his income, the sole source of this capital is the personal savings of the entrepreneur.

It does not require sophisticated economic knowledge to conclude that every case of incurring obligations is connected with the risk of inability to meet them. This risk is the greater the longer the term, and the factors of this risk lie both on the side of the entrepreneur and the environment in which he operates. Without entering into detailed considerations on this subject, it will suffice to point out that any deviation downwards from the scale of sales assumed in the business plan and from the planned prices, as well as any deviation upwards from the assumed production costs, threatens with failure to achieve the planned profit. In each of these cases, our entrepreneur would have to remain in debt longer than planned, and in extreme cases, his debt might become unpayable. If we also take into account the obvious necessity of paying for the current needs of the entrepreneur and his family, the scale of the risk that the entrepreneur described in the example would take on becomes fully apparent.

Considering all these conditions and circumstances, no member of our model community could create enterprises on credit, although the settlement system formally allows for such a possibility. This would create the risk that the obligations taken on for

[10] This "paying off", of course, only means automatically reducing the negative balance of the personal account as funds are received. If he were to allocate, say, AUR 2,000 per month, the period would extend - caeteris paribus - to 100 months.

this purpose would have to be "worked off" by the entrepreneur's heirs, should he not be able to fulfill them during his lifetime. Absolute honesty, which - according to the assumption - is characteristic of all members of our model community, does not allow for such conduct. Capital formation from future savings, as placing the risk on third parties, must therefore be considered incompatible with the principles of our model. This, however, in no way violates the validity of the conclusions regarding the essence of the enterprise as a tool and the economic processes taking place within it, including those that will appear below.

There are no such problems when an enterprise is created from the capital accumulated previously from the savings of a person who has decided to become an entrepreneur. This is because in such a case, in the event of a possible failure, no one else suffers any negative consequences. The only victim is the entrepreneur himself, who "sunk" his savings in the assets of the company. Even for the entrepreneur himself, such a situation in the worst case scenario means that he is left with assets that do not bring the expected results, but do not limit his ability to satisfy his needs in other ways, in particular, to use these assets for other purposes.[11]. Nor does it limit the possibility of satisfying one's current needs in accordance with the principles of the credit money system.

A person who wants to become an entrepreneur in such a classical way must earn an income over a period of time by selling some goods or services and save part of this income as an investment for the future. This means that during the whole period of capital accumulation, such a person provides more goods or services to other market participants than he receives from them, thus becoming a net creditor. The evidence of the creditor position in the credit money system under consideration here is the growing positive balance on the personal account of the future entrepreneur. This balance grows, of course, at a pace proportional to the amount of income and to the rate of saving. In turn, the amount of income depends on the quantity, type, and quality of what the person sells; more "sophisticated" goods and services tend to bring in more income, and simple goods and services tend to bring in less income. Regardless of what is sold, however, the income that can be earned at any given time is always limited. This is because it is limited, on the one hand, by the demand for goods and services offered by a given person, and on the other, by his physical capacity and the length of a day. For these reasons the capital accumulated from savings grows slowly and this process cannot be accelerated. It is also worth mentioning that in this process only the savings of those people who accumulate them in order to transform them into the capital of enterprises count. Savings accumulated for another purpose and savings accumulated by third parties have no relevance to the process of capital formation.

The problem of insufficient own savings for the establishment of an enterprise can be overcome by forming a partnership of persons who want to unite their forces and resources for this purpose. In such a case, the role of the owner of the enterprise is played by a fictitious collective entity, which is a company operating under a certain

[11] A good example of such alternative use of property in real life are the so-called lofts, i.e. apartments arranged in adapted halls of closed factories or storehouses.

business name. It is of little importance whether and how the partners participate in the everyday management of the enterprise; this is determined by the articles of association. The only important thing is that each shareholder transfers to the company's account a certain amount of money as a share in the capital and participates in the company's results in proportion to the share. This means that it both profits when the company makes a profit and participates in its losses, if any. This is an obvious consequence of both principles in our model, i.e. the principle of voluntariness and the principle of reciprocity.

The mere fact of formation of an enterprise by a company does not change the source of financing of its activities. The only source is its capital coming from the payments of the shareholders. It is worth recalling that - according to the terms of the model considered here - the expenses of any collective entity cannot exceed the amount it has in its account. This is a consequence of the recognition that man is the only real person, and therefore the only autonomous and responsible subject of the material animated world. All so-called collective social entities are merely abstract creations of the human mind which do not exist outside it[12]. The effects of such collective entities occur only when the people who make up such a collective act; they are therefore the effect of the action of people, not of the collective. Consequently, only humans can have the right to make commitments, because only humans have the real ability to fulfill their commitments.

If the income from the sale of the company's products does not cover all the costs of its operation and the company's account runs out of funds, only the shareholders can decide whether they want to continue to finance a venture that produces results less than the outlays. A negative decision does not have to mean the liquidation of the enterprise immediately, but only the suspension of further production for the time necessary to sell the inventory of what has already been produced. If this is successful, funds will appear in the account and production can continue. If not, the partners may decide to liquidate their business and dissolve the partnership. In that case, the partners can sell the tangible assets of the business and divide the proceeds among themselves in proportion to their shares. In the worst case scenario, should this not work out, the assets of the liquidated business can somehow be physically divided among the shareholders and each shareholder can do what they want with their portion.

As can be seen from the above, the worst possible outcome of the existence and operation of a business is, in our model, that it will become a useless asset to its owner. The most important thing, however, is that no outsider will feel the negative consequences of either its existence or its liquidation. It cannot be otherwise, because an enterprise is only a special kind of good, and every good is created in order to serve its owner to satisfy his needs. Under the accepted assumptions of the model, the creation and existence of such an asset does not in any way infringe upon the interests of outsiders, regardless of whether it brings the owner any benefits or not. In the latter

[12] Such collective entities, on the other hand, are an excellent way to shift the responsibility for the consequences of their own actions onto such a collective entity.

case, although it ceases to be used, it remains the property of the owner until he disposes of it. Of course, the possibility of using this property for other purposes is not excluded.

7.6 Capital of an enterprise and its profit

In describing above the establishment and functioning of an enterprise, the term capital has been used in several places to denote the amount of funds formally separated from the owner's assets and transferred to his company's account in order to finance the purchases of fixed and current assets necessary for the enterprise to function normally. In this approach, the term capital is synonymous with the tangible and financial assets of the company[13]. The structure of this part of the assets, which are fixed assets, is relatively stable. However, the structure of working capital - as shown in the previous subsection - is subject to cyclical changes. The monetary value of capital so understood is determined by the amount of funds transferred to the enterprise by its owner. When the funds run out, in our model the possibility of incurring further expenses from the enterprise's account ends.

A source of capital in the above sense is that part of the business owner's income which he allocates to an investment intended to facilitate satisfaction of his future needs and which he does not want to spend on satisfying current needs. It is irrelevant whether the capital is derived from income already earned and saved for that purpose or whether it is derived from future income. If the capital comes from accumulated savings, which in our model represents a positive balance of the owner's personal account, then transferring them to the business account and using them to purchase fixed and current assets means that the owner of these savings realizes in this way his rights to equivalence resulting from the principle of reciprocity of market exchange. After such an operation, the business owner obviously does not owe anything to anyone. If, on the other hand, the capital of the enterprise has been created by the owner's incurring private obligations, this man will have to save his income in the future and to do so until the sum of these savings reaches the value of the enterprise now acquired. Either way, the only source of capital is the savings of the business owner.

Taking into account the fact that the funds transferred to the enterprise as its capital are used to finance purchases of both fixed assets and any current assets necessary for proper operation of the enterprise, capital means the amount the owner of the enterprise paid for a complete and ready-to-operate tool with certain technical parameters. It is worth remembering, however, that the mere fact of incurring capital expenditures and establishing an enterprise does not determine whether the tool will become a capital good for the owner, and the expenditures made for its purchase - a successful investment in tangible capital. For a business to become a capital good for the owner, it

[13] The term capital also has a second meaning, related to the system of recording economic events called accounting. In this view - as shown in the balance sheet accounts in the previous subsection - capital appears in the company's balance sheet in liabilities, indicating the sources of asset financing. In the model of economy considered here - according to the assumptions of the system - the source of financing assets can be only the company's own capital. In a real economy, it is also possible and commonly used to finance assets with foreign funds (capital from various types of loans).

must provide him with the expected benefits. Clearly, these benefits can only accrue if the entrepreneur begins to use the tool and if his actions prove successful. It is worth noting that this tool is only ready for use at the end of the first (and each subsequent) production cycle, i.e. when a given batch of products is ready for sale.

