

## A Historical Approach of the Population Role in the Economic Development (Ancient period – the nineteenth century)

**Mirela Ionela ACELEANU**

The Bucharest Academy of Economic Studies  
aceleanu\_mirela@yahoo.com

**Abstract.** *The population is the general premise of existence, of dynamics and of structure working factor. In this paper, the population is considered, first, as a support of primary production and creative factor – work which is the recipient and consumer of the results of any economic activity, and on the other hand, the basic relationship between the ultimate goal of production and the means used to achieve it. There are presented interrelationship between demographic and socio-economic processes, since antiquity until the nineteenth century.*

**Keywords:** demography; the population – background of the work as main production factor; the population – final purpose of any economic activity; work; economic development.

**JEL Codes:** B11, B12, B14, J0, O11.

**REL Codes:** 1B, 1C, 1E, 18B.

Since forever, the demography and socio-economic activities were closely existentially related. Thus, no specialists, no socio-economic school has denied links between economic and demographic processes. Moreover, defining work, production, economy in general as the only specific human activities, those demographic and economic specialists are perceived as two indestructible sides.

The phrase “*population – development*” is a relatively recent creation, although the concerns of specialists in understanding and assessing the relationship between population and other systems of society – territory, food, agriculture, regime etc. – are old, as confirmed by the history of philosophical and social thinking.

The population is *a general assumption of the existence*, dynamics and structure of the employment factor. By the role that work has in all resources and production factors, the population is *the primary component of any society*, and hence of any economy. The population is the indispensable condition of the existence of the society itself, a population whose economic role is reflected in the fact that it is a support of the primary production and active-creator and which is the recipient and the consumer of virtually any economic activity.

Moreover, *the satisfaction of the human needs*, so of the population, is *the general goal, the ultimate social and economic activities*, while production and distribution of goods are only practical means ensuring that necessary to achieve stated purpose. The entire population, on the one hand and the active and employed population, on the other hand, is at the base of the ultimate goal of the relationship between production and the means used to achieve it.

The optical approach and analysis of the population-economy interdependencies were different over time, in some cases even opposite, depending on the era, the design method of research analysts and socio-economic phenomena.

### **Plato, Aristotle and Thomas D’Aquino on the role of people in the society and in the economy**

Interdependencies between economic development and population dynamics – those two distinct processes- have been researched and reflected as such since antiquity. The great Greek philosopher Plato (427-347 BC) examined and assessed these relationships in context and in light of the Greek cities of the time. Obviously, the explanations that the Greek philosopher left the posterity to bear the seal of the slave era he lived in and he created.

Worried about finding the optimal size of the number of people who lived in a city, Plato makes the distinction between the ideal city (ideal state), the real city (the real state) and the possible city (the possible state), for each of these models of cities the Greek philosopher established a special work. In the work

on the perfect city, *Plato surprised size relationship between the number of citizens (constant size – 5,040) and the ability to produce of the city which was the basis for its assessment as ideal*. A perfect city, should, in Plato's view, combine the four great virtues: wisdom, courage, temperance, justice (Popescu, 1997, p. 31).

In Plato's view, the two dominant castes – the philosophers and the guardians – must work together to organize their rule on farmers, craftsmen and slaves.

Criticizing Plato's philosophy on the role of men in the perfect city, Aristotle (384-322 BC) considered that man is totally in the real world. It differs from all other beings because he is rational.

In Aristotle's conception, the work was incompatible with the real purpose of human life. This contradiction is resolved by the laws of nature themselves. In fact, people are different from them in kind. Those with lower intellectual qualities are doomed to become slaves. So, the nature dictates to the society the right to entrust only to slave the job to produce goods in crop production and livestock breeding, fishing and hunting, and subordinate their craft through various activities. The intellectually gifted ones were intended, according to the same natural laws, to lead the less gifted ones.

