Part one. Introductory issues

Chapter 1. On the founding error of political economy

1.1. Types of exchange

The roots of modern economics lie in Aristotle's division of transactions into four types, nowadays referred to as exchange models (Aristotle 1999a, book I, part VIII and IX, and Aristotle 1999b, book V, chapter 5). The first one is a primitive and difficult to apply on a larger scale exchange of goods for goods. It is referred to as a barter exchange and is usually presented as a scheme $G_1 – G_2$. The purpose of such an exchange is to directly satisfy needs of both participants of the exchange act with what she receives from the transaction partner. The second type is a more "civilized" indirect exchange with the use of money, presented usually as a scheme $G_1 – M – G_2$. The third model is an exchange type presented as a “money - goods - more money” scheme (M - G - M+). And finally, the fourth model is an exchange of the type “money - more money” (M - M+).

Aristotle assigned the first two types of exchange to the art of running a household or managing the state, while the other two – to the art of collecting wealth in the form of money. The former art was later called by Aristotle’s student, Theophrastus, *οἰκονομική* (economics), the latter - *χρηματιστική* (chrematistics). The differences between the two types of art will become sharper when we enter deeper into their matter.

Aristotle treated both types of activities included in economics as the art of acquiring property and creating wealth, also by means of exchange with money, which stays with harmony with nature. This harmony with nature was to be based on three premises. The first is that both in the act of direct and indirect exchange people trade goods which are the result of human work and which serve to satisfy their natural needs. Secondly, both the direct exchange and the monetary exchange involve goods of equal value. And thirdly, for the wealth accumulated in the form of goods, there is a natural upper limit which is determined by human needs. All of this makes such people's economic activities morally just. As such, economics – the art of satisfying natural needs of a household or state to the extent conform to the ideal of *καλοκἀγαθία (*kalokagathia)[1] – made up one of the three pillars of politics[2].

Totally different features saw Aristotle in those people’s activities which were included to chrematistics – the art of collecting and increasing money wealth. What makes them different from the previous ones is that there are no limits to the pursuit of increasing one's wealth in form of money. The other reasons for treating activities included in

[1] Body beauty of a person combined harmoniously with her goodness and moral courage.
[2] The other two were art of commandment and rhetoric.

chrematistics in a different way will be best illustrated by a quote (Aristotle 1999a, book I, part X): “There are two sorts of wealth-getting, as I have said, one is a part of household management, the other is retail trade; the former necessary and honorable, while that which consists in exchange is justly censured; for it is unnatural, and a mode by which men gain from one another. The most hated sort, and with the greatest reason, is usury, which makes a gain out of money itself, and not from the natural object of it. For money was intended to be used in exchange, but not to increase at interest. And this term interest, which means the birth of money from money, is applied to the breeding because the offspring resembles the parent. Wherefore of an modes of getting wealth this is the most unnatural.”

The Aristotelian breakdown of people's economic activities into economics and chrematistics according to the goal assigned to each of the models, was adopted by philosophers and has been functioning actually to the present day. On the basis of economics (*οἰκονομική)*, different theories of consumer behavior were created, while chrematistics (*χρηματιστική)* became the basis for political economy which evolved to contemporary macroeconomics. The most important from our point of view is the Aristotle's thesis that money is both a means and an ultimate end of the transactions of merchants and usurers. In modern economics it takes the form of an axiom that the goal of entrepreneurs is to maximize profit.

It follows from this thesis that what is today referred to as a business activity begins with money and ends with it. According to such approach a producer buys means of production and labor for money in order to sell the goods produced with profit. After this is achieved the cycle ends and a new one begins[3]. It's similar in trade. In banking, however, as in usury, the cycle is shorter because goods are not used there at all. Since the times of Aristotle, only terminology has changed a bit, although moral assessment of profit-making activities of entrepreneurs and bankers has somewhat been mitigated too. The original thesis that the final end of merchants and usurers is to accumulate monetary wealth has been replaced by the thesis that the goal of the enterprises and banks is to maximize profits or maximize a company’s market value. Nor is it explicitly claimed that such business activities are in principle immoral. However, the Aristotelian approach to activities included to chrematistics has become the basis of the economic paradigm of both mainstream and side-stream economics.