In order to better explain what this effectiveness of the business owner is, let us use an example from another field, namely a hunter who is at the same stage as our entrepreneur now, i.e. when the production cycle has been completed. He owns a previously purchased rifle and ammunition, and has learned how to use them. For the possession of these tools to benefit him, the hunter must meet three conditions:

- go hunting with the shotgun,
- track down some game, and
- shoot accurately.

If, despite his best efforts, the hunter fails to track due to the lack of game or bad weather, or if he does track but his gun fails him, or if he shoots inaccurately, the hunting effort and expense is in vain. Therefore, the benefit of the hunted game will only appear if the hunter is not hindered by objective factors, such as lack of game, gun failure, weather breakdown, etc., and if he can shoot accurately.

It must be emphasized, however, that the success of a hunting trip does not mean that all the game hunted is a net benefit to the hunter. Even if we disregard the transportation costs to and from the hunting location as insignificant, it is impossible to ignore the fact that the hunter must rebuild his ammunition stock and preserve his rifle after returning from the hunt, otherwise his rifle would become useless, thus losing the characteristics of a capital good. The net benefit will therefore be, in the case of the hunter, what is left over from the game's harvest after the expenses of bringing the rifle to a state of readiness for reuse have been covered. However, what remains, i.e. the net benefit, is indisputably the effect of the hunter's effective use of the weapon, and not the effect of owning it.

Similarly, the benefit of using an enterprise as a tool can only be the profit from the sale of its products[14]. It is that part of the revenue from the sale of a given batch of commodities that remains after the total cost of producing those commodities has been covered. This is because covering costs is a condition for restoring the enterprise to a state that allows it to start the next production cycle on the same scale. Thus, it is a condition for maintaining its status as a capital good. Otherwise, the enterprise loses some or all of its ability to function normally, i.e. it is de-capitalized.

However, merely restoring the enterprise to a state of readiness to produce again is not sufficient for its owner to start the next production cycle. The goal of the entrepreneur is not to own an efficient enterprise, but to use this tool so that the resulting benefits provide him with the desired quality of life. And this is only ensured by the profit

[14] Note that we are considering here for the moment a model of the economy in which there is no state or any public institutions, so there are also no public tributes. Under such conditions, all profit belongs to the business owner.

defined above on the level expected by the business owner. And only on this condition the enterprise is a capital good for the owner.

7.7 The role of finished products in the enterprise

Before we move on to further issues related to the functioning of the enterprise and the role of the owner, it is necessary to dispel possible doubts concerning the validity of comparing the whole complete enterprise to a tool. The essence of a tool, which belongs to the category of intermediate goods, is that it can usually be used repeatedly. The fixed assets of an enterprise undoubtedly meet this condition. However, a problem arises with finished products, which are also part of the company's assets, because after selling them, they change owners and the previous owner cannot use them again. Finished products are therefore "used up" in this sense on a one-off basis, so that they seem to have the same character as consumer goods.

The matter takes on a different dimension, however, if we move away from the physical form of finished products and the fact that they "disappear" after sale, and focus instead on the function they play in the assets of the enterprise. This can be seen clearly in balance sheets 2 and 3 in subsection 7.5. There, at the beginning of the cycle, the current assets include raw materials, supplies, other work items, and cash on the account. At the end of the cycle, on the other hand, only finished products remain in current assets. Later, with each sale of finished products, their share in the value of current assets decreases, while the share of cash increases. In turn, with each purchase of raw materials, supplies, etc., and services (payment of wages and salaries), the share of cash decreases and the share of work in progress and finished products increases, and so on and so forth. Thus, looking from this perspective, we must recognize that an indispensable and integral component of the enterprise is its current assets as a whole. What's more, the physical structure of these assets must be subject to constant and harmonious changes in accordance with the phases of each cycle. Any "jamming" of these transformations in any of these phases causes at least a difficulty of passing to the next phase, and in extreme cases makes it impossible.

In order for a company to perform its function as a tool, at each phase of the production cycle, that structure of its current assets has to be reconstituted which makes that phase possible. Finished products, as one form of current assets, must therefore be quickly transformed into another form, that of the cash from their sale, otherwise the company cannot continue to operate. In such a case it becomes for the entrepreneur the same as for the hunter his riffle, for which there is no more ammunition. Therefore, looking from this point of view, a *condition sine qua non* of starting the next cycle of production is obtaining at least such income from sales of products from the previous cycle, which covers the costs of their production. However, if it ended only on this, it would be tantamount for the entrepreneur to a situation in which the only result of his efforts so far is the possession of a tool, the use of which does not bring any benefit. Therefore, an obvious condition for a business to make sense is for the entrepreneur to make the expected profit.

It must be clearly emphasized that all sales revenue is the result of the successful use of the entrepreneur's tool, i.e. his enterprise, in the same way as all hunted game is the result of the successful actions of the hunter. Profit, on the other hand, which in the accounting sense is the surplus of the proceeds from the sale of commodities of a given cycle over the costs incurred in obtaining them, is in the economic sense the remuneration of the entrepreneur for his successful actions as a salesman. We will return to this issue below, after explaining the role of employees on the market.

7.8 Employees as market participants

There are terms used in some languages to describe the employees of a company or institution that indicate their dependence on whoever employs them. The Polish equivalent of the English word "employee" ("pracobiorca") means directly "the one who takes a job" and the English term "employer" means in Polish "the one who gives a job" ("pracodawca"). The situation is similar in German. "Employee" in German is "Arbeitnehmer", "the one who takes a job," and employer is "Arbeitgeber", "the one who gives a job." The terms "Selbsstandige" (independent) and "Unselbsstandige" (dependent) used in German in official statistics also leave no doubt about the nature of the relationship between employers and employees. Of course, employers are independent and employees are dependent. The English language is no different. Here, too, one can see who is who when someone, when asked what he does for a living, answers "I've been working for...". It just means that he works for someone else and not for himself.

Thus, each of these terms is a typical expressivism, which in advance imposes on the recipient of the message a certain emotional relation to the subject it concerns. The term employee in Polish and in German suggests that on one side there is the one who takes something from the one who gives it. It is, of course, about taking and giving work opportunities. Thus we have here an implicit suggestion that the opportunity to work exists only when the employer provides it. Moreover, the term suggests that the employer is not only the one who is better off than the taker because he has something to give, but also that he is a kind of benefactor, thanks to whom the latter receives something that he would not have received otherwise. In such a way, the semantic layer of these terms reflects the ethical evaluation and emotional attitude of most people to the mutual relations between employers and employees. The ethical evaluation is suggested by the belief that employees work *for* employers, and the emotional attitude is suggested by the belief that employees are dependent on employers and therefore are the weaker party in the market.

The purpose of this subsection is to show that such a view is fundamentally wrong. Nevertheless, throughout the rest of this paper, the terms employer and employee will be used in their traditional sense.

Let's start with the fact that if someone acts in the market as an employee, it means that at some point in his life he has made two important choices. First, he has chosen market exchange as the primary means of acquiring the goods and services he needs, thereby rejecting self-sufficiency in that regard. And second, at some other point, he chose wage labor as the means of earning income, thereby rejecting the activity colloquially referred to as own-account work. What happened between those two moments in his life is of little relevance to the substance of what is happening now. However, there can be no doubt that the option of "becoming an employee" was considered by him, at least for the time being, preferable to those he rejected[15].

There are many reasons why most people are not inclined to undertake so-called business activity, but prefer to earn for their own needs in the role of an employee. First, there is no need for capital, as is the case with entrepreneurs. Second, there is no need to take the risk that the business idea will be wrong. There is also no need to compete with existing entrepreneurs. Finally, one does not have to fulfill many other obligations usually imposed on entrepreneurs. The only problem, which does not mean a trivial one, is in such a case finding such a job which meets the expectations of a given person with respect to the nature of his/her duties and to the level of remuneration.

Considering the essence of the role of an employee in a market mechanism, one must first of all state that since the subject of a market offer may be either goods or services, and an employed person clearly does not sell goods, he may only act in the market as a supplier of services. It is irrelevant whether the employer hires such a person as an entrepreneur or as someone who is not an entrepreneur. Nor does it matter what the employer needs the services for. In any case, these are personal services of the employee, which differ from other services in place, time, type of activities, their frequency, etc., while the only common feature of these personal services is that they are "consumed" by the purchaser in the course of their performance. Thus, it does not matter whether the employee works on a lathe or as an accountant in a company, whether he rakes leaves in a neighbor's garden for money or whether he cares for the sick in a hospital as a nurse. In each case the person renders services against payment, just as a self-employed hairdresser, bricklayer, solicitor or musician giving a paid concert commissioned by an event organizer does.

