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THE THEORY OF TOTAL SOCIAL COST OF PRODUCTION

The following study, dedicated to the memory of professor Demetrius Gregoriades, is the 18th chapter of my «Theoretical Political Economy». The study is a modern contribution to the subject.

The sudden death of the distinguished professor startled all of us.

1. The meaning of total social cost of production

The theorists of economics when speak of cost of production mean the cost of production of any enterprise that produces any economic goods.

Professor V. Voyadgis (Introduction to Economic Theory p. 137) writes «The theory of cost refers to private enterprise».

Professor Nic. Marmatakis «Economic Theory 1977» speaks of social cost but he restricts it only in relation with social usefulness, but he does not explain its content.

Professor P. Samuelson (Economics 1967 p. 373) supports that prices are determined, apart from supply and demand, by the cost of production, without explaining if it refers to firm, or to national economy.

Classical economist David Ricardo rested his theory of prices on cost, that at last analysis is the cost of labour, the only factor of production.

Neoclassical A. Marshall (Principles of Economics chap. III) engaged with the question of prices, supports that prices are due to cost of production that are payed to two factors, labour and saving.

Neoclassical Gustav Cassel (Fundamental Thoughts in Economics

1925) explaining the theory of prices, he substituted fully the theory of value, supported that prices of all goods of a national economy are in mutual determination and are rested on cost of production, namely on the prices of factors labour, (wages), of capital (rate of interest), and land (rent) and also on scarcity of money.

Professor Z. Zolotas («Lessons of Theoretical Economics» 1959) in two points refers to costs, in p. 88 with the sentence «we shall examine first the cost of enterprise». And in the chapter of formation of prices (p. 141b) refers that one cause of prices are «the cost of reproduction», without a clear picture of reproduction, and without the elements of cost of reproduction.

He does not mention that in reproduction, he removes from the private firm to national economy. In p. 141σ' he writes «towards cost of reproduction tend prices».

Generally, economic theory did not explain strictly the meaning of cost of production in national and international economy... *This is expressed in Greek the total social cost of production, in a national economy. Total social cost refers also to international economy of any time.*

Given that the level of prices is a phenomenon that is determined by many forces in any national economy, necessarily the cost for all these forces that is payed, is the total social cost of production. Thus the meaning of cost of production is extended to broad forces, that are used in a national economy to produce the yearly product.

The theory of total social cost of production contains every cost that is payed in the year to have the total production of the national economy. But the question rises, which are the total cost, which are the yearly expenses that make up the total social cost of production.

This consists of all expenses that are payed for the total production of goods, material or services, immaterial, produced by all national economy in a year. Namely the total cost to wages, and salaries, the total rates of interest, the total rents. And every other cost regular or irregular, all damages in the year, payed or unpayed.

Also in the total social cost are contained all pensions, to retired men and women, payed by state or private companies, for these expenses weigh on social cost of national economy.

In total social cost is contained the irregular temporary taxes, or every part of the budget that is over the strict necessary yearly expenses. Taxes that refer to pay loans of the passed years.

In social cost is contained all donations of everyday life, but not

the donations of benefactors out of their property.

In social cost should be accounted all losses of firms, all damage of fires or of wreckage, all these weigh with national production.

All destructions, or desinvestment, belong to total social cost, destructions of agriculture production, payed or not payed. Every damage or loss weigh on national production, even if are not taken into account privately.

All deficits and losses of private firms, are economic losses that weigh with the national economy (production).

All deficits of state and state organisations and all rates of interest for state loans are burdens and elements of the total social cost of production.

All these expenses of several categories weigh upon the national yearly production, as social cost. They are all «input» for the yearly «output», the national income. As much large is the difference between input and output, so large is national income.

This total social cost in relevance with supply and demand determine the level of prices of the country.

Every national economy in internal and foreign competition reacts to change of total social cost.