Therefore, economists usually reject attempts to refer in their reflections on capitalist (market) economies to analogies with both the model of direct exchange ($G_1 – G_2$), and the model of indirect exchange with the use of a commodity-money ($G_1 – M – G_2$), claiming them to be absolutely different economic systems (e.g. Mises 1996, part three, chapter XI, paragraph 2).

[3] This is how a leading American Marxist, P.M. Sweezy (1965, p. 95), described it: "Money is the beginning and the end here; the rationality of the act G-M-G is lacking here, because money is qualitatively homogenous and does not satisfy any needs.” The author incorporates here in fact a part of the Aristotle’s phrase.

1.2. Can there be money at first?

In order to properly assess the Aristotelian thesis that money is the beginning and the end of both a merchant and a usurer activities belonging to chrematistics (Aristotle 1999a, book I, part IX, p.15), first we have to answer the question as to whether money can really be the beginning of the chain of transactions represented by the scheme Money – Good – More Money (M – G - M+) or Money-More Money (M - M+) respectively. Using present-day terms, it is a question about the origin of monetary capital, which is necessary to start what is nowadays referred to as economic activity. Looking for the right answer, we will consider all possible situations that can be found in today's world, regardless of both a type and a scale of activity, which are completely irrelevant to the logic of the consideration.

The first way to accumulate monetary capital needed to start a business is to "earn money" and put it aside for this purpose. The only way to earn money is to sell something that others want to buy. In such a case it is obvious that there must be some goods at the beginning of the chain of events. It can be either a good created by the entrepreneurial candidate, or a service she provided to someone else. Regardless of whether we consider it in the system of metal money, contemporary with Aristotle, or in the present system of symbolic money, we always face at that moment a good (G) - the first part of the Aristotelian chain of transactions assigned to *οἰκονομική.* Only then is it possible to sell the commodity for money. So in order to make money, you first need to get a good for sale. The more goods sold, the more money earned that can become capital - ceteris paribus. In any case, the amount of money represented by the symbol M in the pattern above is equivalent to the goods (G) sold by the holder of that money and not spent for other purposes. The monetary capital with which anyone engages in business activity thus has its source in the income saved by the person from the sale of his or her goods. There is therefore no doubt in this case that a commodity and not money stands at the beginning of the chain of events. This is true regardless of whether the amount of capital currently held is the result of one or more staggered transactions.

The second possible source of money needed to start a business activity, may be a donation or inheritance received from someone. If the endowed or inherited person received the property in kind and then sold it in order to have money to start a business, the matter is obvious; capital appeared after the components of the property had been monetized. If the recipient or heir has received money, it can also only be derived from the testator's unspent income from what he sold to others. In both cases, money is secondary to the commodity, so again we are dealing with a commodity-money (G-M) transaction, which belongs to the Aristotelian *οἰκονομική*.

The third possible way to get money to start any type of business is to take a loan or credit. In this case, in a purely formal sense, a borrower actually first comes into possession of money and then buys what she needs for business she has chosen. However, regardless of where the loan or credit comes from, the borrower gets the money only for the time agreed with the lender, after which he has to return the lent amount, usually with interest. In the vast majority of cases, however, the condition for receiving such a loan or credit is both having the so-called creditworthiness and securing the repayment of the credit (loan) either by property of the debtor or the property of a guarantor. A person who does not meet the above conditions will not receive credit. Therefore, the monetary capital with which a person starts a business in such a case has its source in both his or her ability to earn income in the future, and – additionally – in existing assets of a guarantor that can be monetized in case of failure to repay the credit from the main source,. Thus, also in this variant, the actual source o capital needed to purchase goods necessary to start a business is the entrepreneur's own income saved, but this time it is his or her future income. Therefore, the only difference from the first variant discussed above is that the sale of goods for money that will become the entrepreneur's capital takes place after she had bought assets needed to start his or her business.