Thus, *in Aristotle's conception the healthy city is defined by some natural relationship between population and structure, on the one hand, and economics and its forms, on the other*. What "got out" of the natural laws affected the healthy city status. In order to delineate what was considered to be healthy which was not healthy, the Greek philosopher used the concepts of *distributive and commutative justice*. The links between these two types of justice with equality and legality were likely to reveal the relationship between population and economy at a certain time and in their becoming.

The importance of knowing two thinking titans of the conceptions of ancient Greece is that the modern social science begins their analytical discourse based on their ideas. After 13 centuries of *Dark Middle Ages* – noted an expert in the field – issues of population and economy began to undergo extensive investigations, various modern authors finding and starting to build a specific affiliation of ideas, whether based on Plato's conception or on Aristotle's conception.

The long period of decline of the Greco-Roman civilizations ended towards the end of XIII century. Amid the economic development and the discovery of the works of the ancient thinkers, the concerns on the study of economic activities in their natural connection (naturally) with demographic processes are reconsidered. The beginning of these concerns was marked by the great thinker who was Thomas D'Aquino (1225–1274).

Making an interesting synthesis between Aristotle's philosophy and his doctrine, he managed to give a rationalist tinge on the Catholic philosophy.

In Th. D'Aquino conception, ensuring the distributive justice is for the leaders, which do the distribution of goods produced among their subordinates. This distribution requires consideration of social ranks; each rank receives a share proportionate to the importance of each rank.

The second type of justice, the commutative, is dependent on the virtue (the virtues) of the individual. This is the person's ability to adapt to change, manage goods received in the distributive justice.

Overall, *the Thomist doctrine* was of great significance. Some exegetes of Thomas D'Aquino believe its doctrine of a particular greatness. In essence, by this work it was considered the *realization of the Christian ideal in a society where the economy began to impose itself as an essential social sector*, which began to be subjected to special concerns.

The prevention of traders from abusing the scarcity of goods (rare occurred on account of stronger growth of human needs) and preventing the consequences of the rarity of capital formed a set of principles designed to support business expansion and a certain accumulation of capital.

### **The classics of political economy about the relationship population-employment-development in the Capitalism of the eighteenth and nineteenth century**

With the industrial revolution, addressing and resolving issues related to the interdependence between population and economy changed substantially. However, in the context of establishment of economic science the optic long prevailed that the two components of social life are autonomous, each of which is forming with the other one exogenous variable.

Adam Smith (1723-1790) *puts the production on the first place*, but only in some particular form: agricultural production, production of precious metals, but in all its forms, placing the spotlight the industry, part explicable given the period in which he lived.

Adam Smith sometimes sees work not as a normal activity of life, as a positive creative activity, but as a sacrifice that the man makes from rest, from freedom and from happiness. People engage in toil and trouble relating to work to enjoy the necessary, useful and pleasant thing for humans. The author considers that it is understood by itself the people's trying to reduce the amount of time and effort related work so that workers will try, naturally, to find simpler and easier ways to carry out work. This leads to invention and improvement of machinery and division of labor as a natural and necessary process.

As a result of division of labor, people become more dependent on each other in ensuring the necessary and useful life. Their work becomes more specialized and skilled, less time consuming and therefore more effective. The benefits of the introduction of machinery for the performance of intensive physical character work previously performed by humans stimulates the investment and hence the productivity growth. This is considered as an asset for the whole society but results from the cumulative effort of individual workers' performance.

We also have to take into account, of course, the different degrees of exertion and skill. It may be more work in one hours of hard work only two hours of light activity, or in one hour of work in a profession that requires ten years of work to learn it than in a month of activity in an usual and easy to learn occupation (Smith, 1962, p. 25).