In the phenomenon of inflation is contained two ingredients, one is the total social cost, and the second is the inflationary ingredient, apart from profits.

It is worthwhile to mention several cases which contain parts of total social cost of production in the country.

The natural increase of population in a country brings about increase of rent of land, that means a straight increase of total social cost of production.

On the side of economic policy, the increase or extension of pensions to new social classes, means increase of total social cost of production.

Every new tax, direct or indirect, means an increase of total social cost of the yearly production. If the state restricts its expenditure, without reducing its yielding, the total social cost reduces, then the state makes economies.

The pollution of environment, that necessitates the clearance with new expenses by state, weigh upon the social cost of production.

More generally in the modern economy, social, political or tech-

nological forces bring about continuous increase of social cost of production. -

Labour accidents not only destroy national productive powers, but also they are losses, equal to the new pensions and damages indemnified, that weigh with the social cost.

The death of men and damage out of earthquake are apart from loss of productive powers, and loss of capital, cause also many indemnities that weigh with the social cost of production.

Wars with their heavy losses of men, of capital or land cause many-fold increase of social cost. While war indemnities lighten the social cost of production. Other expenses that are added to total social cost of production are the expenses to armaments, which according to U.N.O. data reach at the level of 650 billion dollars (1981).

When a wood is burned, apart from its aesthetic and fauna losses, the damage, private and public, direct or indirect, either indemnified or not, is added to social cost of production.

The expenses for the world refugees are another element of the total social cost of production. International economy is in solidarity and interdependence in cost of production, as it is in productivity.

They may be added many other cases, in which exist ingredients of total social cost of production.

On the contrary cases of reduction of cost of production, private or public contribute to the reduction of total social cost nationally and internationally.

2. Total social cost of international production

Certainly in international economy, world production, in the total International income, there is a total social international cost of production. This consists of the total social cost of all countries, and of the special expenses that are disposed for the function of all international organisations.

As internally, in international economy there exists the subject of maximisation of yielding of the organisations and of minimisation of their cost; it is not indifferent neither to any international organisation, nor to the states that finance them.

In principle the necessity of the foundation of the international bodies, is the evidence of their economic yielding. But beyond the necessity of their existence, the question comes up, if they render more

or less, than their expense of function.

When an international organisation is set up unnecessary, all the expense of its existence is an international loss, that weigh with the social cost of international production.

3. The effect of total social cost on prices of the national economy

Social cost is a phenomenon that is diffused all over national production, in a period of time. This social cost determines mainly the prices of the national economy, the level of prices, and the relative prices of goods produced.

Social cost functions like a barometer, as heavy is the total social cost so higher is, the level of prices of national economy.

So in the level of prices of a country, we should distinguish the part of the total social cost, from that of inflation. The distinction of the two ingredients, is most fertile to economics.

National economy as a whole and the private individual producers bear the total social cost, being unable to avoid or reduce it.

The prices of the yearly produced economic values are determined not only by social cost, but many other forces, and more specially by the produced income of the year. The two quantities, variables, are connected mutually in a year and connection of future. The two variables have some difference, the social cost is alligatory while national income is probable quantity. Out of yearly output, after subtracting the social cost of production, remains the net national income.

On every productive unit is ascribed a part of total social cost, as prices to factors, taxes, and all other obligations. Just as war damages would be cast upon every individual of the defeated country.

That function of the two variables, social cost and national income, the level of prices, and the prices of goods are determined at the same time, mutually affected. As output is larger, so the percentage of total social cost is smaller the net national income greater, the individual and the level of prices stable.

A successful economic policy that increases national income, reduces social cost at the same time, while a failure economic policy, reduces national income and increases the percentage of social cost.

In a time of abnormal events, wars and other destructions, in a country the total social cost increases, prices increase, irrelevantly of inflation.

4. Social cost and social usefulness

Apart from economic policy that affects social costs and influences national income, some state investment, even consumption expenditure, while weigh with social cost, at the same time brings about increase of national income, through external economies of improvement of productivity.