As can be seen from the above, each employee is in this role a market participant in the same way as a trader selling his goods or a cab driver offering transport services; namely, he is a seller of a service performed in accordance with a contract. The nature of that service derives from the nature of the job served. The sole purpose of each employee as a market participant in this role is to earn an income from the sale of his service. That income then allows him to act in the marketplace as a purchaser of the goods and services he needs. The remuneration he receives is thus a means to an end, which is the satisfaction of his needs. What then, if not own-account work, is what every employee does?

Every potential employee comes to the marketplace with an offer of his services at a particular time and place, with no control over the circumstances under which this happens. There is nothing unusual about this, however, as it applies to the providers of

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[15] Just in case, let us add that such a choice in no way precludes the possibility of changing this decision at any time and starting the so-called business activity in any form.

any commodities offered on the market. Consequently, it may turn out that the kind of service that a person wants to sell is not needed by anyone at that place, or that the price that potential buyers are willing to pay for this service, i.e., the wage or salary, is not satisfactory to the offeror. In the first case, the transaction will not take place because there is no counterparty. In the second case, it is because a buyer's proposal to buy the service at a lower price was rejected by the supplier himself, and the would-be employer(s) did not accept the offer of work at a higher price. Each of the would-be counterparties then decided that what the other was offering was not worth what they had to give in return, i.e., that the condition of equivalence of exchange was not met. It is for this reason that they both made use of the condition of voluntariness, from which arises the obvious and natural right not to enter into an exchange on terms that do not suit them. As a result, each of them will either have to use some other means of satisfying their needs or to forego the satisfaction of their needs.

It is worth noting that in a formal sense, both the employee and the employer have exactly the same three possibilities of behavior in relation to each other in the process of negotiating the terms of possible cooperation. Each of them can accept the offer of the other party, or reject it, or negotiate more favorable conditions for himself, agreeing to certain concessions in favor of the contractor. These possibilities are completely independent of any objective features of the counterparties, which means that neither of them can impose anything on the other In fact, the greater willingness to make concessions is always shown by the party who cares more about getting the deal done. In the "labor market[16]" most employees accept jobs on the wage conditions set by their employers. They do so, however, not because they are the weaker party in the market, but solely because they know that since others accept these conditions, it means that these conditions correspond to current market realities and that attempts to negotiate will fail. Nobody is willing to achieve any goal with more effort than is necessary under the circumstances. This is an elementary principle of human rationality. Thus it would be irrational to expect an employer to agree to pay more for services that he can buy cheaper from others. Most job seekers know this and therefore agree to such conditions, considering them better than the alternative. And the alternative is either to continue seeking a job, or to give up this way of earning a living and meet their needs on their own.

From the moment of commencing employment, an employee becomes a provider of a certain stream of services of a more or less recurrent nature for his employer. For these services he receives a contractually agreed upon remuneration. It is irrelevant to the substance of the resulting relationship between the employee and the employer whether the remuneration is specified as piecework, or time-based, or as payment for work performed. Each of these cases may be treated as a single act of exchange, in which each of the contracting parties gives to the other, in accordance with the contract, some

[16] Quotation marks are used here because in fact the object of transactions concluded on this market is not work but a type of service specified in each contract. It is therefore a market for services operating in the same way as the market for hairdressing or consulting services. The fact that agreements under which these services are provided are called employment contracts only proves a misunderstanding of what is going on in this market.

service and receives its equivalent in return. If this happens, this act of exchange ends and its participants do not have any obligations towards each other. What is more, none of them as a result of this act of exchange increases his possession.

This can be seen clearly in the example of the entrepreneur described in subsection 7.5. In this example, in each monthly production cycle the entrepreneur purchases, among other things, the services of his employees and pays AUR 20,000 for them. Looking at the balance sheet No. 2, we see, among other things, that at the beginning of the cycle, the account of the enterprise shows an amount of AUR 20 thousand allocated for wages of his employees. However, at the end of the cycle these funds disappear, because they become the property of the workers as the equivalent of their services. Thanks to these services the means and objects of production have changed into finished products (worth together AUR 50 thousand - see the balance sheet No. 3). Comparing the data in balance sheets No. 2 and No. 3, we can rightly claim that the transaction of purchase and use of services of the employees did not change the entrepreneur's wealth, but only changed its structure.

This conclusion seems to be contradicted by the situation of the employees. For they undoubtedly increased their wealth by the AUR 20,000 earned in the company, i.e. they enriched themselves by such an amount. However, it is worth noting that this enrichment is not the result of a transaction between the employer and his employees, but the result of the effort that these employees put into providing services to the employer. Thus, they have become rich through their own labor, the results of which, in the form of specific services, they have sold to the employer. With the money thus earned, they can now buy what they need, but this is entirely of their own making and not that of the employer. By hiring them, the employer has merely enabled them to obtain the goods and services they need with less effort than if they had to do it themselves. He himself, of course, also benefited from it, because every act of exchange brings benefits to both parties, as was mentioned earlier. Thus, in any case, it is true to say that the transaction of buying/selling anything does not change the value of the property of either the buyer or the seller. It is only the structure of the two counterparties' wealth that changes; for the buyer, the monetary component of his wealth decreases and the tangible component of his wealth increases, and for the seller, vice versa.

In conclusion, if we look at people employed by anyone for any purpose and in any form as market participants from the point of view of the subject matter of the exchange transactions taking place there, they certainly play the role of suppliers of various services. These services differ from those which are included in this category by custom or by law only in the fact that they are provided on the basis of so-called employment contracts. And the remuneration received for them has the same character as payment for any other commodity, i.e. it is its equivalent.

In this market role, they are neither weaker nor stronger than their potential counterparties. Indeed, the bargaining position so understood has nothing to do with either the subject matter of the contract or the economic potential of either party. As already mentioned, the weaker party on the market is always the one who cares more about the transaction. When the transaction does not take place, the alternative is either to continue the search for a counterparty by both parties, or to abandon the exchange and possibly switch to satisfying one's own needs without using the market.

7.9 The role of employees in the enterprise and their relationship with the owner

It has been stated above that an employee sells to his employer the result of his own work in the form of a stream of services of a certain nature stretching over time, while the remuneration for these services is usually paid on certain fixed dates. The provision of employee services is therefore, from this point of view, analogous to the supply of energy, water, telecommunications services, etc. However, the similarities do not end there. Analogous to relations with suppliers of all other goods and services are in fact all aspects of relations between an entrepreneur and his employees.

It has also been mentioned that there is no objective criterion to distinguish the services provided to entrepreneurs by their employees from those provided by external service providers or from those provided to non-business persons. It should be added, however, that all services, including those provided by employees, regardless of their positions, have the same function in the processes occurring in the enterprise as materials, energy and other means of production used, as well as all intangible goods, such as patents or licenses. The services rendered by all employees are the intangible elements of the mechanism (system), which is the enterprise, thanks to which this mechanism may operate and serve the owner in the function for which it was created. These services are simply an essential component of the production factors. For the efficiency of this mechanism it does not matter which of its elements is driven by the "human factor" and which by inanimate matter. It is always just a question of the current state of technology.

A typical construction company is a good example to prove this point. Before the excavator was invented and manufactured, the business owner employed a number of laborers who performed excavation and other earthmoving tasks with shovels and pickaxes. Today, however, the same thing is done more quickly and accurately by one man - the excavator operator. The only change that has occurred in this enterprise is the replacement of the services of laborers, which were previously an essential element in the functioning of the construction enterprise, with the operation of another element - the excavator performing the same tasks. However, the product of a construction company is the same as before, i.e. excavation and other earthworks, for which its owner receives remuneration from the investor.

Following this path, it is not difficult to imagine, for example, a car factory or a steel mill, where people do not work at all, because after pressing one "button" by the owner, everything is done by appropriately programmed automatons. This is clear evidence that the products produced in the enterprise are the result of the actions of the owner of this enterprise, and not of its employees or other suppliers. It is the entrepreneur who from beginning to end buys all that is necessary for the creation of the enterprise and for its normal functioning. If the services of workers are necessary in this combination of factors of production, he hires the appropriate number of professionals. If these services can be replaced by machines, he buys machines instead of hiring people. In any case, however, at the production stage, the entrepreneur acts on the market as a buyer of those factors of production that make possible the creation of products for sale. Their creation is the sine qua non condition for the readiness of his tool to be used for the purpose for which it was created.