Starting from Smith's ideas, David Ricardo (1772-1823) continues to deepen the theory of value based on work, bringing far more complex issues in November. In his view, *the value is essentially different from wealth, because the value is independent of the abundance, but is dependent of the difficulty or ease of production. A million people's work in factories will always produce the same amount, but will not always produce the same wealth. By the invention of cars, by improving the skill, a better division of labor or by discovering new markets where trade can be made on advantageous terms, one million people can produce double or triple the amount of wealth ... and thus will not add to the value because the value of a thing increases or decreases according to its ease or difficulty of producing, or, in other words, according to the work done for its production* (Ricardo, 1962, p. 112). From its exposure results that the amount is regarded as a product of labor, while wealth is the result of collaboration between man and nature and the means of production which they use.

Unlike Smith, which reduces the value of the goods only to direct labor expended (live work) to its production, Ricardo states that instruments, working tools do not create value, but as they are consumed, they are transferred to the product.

In Robert Thomas Malthus (1776-1834) view, the creation of wealth requires human effort, but not any work creates wealth. Wealth is created by productive labor. The productive work can be estimated by the quantity and value of the subjected product (The Team Department of Communication and Economic Doctrines, 2001, p. 65).

Malthus recognized the merit of Ricardo to show that the value, as social substance, is created by work, while wealth is the result of the collaboration between man and nature, helped by the capital. He joins the Ricardian theory of considering work as a source of value of goods. Assuming that working capital

is considered acquired, Malthus distinguishes between the constant capital, capital called “the one that orders” and variable capital, the sense was, “capital that is controlled”.

Studying the realities of developed economic countries in the late eighteenth century and the beginning of the nineteenth century, Thomas Malthus made a law of the population of which essence is: “the increase of revenue on economic development increases birth, and when this growth occurs ahead the intensity of economic development the revenue declines.” (Malthus, 1992, p. 124).

By formulating this law it was implemented the quality of exogenous variable of both the economy to the population and the population to the economy. First, birth is seen as directly and unilaterally determined by the size and dynamics of the income. Then, the increase of birth rate compared with the economic results automatically lead to lower family income (wages). In other words, Th. Malthus expected that production of consumer goods increased in arithmetical progression, while the population grows in geometric progression. The general conclusion which Malthus made was that it can reach a great crisis if action is taken to stop the population growth (Malthus, 1992, p. 256).

According to Th. Malthus, *the population growth with a relatively high rate is an obstacle to growth*. A positive population growth means more claims against all systems of society: health, education, economic, environmental, habitat. The economy in turn must respond to these new requests, usually by increasing production (not to reduce the living standard of population).

However, a contemporary critic of Malthus said: “God sent not only a mouth in addition to be fed, but a pair of arms that will work.” Of course, additional workforce training needs skills, talents to work. So, demographic investment must be done, as Sauvy said, investment will be recovered in less or more time, depending on the level of labor productivity.

According to opinion of the Romanian demographer Vladimir Trebici, statistical documentation of Th. Malthus was quite modest, given that the first census was held in England in 1801. In his opinion, to answer the question *whether it is positive or negative the population growth in relation to social economic objectives, the analysis is required to take into account the time, that country's characteristics, cultural models*.

The general statistical observations show that periods of economic prosperity have been accompanied by declining birth rates. Economic and demographic history have seen situations much more varied than that surprised by Thomas Malthus in the capitalist law that bears his name. The meanings and dimensions of the demographic and economic dynamics were different not only from one country to another, but from one group of countries to another. If there are analyzed and countries left behind in economic too, the demographic-economic

picture with the changes appears in its full complexity. Moreover, even in the same country these relations have evolved varied from one period to another.

John Stuart Mill (1806-1873) considered work an important production factor, creator of utility fixed and embedded in material objects. Only the labor which is involved in creating utilities is productive. The other work, while useful, falls into the category of non-productive. Social and natural production conditions are materialized through the joint action of the three production factors: labor, nature and capital.