In these cases if national profitability is greater than the social cost, the state goes on with the expenditure. Then we speak that national usefulness is greater than the social cost.

National economy in developping countries in the first stage has greater national usefulness than the social cost. From public works of infrastructure the yielding is larger than the expenditure of the state, and national income increases quickly.

Public investments are productive at different levels, some of them have a render higher than others. In economic planning state investments while increase total social cost, may have better results on national income. Then we speak of greater public usefulness than the increased social cost of production.

5. Social cost and productivity

Productivity is connected inversely with total social cost of production. As social cost of a national economy is high, so productivity is low. As social cost in a country is low, so its productivity is high, as productivity of a country increases so its total social cost reduces and prices ought to go down, but other forces keep them stable, even they go up.

The relation of cost of a productivity unit to its render is its level of productivity. There is also level of productivity in a national economy, as it was explained the subject in my essay «A theory of productivity» 1948.

So the relation of social cost of a national economy to its national income is the productivity of the country. The two variables may have several relations in different countries, because of different historical conditions of productive provisions.

The theoretical hypothesis of free competition that means minimisation of total social cost and maximisation of productivity, as the classical school promised was impossible in practice.

Great loads of social cost because of war damages, of destructions, or of social policy mean low level of productivity. National economy with the least cost of production, the least of social cost, and modern technology, means high level of productivity, and lowest total cost of production, then is generated a competitive national economy. But in the modern and real world a national economy, in order to be protected of international competition, is obligated to promote productivity along with national obligations.

6. International comparison of total social cost

From the presented analysis appears that the total social cost of a country has close relation with the conditions of the national economy, its history and its stage of development, namely of its level, of productivity.

That is why the level of prices differs from country to country, on a long scale. With a theoretical hypothesis, our opinion will be more manifest.

Let us suppose that an international system of money is introduced in all countries, the same money all over the countries. Then the level of prices in each country will be different. Different prices also of the same products. Then the countries with disadvantages will be obligated to protect the national production, because international competition will be impossible and the states in international transactions have to hold them under control and protection. The unification of their economies without any restriction will be against those countries that the higher total social cost of production.

This phenomenon that appears manifest in our hypothesis, occurs always under the system of national moneys, the different unit of money and their names.

The equalisation of total social cost in different countries is a question of long time, even of centuries. Then liberalisation of international transactions would be easy.

7. Social cost and national income

Total social cost of production, as we have seen, is in straight relation with national income, and throws some confusion on the subject.

Recently in Greece pensions were extended to farmers without the assurance contributions of the assured individuals. This new yearly sum given to farmers, certainly has the character of social cost of production of Greece.

At the same time this sum is also individual incomes. The question raises what relation has to national income.

Social cost is not national income, that is clear. Social cost is cost of production in the national economy. It contributes in several ways to national income and by increasing productivity.

Every piece of social cost is a force that generates many reactions in the national economy, on export, on import, on the level of prices, on taxes etc. Its multiple reactions on national production, may increase or reduce national income or it may redistribute the total national income.

It may also increase prices unevenly and thus it redistributes the national income among the different classes of the population. It may also lead to reduction of the individual income of farmers that have got the pensions, if the government does not take other protective measures.

The result at the end of the year out of the data will bring to light the whole transformation of the Greek national economy, and the distribution of its national income.

The conclusion that every new social cost, given to individuals by state or firms, is at the same time, part of national income, would be false.

The distinction of private economy, of consumer or producer, from national economy, is very important, and the necessity of distinction of microeconomics from macroeconomics theoretically is so valuable.

Any measure by state that benefits individuals, is surely part of social cost but is not at the same time part of national income. Through the change of prices, or of productivity it may be the factor of reduction of national income, or a redistribution of national income.

So cost of production of private firm differs essentially from the total social cost of production of national economy.