As the foregoing discussion shows, the relations between the owner of a business and his employees are of the same nature as those between him and the suppliers of all other tangible and intangible goods and services necessary for its proper functioning. They are the ordinary relations between the buyer and seller of any commodity. Delivery of the commodity and payment for it releases the parties to the transaction from any claim against each other, regardless of how and for what each party uses what it has received from the transaction partner.

If, therefore, the employer were to discontinue the use of his employees' services after payment of the wages due them, neither their wealth would be altered nor would it in any way change the fact that these people must continue to satisfy their needs through their own efforts. The only inconvenience to the laid-off workers is that they will have to change the way they acquire further goods. Previously they were buying them with the income from wages received from their employer, but now they must either look for another employer, or change the way they earn their income. While this necessitates adjusting the nature of their activities to satisfy their own needs to the new circumstances, such an inconvenience is faced by sellers of all goods and services to whom, after the first or subsequent transaction, customers for some reason stop coming. They, too, must in such a case look for other buyers of their products or change the way they "earn their living". There is no objective reason why an employee's discharge should be judged differently from a loss of customers by a barber or milk salesman.

In the system of credit money considered here, the loss of the previous source of income does not have to influence the standard of living of a given person, regardless of whether this person is a salaried employee, or an entrepreneur whose business "didn't work out", or someone practicing the so-called freelance profession. The condition of maintaining the current standard of living is, after all, an active search for another source of income. Until such a source is found, everyone can satisfy his needs at the current level, since the system ensures the possibility of buying the necessary goods, regardless of the balance of the account. If a person has no savings, buying more goods and services will result in an increasing debit balance in his account. This means that a person can "live on credit" for a period of time and will be able to offset the resulting debt when he or she begins to earn an income from another source.

As can be seen, the essence of the credit money system in the form considered here is that it is completely neutral for processes taking place in the real sphere. It does not restrict anyone from taking such actions as they deem expedient in order to benefit from the advantages of the market. It does not matter whether a person chooses the role of an entrepreneur, an employee or a freelancer as a way of earning income. It also does not limit in any way the possibility of helping others unselfishly, if only someone wants to do it for whatever reason. But at the same time - and this is extremely important - the system makes it impossible to burden others with the negative consequences of one's own decisions in the sphere of production and exchange of goods and services. In short, the system allows everyone to live on his own responsibility without violating anyone's freedom.

7.10 The essence and source of profit

Several conclusions emerge from the model considerations so far about the essence of the enterprise and the function it serves for the entrepreneur. First, a person becomes an entrepreneur as a result of consciously choosing such a role in order to acquire resources to meet his or her needs. Second, in order to achieve this goal, such a person must acquire certain skills and knowledge about the chosen industry in which she intends to operate or is already operating, that is, she must build her intellectual capital. Third, he or she must accumulate sufficient financial capital to finance the purchase of needed fixed and working assets. At the establishment stage, it is not important whether and to what extent these two forms of capital fit together and are sufficient to ensure the success of the enterprise. If either of these factors is found to be insufficient or inadequate, the intention will at most fail.

The same conditions must be met in the case of inheriting an existing business or cash sufficient for starting up such a business. The mere fact that a business exists proves beyond any doubt that the current owner or group of owners wishes to act as an entrepreneur, has the necessary intellectual capital for this role and has allocated a sufficient amount of their own capital for this purpose. It is obvious that the decision itself is a one-off act, but the fulfillment of the latter two conditions always requires consistent long-term action, as neither knowledge and experience, i.e. intellectual capital, nor monetary capital can be acquired in a short time.

It is worth remembering, however, that the very establishment of an enterprise is always the culmination of only the first stage of the owner's preparation for the role of an entrepreneur, that is the stage of creating this tool for himself. Whether this enterprise will work and bring the expected results will be shown only in the future. However, regardless of how long this first stage lasted and what its course was, there can be no doubt that this specific tool, which an enterprise is, is created with the effort and resources of its owner solely in order to make it easier for him to satisfy his needs as a human being.

The suppliers of the necessary tangible and intangible goods and the providers of the services necessary for its operation are, of course, involved in the process of creating this tool. The latter group includes all salaried employees. Their role in the enterprise - as shown in the example presented in Section 7.5 - is to participate in the process of cyclical transformation of various current assets into finished products, in accordance with the technology and organization of processes used in the enterprise. However, it is worth repeating that hired workers are needed only when and to the extent that their services cannot be substituted by machines and other equipment, or when such substitution is economically unprofitable under the given conditions.

It is also worth emphasizing again that the enterprise is complete and ready to be used by the owner as a tool only after the first production cycle has been completed, i.e. after the first batch of finished goods has been produced. For only then can the entrepreneur proceed to the second stage of his plan of action as an entrepreneur. This stage is, of course, selling his products at a profit in order to allocate the profit to his own needs. Whether this plan will be successful, and whether he will be able to proceed to the next cycle of production to use his tool again, will be determined by the results of his actions at this second stage. If the products of the first cycle are sold as planned, the opportunity will arise, If not, a problem will arise, because the launch of the next cycle will be possible only after recapitalization of the company by its owner. This was mentioned when discussing the example in Section 7.5.

Before we proceed to consider what happens at this second stage, another very important point must be clarified, namely, the matter of who is the creator of the product created in the enterprise. According to the principles of the credit money system considered here, all suppliers, both external and internal, receive the agreed payment for their products immediately after the execution of the contract. Therefore, no unsettled receivables and mutual obligations of the parties arise from the transactions concluded; such a category does not exist in the model.

No one seems to question the basic principle of market exchange, according to which the conclusion of a transaction implies the transfer of ownership of the object of that transaction to the purchaser, and the payment of an agreed equivalent ultimately deprives the seller of any claim to that object. It is obvious, therefore, that since external suppliers of any goods or services have no such rights after payment, for the same reason, after receipt of wages, salaried employees, whether they are classified as direct production workers or indirect production workers or any non-production employees, cannot have any claims. Regardless of the duration and nature of their relationship with the entrepreneur, both the role of the suppliers of goods and the role of the salaried workers end with the performance of their service in accordance with the contract. In the case of salaried employees, the object of such a contract is the provision of certain paid services to the owner of the enterprise. Payment for the services rendered releases the purchaser from any obligation towards the contracting party. This rule is not limited either by the manner or the purpose for which the purchaser will use the object of the contract, regardless of whether or not the suppliers are aware of this purpose. Nor does it make any difference to the validity of the rule in question whether the transaction is concluded by the interested parties themselves in person or by their agents, such as the company's sales representatives; in the latter case, the effects are always borne by the principals.

From the fact that in the process of production, or more broadly in the process of functioning of the enterprise, participate both suppliers of goods and persons providing services, however, it does not follow that they are the creators of the merchandise created in this enterprise from the elements supplied by them. The real and only creator of the commodity is the entrepreneur. It is the entrepreneur who brings the purchased means of production together with the services of employees at all workstations and with the applied technology and organization of production into a final product. Without the entrepreneur such a product - whatever it is - would never be created.

Exactly the same is true for companies that create intangible goods, such as computer programs and applications. They are of course written by programmers employed in such companies. But that does not change the fact that what the programmers sell to their employer are the IT services - the same commodity in its essence as raking leaves for the owner of the garden. Only the effect (product) of each of these services is different. In the case of leaf raking, the intangible effect, or the final product for which the service provider receives remuneration, is order and tidiness in the garden cleared of unnecessary leaves. The effect of the programmer's work, on the other hand, is fixed in a specific form, smaller or larger fragment of the program, which will become part of a larger whole, which is the finished application. Programmers are therefore the authors of individual fragments of such an application, but the creator of the commodity, which is the finished application sold in thousands or millions of copies, is the owner of an IT company. The same applies to book or music publishing. The author of a work, such as a novel or a musical work, is the writer or composer, but the author of the product, such as a book or a musical album in which the work is recorded and sold, is the publisher. It is irrelevant whether the goods have a tangible form (paper book, CD) or are made available as an electronic file in a specific format (e.g. pdf, epub, mp4). In either case, it is a product whose creator is an entrepreneur. Without the participation of such an entrepreneur, none of these works could become goods.

Having made these explanations, it is possible to return to the main topic, which is the analysis of what happens in the enterprise. The production of finished goods - as already mentioned - is not the culmination of the enterprise's activities, but only the final phase of the entrepreneur's preparation stage for the use of the tool by him. Referring again to the hunter analogy invoked earlier, it is that moment when the hunter has a working gun and ammunition and is ready to go hunting.