In each of the three cases described above, a given person starts his or her activity as an entrepreneur, having first collected an appropriate amount of money, but in each of them the source of this capital is the previously obtained income from the sale of own goods or services of this entrepreneur.

Apart from the three cases described above, business can still be started, at least in theory, in three more ways. In each of them you don't have to get any money at first. The first of such options is when a candidate for an entrepreneur gets goods and services he needs for his business, i.e. the necessary capital in kind, under the terms of deferred payment. This is the so-called supplier or merchant credit. Although theoretically possible, it is rather unlikely that someone who has only a sincere desire to start as an entrepreneur but has not yet got any assets would be given such credit. However, leaving this doubt aside, again at the beginning of the chain of events leading to the establishment of a company are goods. In the formal sense, goods gained in such a way are the property of the buyer and in case of default, the seller has no right to demand their return. However, this does not change the fact that the goods thus obtained do not actually belong to him until he pays for them. In order to do so, he must earn income from the sale of what is his property and not spend that income on other purposes. So again, goods must come first, and only then money with which a candidate for an entrepreneur will pay off the trade credit. Such a credit – as can be seen – only allows one to speed up the moment of starting a business activity in relation to the time of achieving income. However, it does not change the fact that the source of financing the entrepreneur's assets is ultimately his own capital coming from the income saved. Therefore, it is true again, that capital has to be preceded by goods.

A next possible case is to start a business activity without monetary capital. This option is possible for such services where no goods are needed at all to provide them or where goods belonging to the recipient of a service can be used. In such a case, it is sufficient to simply declare the readiness to provide such services and the activity can start. However, even in this case the activity will start with a commodity, since every services sold belong to this category.

And finally, the last possible case, a situation in which someone uses self made tools to produce goods or provide services. Again, it is not money then, but goods that are at the beginning of the chain of events that enable such an entrepreneur to start a business.

1.3. The fatal error of Aristotle's approach, and the right course of events

By claiming that merchants and usurers both start out with money and end up with money, Aristotle made a fatal error. As shown above, in a purely formal sense, money can be at the beginning only in one case and under one very difficult to defend assumption that someone would be ready to give credit to a person who would like to start a business, but has no own resources. In any other case, there is always a commodity at the beginning, and only when it is sold does money appear.

The supporters of the Aristotelian approach to the activity of all kinds of enterprises seem not to see this first stage in which a person intending to undertake some form of business activity prepares for it for some time in various ways, gathering, among others, money capital, which is necessary to achieve this goal. Omitting this stage does not bear the best testimony about thinkers, but if bad will is excluded, it can be justified to some extent by the fact that the process of saving the money earned is generally not directly visible from outside. What becomes visible, however, is that a person has been acting as an entrepreneur for some time, buying and selling various goods, and that the scale of such operations is growing, and with time her assets are also growing. And since you can only buy goods if you have money, so it seems logical to consider that business starts with money, although it is absolutely wrong.

Nota bene, if we reject the narrow-minded concept of capital, it will become clear that the only way to ensure that future needs can be met relatively easily is to prepare well in advance by acquiring specific skills and preparing appropriate tools. That's what "create capital" means. This concept obviously includes the accumulation of money savings as that Aristotle's "(…) surety [that makes us possible in the future] to get what we want by bringing the money" (Aristotle 1999b, Book V, part 5, p. 80). For with such savings, one can acquire what is needed to start a business activity.

The source of capital needed to start any business activity can only be the income from the sale of goods, which will be saved by the person for this purpose. Therefore, the only proper scheme describing the very beginning of every kind of human economic activity in a monetary economy is the one that refers to gathering of capital, namely G_1 – M, where G_1 represents all goods sold by a person which intends to become businessman. Therefore, there is no doubt that we are dealing here with the beginning of the scheme of activities belonging to the Aristotelian *οἰκονομική* (G_1 – M – G_2).