*The accumulated stock of capital is called capital;* in such way capital is defined as part of the wealth gained through work and used in the production and reproduction of wealth. The size and use of capital may expand or reduce the creation of wealth, and his work is to be used and not preserved. The function of the capital in production *is the function of work as an indirect form* through the means and objectives as it is materialized (Ivanciuc, 1990, pp. 37-38).

### **Karl Marx: the productive labor and surplus value, the capitalist law of population**

Karl Marx (1818-1883) analyzes the capitalism as a generalized commodity production, in which human labor itself became a commodity. In Marx's conception, the work does not necessarily mean direct labor; it can be live work that is distributed on many goods and labor incorporated into the manufacture of a car, which the car slowly forwards it on to the products.

Marx follows Ricardo in his view on the value of merchandise. Therefore, he argues that all goods are valued in relation to the direct or indirect employment that it is included and in relation to the amount of necessary social work incorporated into the merchandise.

According to the Marxist conception, labor, the one who works productively, is the main force of the company. This assessment takes into account the fact that absolutely all means of work, no matter how sophisticated would be dead as long as they are not revived by man.

Obviously, between the development and use of material factors of production and use of work there are multiple necessary links, resulting in the need of general progress. Despite these multiple interdependent links, each of the processes has shown determination and specific events. In this respect Karl Marx postulated: "The reproduction of labor force – force that must continually enter the structure of capital as a means of recovery (production added-value) and can not be freed from him – whose subordination to capital is only disguised by the changing of individual capitalists who are selling it, it is actually a time of reproduction of capital itself" (Marx, 1966, pp. 623-624).

In Marxist vision it is an essential difference between normal reproduction of labor under a social report and normal reproduction in the capitalist sense. The normal reproduction of labor, as an overall process, would also involve quantitative changes, structural and quality ones to be in relation to the socio-economic and technical progress, with the natural coordinates of demographic phenomena, namely to the socio-cultural and national conditions from the reference country, so in each country.

But, the capital relationship – showed Marxists – imposed “another normal” in the reproduction of labor. The most significant manifestations of misconduct of “normal capitalism” of training and use of labor from “the general normal” were treated and appreciated by the Marxists through the following: chronic and mass unemployment, large asymmetries between the necessary-historical and supported structures, selfishly promoted by the capital; the absence of national programs for training the workforce, the absence of ways and means of mixing the individual and the social overall process of training and use of labor.

These demo-economic imbalances in the conduct of reproduction of work force by their socio-political importance – supports Marxism – far outweighs the labor market, since the bourgeois leaders call them with all seriousness, “public enemies” of capitalism itself.

*The capitalist law of population* is the theoretical generalization of resonance with the essence of Marxism addresses and examines the unemployment, its objective determination.

Karl Marx formulated the public law as it follows, “once with the expansion of production scale and the number of workers in service, with the development of productive force of their work, with expansion and growth of all resources of wealth, extent the proportions to which the attraction of more workers by Capital is linked to a higher rejection of them. This is a law of population similar to the capitalistic production model.”

„But if a working overpopulation – emphasizes Marx – is the necessary product of accumulation or development of capital-based wealth, this overpopulation becomes in turn a lever of capitalist accumulation, even a condition of existence of the capitalist mode of production” (Marx, 1966, p. 641). It is noted in this case that the economic component is autonomous and it is an exogenous variable to the population.

The preparatory elements for defining the capitalist law of population movements consist of the accumulation of capital, where the size and structure of the accumulation appear as independent variables, while their labor movements, movements of variable capital (with which is bought the goods of the workforce) are a dependent variable. More specifically, Marx stated: "It is not in any way about a relationship between two quantities independent of each



other, ie the size of capital on the one hand, the number of working population on the other hand. Ultimately, it's not just the relationship between unpaid and paid work of the same working population.”

Following this thesis, in the Marxist thinking it is paid an essential attention to the ratio between the newly created value of only productive labor, the value of labor work and the added-value.