The end of the production cycle means for the entrepreneur to move to the second stage of his activities, in which his role completely changes. Previously, he played the role of a product creator, in which he acted in the market as a buyer of goods and services necessary for the creation of the final product. Now he must become a seller of what he created in his previous role. This role is essentially unrelated to the one he has played up to now. At this point he is in the same situation as a merchant who bought certain products from a manufacturer in order to resell them. What both cases have in common is the necessity to incur certain outlays in order to take possession of the products which are to be sold. In the case of the manufacturer, these expenses include the total production costs. In the case of the merchant, on the other hand, the value of the expenditure is determined by the total cost of acquisition of the goods. In both cases, however, these are expenditures incurred by the current owner of the goods, i.e. the entrepreneur-producer or merchant. These expenditures determine the monetary value of the goods at the place where they are currently located. This of course does not mean that the total expenditure up to that point is the same in both cases. The owner of a productive enterprise must expend more than the merchant by the value of the fixed productive assets[17].

The transition of an entrepreneur to the role of a seller of the products produced in his enterprise requires him to act very differently than in the role of a manufacturer. In the role of a manufacturer, his activities boiled down to bringing together in one place all the components needed to produce finished goods. In order to do that he had to somehow reach sellers of these components in various places of the world, agree with them all the terms of delivery and pay the agreed price. In contrast, the actions of an entrepreneur in the role of a seller must disperse the manufactured products over such an area as to sell them all.

In order to do this, the entrepreneur must find people who need his products. This task is more difficult than the previous one. In his role as a producer, the entrepreneur knows what he needs at a given time to produce the final product. By contrast, in the role of a seller, he never knows how many of his products will be recognized by others as needed during the period he is interested in. Even if various market studies and analyses are carried out beforehand and production and sales plans are drawn up on this basis, these are always just forecasts made under certain assumptions, not certain knowledge. The future cannot be guessed. By taking risks, an entrepreneur can only hope that his assumptions will not be very different from what will happen in the future.

Incidentally, it is worth noting that the entrepreneur's involvement in the production process of any product makes sense only in two cases. The first is when a given product is something completely new, not available anywhere else. The second is when the total costs of producing a given product locally are lower than the total costs of purchasing it where it is available. In both cases, of course, there must be additional reasons to believe that demand will ensure the expected profits at the assumed scale of sales. It must be remembered that the creation of a manufacturing enterprise always requires more capital and involves greater risk than the creation of a trading enterprise for the same commodity. In the event of insufficient demand, the merchant at worst loses only as much capital as he has frozen in the goods he failed to sell, but the remaining assets of his enterprise can in most cases be used to trade in something else. The producer, on the other hand, in such a case "freezes" not only his capital in unsold goods, but also his capital in productive assets, since it is more difficult, and often impossible, to switch to the production of something else.

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[17] These outlays are gradually "recovered" by each entrepreneur through the depreciation of individual components of these assets, if, of course, his enterprise will function normally during this time. However, the larger share of fixed assets in the assets of the entrepreneur-producer makes the period of recovery of this capital in his case longer than in the case of the merchant.

When considering the essence of profit, it is worth noting that although in a formal sense it is part of sales revenue, in its essence it differs from that part of revenue which corresponds to the costs incurred. As already mentioned, both the cost of production of finished goods in the case of a manufacturing enterprise and the cost of acquisition of goods in a commercial enterprise are the monetary equivalent of all the current assets of the enterprise used for this purpose. Without them this tool - the enterprise - is not reusable. From the point of view of the technical and economic conditions of the enterprise, it would therefore be sufficient for the sales revenue to cover only the production costs in each cycle. However, this would be a situation in which the owner of the enterprise works with his tool only to ensure the efficiency of its operation.

Of course, such a hobbyist motive cannot be excluded, but only under the condition that the entrepreneur has some other source of income. In the vast majority of cases, however, business owners are guided in their actions by rationality understood in a classical manner. It boils down to the fact that the use of a tool with a given effort brings effects that allow to satisfy the needs at the expected level. This is only possible if the revenues from the sale of products ensure the expected profit. If this occurs, the profit is always the result of the entrepreneur's efficient use of his tool, regardless of whether he is a producer or a merchant. The essence of this efficiency is to get one's products to where they are needed and at the time when their purchasers want to buy them.

It is therefore reasonable to conclude that profit is the entrepreneur's remuneration for services rendered by providing purchasers with products they needed at the time and place they bought them. In addition to the expenses incurred in acquiring the products, i.e., the total costs of production or the total costs of acquisition, the entrepreneur must also contribute as much of his physical and intellectual effort, knowledge and experience as is necessary to sell the products at the agreed price.

On the basis of the considerations carried out above I want to expose very strongly the following thesis: the source of the entrepreneur's profit is neither the production process nor the ownership of capital. The only source of profit is the entrepreneur's effective actions, which lead to the sale of his products for a price including that profit. Those efficient actions are precisely the service of delivering those products at the time and to the place where they were bought by the buyers. It does not matter in the least who produced these goods and at what cost. All that matters is that the purchasers paid a price for them that included that profit, thereby confirming that they needed that service at the time and place where the transaction occurred.

It is not about individual profit, but about the mass of profit brought by the sale of the whole batch of goods from a given cycle. What is not sold turns out to be useless to anyone, and in such a case the entrepreneur not only does not recoup the expenses incurred for these products, but also his efforts at the sales stage turn out to be futile. Of course, this is not futility in the literal sense, because work understood as the outlay of specific physical and intellectual effort always brings some material results. In the case of unsold goods, the futility of the entrepreneur's effort lies in the fact that it does not produce the result, which is the expected amount of profit. If he had made a profit, he would have been able to buy what he needs to satisfy his needs in life, but since he failed, he cannot do so. However, the unsold products, which are the material result of his actions, are then at his disposal and he can do with them what he wants.

7.11 Income and profit

In our deliberations two terms have repeatedly appeared: income and profit. Due to a certain affinity of these two concepts and the resulting danger of their misinterpretation, it is worthwhile to explain in detail the similarities and differences between them. Let us add that the meanings ascribed to them here differ to some extent from those currently used in accounting.

Income is a concept that is associated with a monetary economy where money plays the role of the means of exchange. As already mentioned in several places in this work, the introduction of money resulted in breaking the act of direct exchange of one commodity for another, which occurs between two people at the same time and place, into two acts of indirect exchange, occurring at different times and places between three people, which is usually written as the exchange scheme C1 - M, M - C2. What links these two acts of exchange is the sum of money, M, that the seller of a good receives from its buyer in the first transaction. It is this sum of money that determines the amount of the seller's income in the original sense of the term. This is precisely the sense in which the term will be used here[18].

The economic content of this concept derives from the principle of reciprocity and equivalence of exchange, the sole purpose of which is always to satisfy one's own needs with what is offered on the market. Due to the fact that in the monetary exchange the seller does not receive from his counterparty what he can directly satisfy his need with, he does not achieve the ultimate goal of such exchange. This happens only when he buys what he needs with the money received from the sale, that is, when he obtains the equivalent of the goods previously sold. Thus, monetary income must be treated as a proof of the transfer to a market participant of his goods or services, which gives him the right to an equivalent in other commodities. Only when this right is exercised in full, i.e. when the entire amount of the income is spent on the purchase, is the acquired claims fully satisfied, i.e. the principle of reciprocity is fulfilled. At that point such claims cease to exist. The income proving their existence also disappears.

There is no state in our model so far, so there are no taxes either. Consequently, all income generated from the sale of goods and services remains at the disposal of the one who generated it and can be spent in full for any purpose. This, of course, also applies to business owners, who may use the entire sales proceeds earned both for the continuation of their business and spend it entirely for personal purposes, withdrawing the funds from circulation with all the consequences for the operation of the business. In the real

[18] For the fact that income arises at the time of sale, it is irrelevant whether the payment of the agreed price occurs immediately, as in the model considered here, or at a later date, which is common practice in the real economy.

economy, the equivalent of this concept is sales revenue, from which various public tributes and costs of acquisition determined by the state are deducted, and only after these deductions is the amount of income available to the entity.

As explained, income always arises from the sale in the market of any good or service irrespective of who the seller is and becomes his exclusive property which he can do whatever he wants with. For example, the income of a car dealer is the price he receives for the car he sells. With this income, he can buy any goods with a total value equal to the price received. He can, for example, use part of this income to buy another car for the showroom, buy additional accessories for the trade and keep the rest to pay the salaries of his employees, or - having decided that the prospects of development of this business are not too good - withdraw the entire amount of income obtained from the market and spend it on his own needs. An employee's income, on the other hand, is the salary he or she receives each month for services rendered to the employer in his or her position. The income of a lawyer, solicitor or freelancer is the fee for services rendered. In each case, income is the monetary equivalent of the good or service sold, which also determines the value of any other goods or services that the holder of the income may receive for it.