Also untrue is what the second part of the Aristotelian M – G – M+ pattern suggests. First of all, because it suggests that the source of the increase in the amount of money in the second transaction (G – M+) is a commodity purchased with money in the first one (M – G). And secondly, because it suggests that the sale of a previously purchased product with a profit, M+, ends the whole cycle.

Consider this with the example of a merchant who, having money raised before, buys, for example, precious spices in India in June of a given year and sells them in July and August of that year in Italy and France. It is obvious that before the merchant can cash the goods, he must first transport them to his premises, then subject them to so-called "confectioning", i.e. splitting and packing them into appropriate commercial portions, then deliver them to the commercial outlets, and so on. All these activities require effort, time, cost and many different risks incurred by the merchant, among others the risk that nobody will buy these spices. And all these factors make this exemplary commodity purchased in bulk in India and then retailed in other parts of the world, to be completely different goods.[4] Can it therefore be argued that the source of our merchant's profit is not the above-mentioned factors, but that it is a commodity? Can it seriously be taken Marx's thesis that a capitalist trading in cotton actually exchanges £100 for £110[5]?

We will come back to the question of the source of profit later on in this book. Here, let us briefly sum up the corrections made so far by Aristotle's M – G – M+ scheme, according to which merchants are supposed to operate. Taking into account what has been shown above with regard to the origin of the capital, and referring again to our sample spice merchant, the sequence of transactions up to this moment should be shown schematically as: G_1 - M - G_2 - G_3 - M+. G_1 represents goods sold by the merchant and transformed into capital, M. G_2 are spices bought in bulk in India After being repacked and delivered to the consignees, the goods become different goods and are therefore marked G3 there. After sale it turns into (more) money, M+. However, contrary to what Aristotle claimed about the purpose of merchants' activities, earning extra money does not mean that the purpose of our merchant has been achieved.

It is worth noting that if the trader's goal was to make money, this goal would be achieved already at the initial stage of raising capital described above, i.e. at the stage of accumulating money savings. With each sale of any goods, the seller's cash resources would be increased by the amount of income earned and saved. It would therefore be sufficient to act as the person began to do so, and to enjoy the increasing wealth of money. Why is this not the case?

Well, first of all, no one makes an effort to get something that does not satisfy any need. Therefore, if someone raises money that he or she gains through his or her own efforts, he or she does so with the sole intention of using it to satisfy some future need. It is irrelevant here neither the time when this will happen, nor the type of need that will be

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[4] Apart from the question of validity of the Debreu's Theory of value, one must agree with his definition of a commodity, according to which "(…) a commodity is a good or a service completely specified physically, temporally, and spatially" (Debreu 1987, p. 32). A product with the same physical and functional characteristics offered at different times and in different places is a completely different product! We will return to this issue later in this book. Here, however, let us also consider the alleged aim of more money (M+), which is to be the end of the merchant's cycle.

[5] "If I purchase 2,000 lbs. of cotton for £100, and resell the 2,000 lbs. of cotton for £110, I have, in fact, exchanged £100 for £110, money for money. (Marx. Capital, vol. 1, p. 104, https://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf, access 27.11.2017

satisfied, nor whether the holder will actually use it to satisfy his need, or whether the resources gathered will be used by someone else. Money is always just a means. Its purpose is to serve as a tool to facilitate the satisfaction of needs, by allowing the moment of expenditure to be postponed from the moment of income.