The workforce is presented primarily as a defining biophysical human structure as the primary source of physical and intellectual energy. But the use of labor involved a social, moral and historical side, whose share has continually increased; the occurrence of labor goods was a corollary of the process. Like any other merchandise, labor has two factors: the value and the use value.

The value of labor is determined by the working time required for the production and reproduction of this article so specific and essential part of capitalism. The lower limit or minimum limit value is the amount of labor, physically indispensable. If the price of labor (wages) falls to this minimum level, it falls below its value, because it excluded the historical-mental element.

Starting from their fundamental thesis of the value and the only source of it – the productive work – Marxists conclude that the use value of labor is that the employed labor force creates both value of its own (which is the historical and moral element) and a surplus of value – added value for capitalists. The employed labor is the active subject of production of the process of over-value, of the recovery of capital.

On the basis of this mode of treatment mechanisms and production of value and over-value, Karl Marx formulates his general political conclusion: capitalism must be replaced by revolutionary means, by the outbreak of the proletarian revolution in advanced capitalist countries (matured in the forms of exploitation of the proletariat, but also in the organization of the exploited ones).

The history of the last and a half century, in particular, the experience of countries which have opted for liquidation of capitalism and building socialism Marxist revealed exaggerations regarding their findings and of political and ideological recommendations. Capitalism has evolved and developed in other way than as envisaged by Marx-Engels-Lenin and even Marxists of the twentieth century.

However, some fundamental thesis and ideas propagated by Marxist thinking on the formation and use of labor have been incorporated in what specialists called heterodox theory of economic growth and development at the turn of current centuries and millennia.

\*        \*  
\*  
\*  
\*

Since the second half of the nineteenth century, *with the emergence of two new social sciences – sociology and demography – social life appears as a result of human will, able to act on society, to transform and to change it radically*. This is not considered a result of natural or divine order.

On this methodological-philosophical background, over the last centuries it was shaped and consolidated a new optics regarding the social processes and relations between them. Nowadays, it is considered that the social, demographic and economic processes are not dependent to each other, but on the contrary, the relations between these processes are reciprocal, of interdependence. Therefore, their analysis requires the successive passage of each process group either by the position of dependent variable, or by the independent variable towards each other. Thus, *the population is a factor of the economy as a means to achieve the ultimate goal of any activity (as producer), but also an effect (as consumer)*.

In the twentieth century, especially in the second half of this century, the optical approaches to the relationship between population and economy (both seen in dynamics) have multiplied, their views on it becoming not only more diverse but also opposite. What characterizes them is *the turn of the population in endogenous factor* (the internal, intrinsic side) of the economic development (economic growth), factor which, in turn, is determined by economic processes.

The dual position of the population in the demo-economic system – as a main production factor and as virtual destination of the goods produced – is a strong case for assessing the demographic factor as endogenous variable of the economic growth and development.

---

## References

- Colectivul Catedrei de Comunciare și Doctrine Economice (2001). *Doctrine economice*, Editura ASE, București
- Dobrotă, N., Aceleanu, Mirela (2007). *Ocuparea resurselor de muncă în România*, Editura Economică, București, 2007
- Ivanciuc, Nicolae-Văleanu (1990). *Liberalismul în teoria economică și politică clasică* (I și II), Tema3, LitoASE, București
- Malthus, Thomas R. (1992). *Eseu asupra principiului populației*, Editura Științifică, București
- Marx, K. (1966). *Capitalul*, Vol. 1, în Marx-Engels, Opere alese, vol. 23, Editura Politică, București
- Popescu, Gh. (1997). *Liberalismul economic* (Clasicismul), Editura Mesagerul Cluj
- Ricardo, D. (1962). *Despre principiile economiei politice și ale impunerii*, vol. I, București, Editura Academiei
- Smith, A. (1962). *Avuția națiunilor, cercetare asupra națiunii și cauzelor ei*, vol. I, Editura Academiei Române
- Trebici, V. (1996). *Demografie*, Editura Enciclopedică, București