This definition and the examples provided allow us to see that the term "income" may cover both the unit value of a good sold (e.g. a car sold) and the sum of values of goods and services sold in a certain period (e.g. monthly salary of an employee or annual income from sales of goods in a warehouse). In both cases it is a stream of value expressed in monetary units, which flowed out in some period of time in the form of commodities (goods or services) from a given entity to other market participants, and flowed back to it in the form of the right to an equivalent in other goods. The specific content of the term is always a result of the broader context in which it is used.

The second term explained here, profit, is reserved for that part of the income earned by the entrepreneur which is in excess of the total cost of producing and selling a given batch of goods[19]. It follows from this distinction that the seller of a commodity after a transaction always receives an income which he can spend on anything, but a profit arises only if the income from sales is greater than the sum of the total cost of production or acquisition of that commodity and the cost of selling it.

This statement has already been made, but it is worth repeating again that profit is the remuneration of the entrepreneur for his successful action in selling the goods in his possession at a price which includes that profit. It is irrelevant to the essence of profit whether the goods were produced in his manufacturing enterprise or whether they were purchased from some other producer. In either case, a profit will arise only if the goods are in a place and at a time where purchasers are willing to buy them at that price. It is therefore legitimate to say that the entrepreneur's profit is his income from the sale of services rendered to the purchasers of the goods.

[19] In mainstream economics, a company's profit is defined as the excess of sales revenue in some period (month, quarter, or year) over the total costs incurred in that period, with the final content of the concept depending on a number of additional factors derived from laws and accounting rules.

The entire proceeds of the sale always belong to the seller and, according to the principle of reciprocity and equivalent exchange, can be spent by him in full. However, in the case of an entrepreneur (even if it is a group of owners) who wishes to continue his business, the use of this income is usually determined. In order to continue to operate on the same scale as before, the entrepreneur must allocate to the needs of the business that part of the sales income that corresponds to the total cost of goods sold. If, on the other hand, he wishes to expand his business, he must still allocate for this purpose a portion of his profit. Thus, the entrepreneur's profit is usually divided into so-called retained profit, which is allocated to the development of the enterprise, and distributed profit, which is the owner's personal income. It is always up to the owner to decide the proportion between these two parts.

At the end of this fragment it is worth adding that both sales income and profit contained therein are the fruit not only of those actions of the entrepreneur which directly preceded their achievement, but they are the effect of all his previous efforts. They consist of both activities and expenditures directed at the acquisition of knowledge and various skills, i.e. the creation of intellectual capital, before the entrepreneur became an entrepreneur, and those that ultimately led to the creation of the enterprise, i.e. the creation of physical capital in this form. Both of them are always of a long-term character and testify, above all, to the importance that people deciding on such a form of economic activity attach to the material side of the quality of their lives. They also testify to the awareness of the dependence of this aspect of the quality of life on one's own diligence, prevention and foresight as well as on consistency in pursuing the set goal. However, it is only through the entrepreneur's successful actions as a seller of the products acquired as a result of all these efforts that they culminate and make it possible to achieve the entrepreneur's ultimate goal. This goal is always to gain the means to satisfy one's needs with the results of other people's work bought on the market.

It should also be added that by investing in themselves and in physical capital in the way described above, entrepreneurs do not have to be personally involved in the day-to-day running of their business. If they have worked long enough and effectively enough to acquire the necessary financial and intellectual capital, which is proved by the functioning enterprise, they may now outsource its day-to-day management to hired managers. Such a procedure in no way changes either the very essence of the entrepreneur's role or the source of achieved profits. This source is always only the entrepreneur's own efforts to sell his product. The only difference between a so-called annuitant (rentier), who is not involved in the day-to-day affairs of his enterprise at all, and an active entrepreneur, who manages his enterprise personally, is that the former buys one more service than the latter. This additional service is provided by a hired manager, for which the rentier pays from his own income.

Leaving aside the special circumstances of force majeure, the amount of a person's current income is always the result of all his past actions and omissions and not the result of some unspecified external factor. These actions and inactions ultimately determine what a person currently offers to others. A businessman's profit, an employee's salary, a hairdresser's or a doctor's income, a lawyer's or a teacher's salary, to name but a few examples, all have the same source: the sale of a person's specific services to someone who needed those services for something.

A quite common mistake made when comparing incomes earned by different people or social groups is looking at these incomes only from the current perspective and in isolation from the type of products (goods or services) they sell. This is because the amount of income is always strongly influenced by everything that a given person has done so far, and especially by what knowledge, experience and skills he or she has acquired in the field in which he or she currently operates. These are the factors that determine the type of product sold now and its price. This applies to all people, so both those who practice the so-called liberal professions, as well as entrepreneurs and employees.

The architect's income earned in a given period is always many times higher than the wage for the same time of a manual laborer, because the product of the architect's work is different from that of the laborer. On the same principle, the manager in charge of a business receives a salary higher than that of a foreman, and the owner of a business receives profits many times higher than the salaries of his individual employees. Leaving aside certain pathological phenomena, which will be discussed later, the mutual relations of these incomes have no relation either to the size and structure of production of a given enterprise or to the size and structure of employment in this enterprise[20].

To summarize this point, let us reiterate that income is the monetary equivalent for a good or service sold, which entitles the holder of that income to receive the equivalent in other goods. Thus, anyone who sells a good or service earns income. This, of course, applies to any businessman, whether merchant or manufacturer, who manages to sell his goods at a price that includes profit. For then, along with the goods, he sells his specific service, characterized above. Its specificity lies in the fact that, unlike others, this service can only be sold together with the goods to which it refers. If the price obtained for it is satisfactory for the entrepreneur, i.e. if he makes the expected profit, it means that he has effectively used his tool and achieved the intended goal.

7.12 Money and income

It does not follow from the fact that income appeared when money was used as an medium of exchange that these two economic categories are inseparable. For each of them represents a different kind of economic relations. The proof is the credit money system discussed in the previous subsections, where participants earn income from the sale of their products, even though there is no means of exchange, but only a unit of

[20] Proof of this thesis can be provided by examples of more and more rapidly emerging outsourcing companies operating fully automated warehouses (storage centers), operated by a small staff consisting mainly of IT specialists supervising the computer system. Of course, the salaries of these IT specialists have nothing to do with the size of the turnover of the company in which they work. They are paid for their product, which is the provided IT services. The same principle applies to the income earned by representatives of all professions, from diamond cutters to asparagus pickers. Each receives an income commensurate with the product sold, and the amount depends on current market realities.

account. Let us then consider the essence of the economic relations behind these two categories, namely income and money.

Let us begin with classical money in any of its forms. The condition sine qua non for the finalization of any transaction in any known monetary system is the prior existence of that money. It is irrelevant whether part or all of the payment is made before delivery (advance payment, prepayment), at the time of delivery, or only some time after delivery of the goods (deferred payment, or buyer credit). It is also irrelevant whether the buyer pays with his own money earned earlier or with funds obtained from a bank loan or credit. In either case, payment can only be made when such money already exists.

There is no doubt, therefore, that for money to serve as a means of exchange it is necessary that someone create it. It is irrelevant whether this creator is a private person or a public institution. It is also irrelevant whether money is a tangible object (a full-value bullion coin, an exchangeable or non-exchangeable banknote, or an undervalued bill) or an intangible record in a bank account. In each case, what acts as a means of payment must be an object of someone's exclusive ownership. And it is precisely as an object of property that money is exchanged for another object, which is a purchased good or service. The effect of such an exchange is, of course, that ownership of money passes from the buyer to the seller.

As long as such money exists, we are always dealing with a relationship between the subject of property and its object. The fact that it is an object with a special economic role does not change anything in this regard. This role can end at any time, either because of the loss of the so-called social acceptance (such as the Reichsmark at the end of World War II) or as a result of a decision by the authorities to assign this role to another object (denomination, change of currency), but the subject-object relationship remains. However, as long as the object acts as a means of payment, it is a kind of legitimacy for market participants, which entitles the owner to buy goods in a given local market in exchange for its transfer to the seller. The manner in which this legitimacy is obtained, which may be by credit, loan, proceeds of sale, but also by theft or robbery, is irrelevant to the function it performs in buy-sell transactions. For this reason, in any classical monetary system, someone can have huge debts that no one knows about, and yet still buy if he can find some way to get such money.