Secondly, the only reason why a candidate for a merchant or other entrepreneur accumulates money in the initial stage, which was omitted in the Aristotelian model, is precisely the intention (desire) to become an entrepreneur. In order to achieve this goal, the candidate must purchase such goods and services which will eventually make up the physical tissue of his enterprise. When this happens, the purpose of putting aside the money earned is achieved. As already mentioned, it is at this point that the first cycle of G_1 - M – G_2 transactions. Thanks to his own work, the effects of which have been transformed by the means of money into the effects of someone else's work, the candidate for an entrepreneur has acquired a tool that will serve him in his further activity. From the point of view of logic, it does not matter here whether this tool is e.g. a scythe, thanks to which a farmer will be able to harvest wheat easier and faster, or whether it is goods bought anywhere in order to be sold somewhere else, or whether it is a company equipped with the most modern machines for the production of space shuttles, which is owned by e.g. 10 million people who own its shares. In each of the cases, we are dealing with a tool in the hands of one or more people. And in each of the cases the creation of the tool completes the first full cycle of transactions of the type G_1 – M – G_2, the aim of which was just to get this tool.

Having got the tool – an enterprise – which is a final result of the first cycle of transactions, an entrepreneur can start using it in a proper way. If she is a producer, she can start producing goods for sale. If she is a trader – she can start purchasing goods for sale. In both cases the result of using the tool are new goods (G_3) for sale. They enable starting the second cycle of transactions of the type Goods – Money – Goods. In the second cycle, of course, it is essential that the amount of money obtained from the sale of these goods (M+) be greater than the amount spent on their purchase or production, M+. When this happens, the revenues will be partly used to finance the purchase of what is necessary for the further functioning of the enterprise and its possible development, G_4, and the remaining part will be used to purchase goods necessary to satisfy the life needs of the entrepreneur, G_5. If the entrepreneur would not make a profit sufficient to cover these needs, his activity would not make sense. This is the only and ultimate goal to which all his activities are subordinated.

The inexorable logic indicates that in every case of so-called human economic activity, i.e. activities aimed at obtaining goods through exchange, we are always dealing with a cycle typical of Aristotelian economics, presented in the form of the G_1 - M – G_2 pattern. The first symbol G always represents there intermediate goods, i.e. those intended for exchange, and the second one – goods used to satisfy the production and/or life needs of the owner(s) of the company. The money in the middle acts only as an intermediary facilitating the acquisition of the latter goods.

Some people work on the land and use the harvest directly to meet their families' needs. In this case we are dealing with self-sufficiency, for which it is not necessary to engage in any transactions with others. Nor do such people need money.

The majority of farmers today grow their land in order to sell some or all of their harvests and use the proceeds to finance the purchase of other goods and services, both for farming and consumption.

In every society there is a group of people who have chosen to provide services as a way of generating income needed to finance the purchase of the goods and services they need. This group also includes employees who provide services in manufacturing, service or commercial enterprises. Again, the sole aim here is to earn wages to finance purchases of goods and services they need to live.

Finally, there are people in every society who choose to run a company for the same purpose, either personally or through hired managers. Each of these ways falls within the G – M – G scheme, which Aristotle considered a morally just way of satisfying natural human needs. And in each of them money is used only to make it easier to exchange the effects of one's own work for those of others.

Therefore, untenable is Aristotle's thesis that the aim of both merchants' and usurer's activity is to earn money by means of money. Under no circumstances can the money come first. Nor is it ever the ultimate goal of people, whether the person is a merchant, a farmer, an architect, an entrepreneur or banker or just an "ordinary" person. The purpose of every economic activity is always only goods necessary to meet needs, with the only difference that they are sometimes self-made, but most often acquired through exchange. In the latter case, however, intermediate goods are necessary in order to earn money to finance the purchases. Ant those goods have always to be first.

In conclusion, it should be stated that the Aristotelian approach to activities assigned to chrematistics, which has become one of the important elements of the foundation of the theory of political economy, is burdened with a very serious error. It is for this reason that this science has taken a blind alley from which there is no way out. Therefore, instead of trying to rebuild this foundation, it is better to build it again. This is also what the further part of this study serves, in which the starting point is the human being as a subject who makes decisions and acts to implement them.

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