Income is of a completely different nature than money. As already mentioned in the previous subsection, it always arises as a result of the sale of any goods or services, regardless of when and how the settlement between the contracting parties takes place. For its creation and existence, income does not require the existence of money as a means of exchange, it is enough that there is a commonly used unit of account in which prices (values) of goods exchanged on the market are expressed.

Unlike money, which, as mentioned, is evidence of the existence of a relationship between the subject of property and its object, income is a proof of the existence of a creditor-debtor relationship between the subjects of the economic system. The objects of this relationship are goods with a monetary value equal to the amount of income. On one side of this relationship are the holders of income, i.e. the entities entitled to receive goods, on the other side - the entities obliged to sell goods, and between them - the settlement system, which is to ensure compliance with the principle of reciprocity. In classical monetary systems this task rests with money in its function as a means of payment and the principles of its creation and provision, while in a credit money system it rests with the principles of its functioning already described above. As the holder of income uses his entitlements, buying the goods and services he needs on the market, his income is reduced by the amount spent on purchases. This happens until the income is fully used and then disappears, unless the holder earns another income from the sale.

Leaving aside single and occasional transactions and donations, the effects of each market participant's activity can be pictorially presented as two streams flowing in opposite directions. The first one is the stream of income obtained by a given person and expenses made from them. Looking from the point of view of the economic content behind the income and its use (expenditure), this stream is a stream of rights to market goods that a person receives in the market and then uses. The second stream, on the other hand, is the stream of market commodities to which these rights pertain; selling commodities gives the right to receive others, and buying commodities means using the right. Both of these streams are expressed in monetary units, so they can be referred to as streams of economic value that flow through a given market participant (Figure 1).

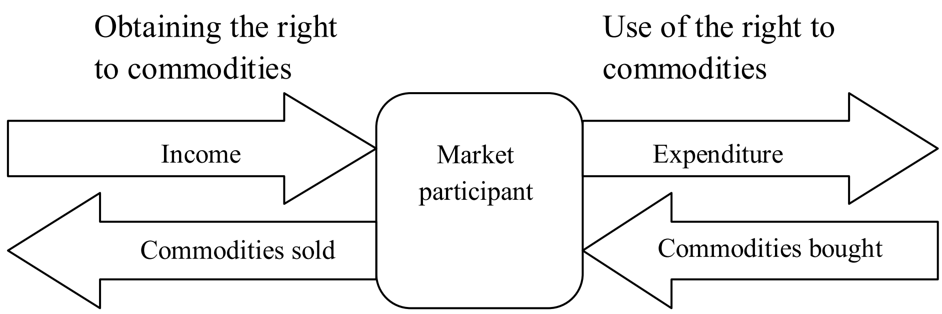

Fig. 1. Streams of economic values of a market participant

Time distribution of income and expenditure is solely dependent on the will of the individual. This is evident in the credit money system considered here. This is evident in the credit money system considered here. This is evident in the credit money system considered here. For everyone in this system can make purchases regardless of whether or not he has any unused income. And the balance of the settlement account reflects the current disproportion between incomes and expenditures, that is, staggering of these two streams of value in relation to each other.

The same is true in any "normal" monetary system that uses money as a medium of exchange and a means of payment. Then, although spending all the income makes further purchases formally impossible, this possibility can be restored relatively easily by taking out a loan or bank credit[21]. All that is required is the will to buy in order for this to happen. No seller is interested in where the buyer got the money, just that he got it.

In light of what has been written so far about income and money, the following conclusion emerges: although income as an economic category appeared when money was used as a medium of exchange and a measure of value, it is only a measure of value that is necessary for income to arise. For money in the role of an means of exchange is needed only so that the one who sold the goods for money can be sure that for this money he will get from another counterparty what he needs. If the settlement system guarantees such reciprocity, as is the case in the credit money system, then money as a medium of exchange and a means of payment is not needed at all.

7.13 Income, supply and demand

It has already been mentioned here that an important breakthrough in the development of the market economy occurred when money was used in the process of exchange as a medium of exchange and a means of payment. The breaking up of the act of direct exchange into two acts of indirect exchange, which took place at that time, meant that the condition of coincidence could disappear, which had previously made the satisfaction of a person's demand for a good dependent on the realization of the supply of his own good. From now on, the condition of obtaining the desired good on the market became the possession of a sum of money sufficient for the purchase. And since, under normal circumstances, money can only be obtained by selling something of one's own, the actual condition of being able to purchase became that of having one's own income from the sale. That is the original economic content of this category, which is income. It is the monetary equivalent of the goods sold, thanks to which one can get on the market the equivalent in goods that the holder of income needs. Thus, exchange still takes place according to the principles of voluntariness, reciprocity and equivalence, only that their realization occurs at different times.

Thanks to the appearance of the category of monetary income, demand and supply have become independent of each other from the point of view of the time of their occurrence. The fact of obtaining income by a person, that is, the fact of his realization of the supply of any commodity, gives him the right to receive an equivalent. However, in order for this right to be transformed into demand by this person, four consecutive conditions must be met.

The first of them is the emergence of the need to acquire a particular good. The second is the decision to acquire this good through purchase on the market. The third condition is the existence of the desired good on the market within the reach of the person who wants to buy it. The last is the acceptance of the price by both parties to the transaction. None of these conditions has anything to do with income or whether or not there is any money as a means of payment.

[21] The only condition is to have the so-called creditworthiness.

If any of these four conditions is not met, the person who earned an income will not exercise his or her right to reciprocity. Thus, people may have some stock of earned income, but at the same time they may not want to spend it at the moment for whatever reason. On the other hand, if the above four conditions are met, demand will appear in the market even if the decision-maker has no resources of his own, for he has either not earned income yet or has already spent it in full. Both in the first and in the second case, we find a confirmation of the thesis that has already appeared here before, that whether or not a person buys something on the market is not determined by the current financial situation of this person, i.e. whether he has unused income or not. In fact, the relationship is exactly the opposite; it is the current financial situation of a person that is the result of the decisions realized by that person in the real sphere regardless of whether we consider it in the classical monetary system with money as a means of payment or whether it is, as here, a credit money system. The primary cause of the emergence of demand for a given market product is always the decision of the individual to satisfy his need through the market. If it had been decided that the need would be satisfied independently, outside the market, the demand for this product on the market would not have appeared.

The mere decision to purchase a product, however, means the fulfillment of the first two of the four conditions listed above and does not determine the transformation of potential demand into effective demand. It happens only when the other two conditions are met. It is then that a transaction takes place and, in accordance with the principle of reciprocity of market exchange, an economic effect is created in the form of a flow in opposite directions of different goods of the same market value (Fig. 1). To the buyer flows the purchased goods, and from the buyer - the one that is the result of his activity and whose sale will provide him with sufficient income to pay for what he bought. The order of these flows and their time interval as well as their material structure are not relevant here. It is also irrelevant whether the act of buying was a one-time thing or whether a person continuously buys something on the market. In both cases, the sum of the values received by a person from market participants in goods and services must correspond to the sum of the values of other goods or services sold by him earlier or later. As long as these two flows over time do not equal each other, the person is either a net debtor or a net creditor. A person is a net debtor if his or her income up to that point was less than his or her expenses, and a net creditor if the opposite is true.

This is how each person's demand for any market product creates a corresponding supply of another product in terms of value. In other words, the supply of any good in the market is the result of the demand of the suppliers of that good for other market goods. There is no good offered on the market by someone who does not intend to obtain something else there. For if one wants to satisfy his need independently, outside the market, he makes a completely different effort.

As can be seen from the above, in the cause-and-effect chain, demand is a primary factor, while supply is a secondary quantity induced by demand. This statement is true not only with respect to the direct exchange of a commodity for another. It is also true in a developed market economy in which everyone is constantly trying to earn income without any predetermined needs. In such a case, it is, of course, potential demand for goods and services needed to ensure an adequate quality of life for the individual, i.e., demand for final goods. This demand is determined neither by the amount, nor by the product, nor by the timing of its realization. However, the lack of knowledge of these demand parameters ex ante does not change the fact that it is a person's decision to satisfy his needs in the sphere of final goods and services through purchases on the market that causes and drives actions taken by him in order to secure some source of income. The result of these actions is finally the supply of goods or services chosen by this person, the sale of which is to be the source of his/her permanent or temporary income. This, of course, also applies to the services of employees.

Nothing practical follows from the fact that potential demand induces supply. It is merely a logical statement of the causal relationship between the two economic categories. They acquire economic significance only when a person puts his intentions into action. For then, at some point, there is an actual demand for certain goods and, usually at another point, an actual supply of other goods. Both demand and supply on the part of the individual are the result of his autonomous decisions about what, where, and when to buy, and about which of his own goods or services to offer on the market to generate the income that finances his purchases.

Thus, in a market, at a given time and place, there are always a number of autonomous persons who, for reasons known only to them, have decided to sell there, either permanently or temporarily, goods and services of their choice, in order to generate income to finance their purchases. As a result, a certain supply of goods and services is created at that time and place, whose monetary value and material structure depend exclusively on the arbitrary and autonomous decisions of the suppliers. Importantly, the size and structure of that supply is always the deferred effect of decisions that individual market participants have made in the near and distant past, regardless of which of those decisions were made consciously and which were made in the nature of thoughtless omissions. These deferred effects of supply decisions also determine the amount of each person's current income.

Thus, if someone in the past made consistent efforts to become an entrepreneur or a highly qualified professional in a certain field and these efforts were successful, his current income is usually high or very high. However, this is not because someone from outside has decreed it, but because he is currently selling a commodity (good or service) with a high market price. This income therefore now allows him to live at a high material level[22]. The same is true of people who have not been particularly active in acquiring knowledge and skills, and who passively submit to the course of events. It is just such people who constantly feed the army of poorly qualified workers, which occurs on the market with the supply of relatively simple and consequently - low-paid

[22] Just in case, let me remind you that we are still considering here a model of the economy in which there is neither the state nor other organizations that would provide opportunities for income from sources other than voluntary exchange.

services of the so-called manual labor. The current incomes of such people are low not because their employers are heartless greed-mongers, but solely because the product they offer to the market is of little value. The low level of consumption of such people is thus a simple consequence of this very fact.

Although anyone can, at any time, completely change his or her life by making appropriate decisions and putting them into practice, as discussed in subsection 3.3, the "force of inertia" of the chosen life role, and thus the role played on the market, is very high. As a result, the supply of goods or services offered on the market by each participant is relatively rigid. This applies both to entrepreneurs and people who have chosen the role of employees or any other free profession. Current fluctuations of prices, including wages, do not seem to have much influence on the supply of particular goods and services. Rather, prices (including wages) are the result of the natural cyclicality that exists on both the supply and demand sides. Cyclicality on the supply side has to do with the natural cycles of crop and crop failure in agriculture, and with the imitation effect that occurs in every industry. Demand-side cyclicality, on the other hand, is a result of the natural cyclicality of human needs[23].

If the above theses are correct, then the conclusion that the real demand of each person for goods and services depends on what happens in the sphere of goods and services offered by him on the market, i.e. in the sphere of his supply, becomes legitimate. As it has been mentioned, the decision concerning the kind and quantity of goods or services which a given person decides to sell on the market is always his autonomous decision. On the other hand, the actual demand of each person is determined by whether and to what extent his/her sales plans are realized. The principle of reciprocity of exchange is at work here again. The actual demand in a certain period of time and the actual supply in this period of time may spread in time independently of each other, but in the end, each person, who does not want to burden his heirs with the consequences of his own purchasing decisions, must balance the value of both sides of his market activity until the end of his life at the latest. In this sense, the total demand of each market participant during his life depends on the realized supply of his own goods or services during this period, i.e. on the income he has earned. On the other hand, in the shorter term, if there are no formal limits, the degree of divergence between the two economic streams of a person is, in our model, determined only by his prudence.

As in the case of supply, arbitrary decisions of individuals result in a certain material structure of demand for a certain monetary value at a given time and place, which has no relation either to the quantity or to the structure of supply at the same time and place. Neither does it have any relation to the amount of disposable income of individual market participants, as already written above.

[23] Since monetary categories such as money supply, credit, interest rate, financial instruments, etc., are not present in the model considered here, it is pointless to refer to the various business cycle theories propounded in mainstream economics.

It is possible, therefore, that some members of the community manufacture products for sale over a period of It is worth mentioning again that income earned by a person in a given period is always only a monetary equivalent of the value of goods sold in that period to other market participants, and thus it is a category representing a stream of value of goods that flowed from the seller to buyers. Thus, the fact of income does not mean an increase in the value of the seller's property, but only a change in its structure. In place of goods there is either an increase in the positive balance of the account, or a decrease in liabilities, i.e. a negative balance of the account. Such a balance always determines the current financial situation of a person, but it should always be remembered that goods and services are the only objects of such settlements. The same is true in the case of the provision of services: the service provider increases his assets or reduces his liabilities with the results of his own work, which are purchased by the recipient of the service at the time the service is provided and immediately take the form of monetary income. time, buying from others what is necessary for that purpose, and when they are ready, no one wants to buy the products, even though those who supplied the producers with their goods and services have been paid for them and thus have disposable income. The production of any good and the income it generates for those who supply the components needed for that production have no effect on either the demand for that particular good nor on the demand for other goods unrelated to the production process.

It is worth mentioning again that income earned by a person in a given period is always only a monetary equivalent of the value of goods sold in that period to other market participants, and thus it is a category representing a stream of value of goods that flowed from the seller to buyers. Thus, the fact of achieving an income does not mean an increase in the value of the seller's property, but only a change in its structure. In place of goods there is either an increase in the positive balance of the account, or a decrease in liabilities, i.e. a negative balance of the account. Such a balance always determines the current financial situation of a person, but it should always be remembered that goods and services are the only objects of such settlements. The same is true in the case of the provision of services: the service provider increases his assets or reduces his liabilities with the results of his own work, which are purchased by the recipient of the service at the time the service is provided and immediately take the form of monetary income.

Thus, it only makes sense to speak of income as a value if one has in mind, on the one hand, the monetary value of the goods that have already flowed from the seller to the buyer in a given period and, on the other hand, the value of those goods that the seller can obtain from others as an equivalent. Whether and when this right will be exercised by him, and what goods, if any, will make up this value, is determined solely by the holder of the income.

In summing up this part of reflections on the mechanism of functioning of the model of economy in the credit money system, the following conclusions can be made. First, the only source of income of any market participant is his own effort put into the production of goods or services sold at some time.

Second, income is needed only if and to the extent that a person wants to satisfy his needs with goods and services purchased on the market. Otherwise, income is not needed for anything.

Third, although a person's demand for market goods and services at a given point in time does not depend on his financial situation at that point in time, the total income of each market participant over his lifetime determines the maximum amount of that participant's possible expenditures, that is, the maximum amount of his total demand over that period. Neither shifting these two streams relative to each other over time, nor changing their internal structure, affects the size of either stream. Thus, if someone for some reason bought earlier what he intended to buy later, only the timing of the emergence of demand for that good has changed, not the magnitude of that person's demand. Similarly, if someone buys on impulse a good that he had not originally thought of, then, ceteris paribus, he will not buy something else later. The only result of such an unplanned purchase, then, is that another seller earns income, but the aggregate demand of that person does not change unless that person increases his income to fill the "gap" in his budget by selling more of his own goods or services or getting higher prices for them. So again, supply is the effect of demand. It should always be remembered, however, that the additional supply of any good induced by such decisions does not affect the demand for that good; at most, it may intensify competition in the market for that good and cause its price to fall.

Fourth, the size and structure of the global supply of goods and services in a given period is independent of current market factors, and in particular of current demand. This is because it is a deferred effect of the autonomous decisions of individual market participants made in the past regarding the choice of the primary source of income necessary to be able to buy the needed goods and services, i.e. to appear in the market on the demand side. Moreover, in the real world, in countries defined as highly developed, the supply of the vast majority of goods is always greater than the demand for them. Thus, there is no reason why this should be different in the model economy.

By contrast, in the long run, realized supply determines effective demand according to the principle of seeking to equate a person's lifetime demand with his lifetime income. This means that each market participant can get in his lifetime at most as much as he himself manages to transfer to other market participants. Abstracting from possible donations, therefore, this means that everyone achieves in his life exactly as much as he is willing to give himself. Market exchange has no influence whatsoever on the size and subjective structure of the wealth of individuals or on the size and subjective structure of the wealth of the whole economy, that is, on the distribution of that wealth among the members of the community.

Fifth, a person's financial situation is never the cause of his actions in the sphere of production and exchange of goods and services, but their effect.

Sixth, due to the fact that throughout the economy the sum of savings is always equal to the sum of liabilities, the only components of global wealth are tangible and intangible goods.