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# **An Introduction to Marxist Economic Theory**

**(Excerpts)**

## **Commodities, Use value and Exchange value**

Every product of human labor normally possesses utility; it must be able to satisfy a human need. We may therefore say that every product of human labor has a use value. The term “use value” will, however, be used in two different senses. We will speak of the use value of a commodity; we will also talk about use values, as when we refer, for example, to a society in which only use values are produced, that is to say, where products are created for direct consumption either by the producers themselves or by ruling classes which appropriate them.

Together with this use value, a product of human labor can also have another value, an exchange value. It may be produced for exchange on the market place, for the purpose of being sold, rather than for direct consumption by the producers or by wealthy classes. A mass of products which has been created for the purpose of being sold can no longer be considered as the production of simple use values; it is now a production of commodities.

The commodity, therefore, is a product created to be exchanged on the market, as opposed to one which has been made for direct consumption. Every commodity must have both a use value and an exchange value.

It must have a use value or else nobody would buy it, since a purchaser would be concerned with its ultimate consumption, with satisfying some want of his by this purchase. A commodity without a use value to anyone would consequently be unsaleable, would constitute useless production, would have no exchange value precisely because it had no use value.

On the other hand, every product which has use value does not necessarily have exchange value. It has an exchange value only to the extent that the society itself, in which the commodity is produced, is founded on exchange, is a society where exchange is common practice.

Are there societies where products do not have exchange value? The basis for exchange value, and a fortiori for trade and the market place, is constituted by a given degree of development of the division of labor. In order for products not to be directly consumed by their producers, it is essential that everybody should not be engaged in turning out the same thing. If a particular community has no division of labor, or only its most rudimentary form, then it is clear that no reason for exchange exists. Normally, a wheat farmer has nothing to exchange with another wheat farmer. But as soon as a division of labor exists, as soon as there is contact between social groups producing different use values, then exchange can come about, at first on an occasional basis, subsequently on a more

permanent one. In this way, little by little, products which are made to be exchanged, commodities, make their appearance alongside those products which are simply made for the direct consumption of their producers.

In capitalist society, commodity production, the production of exchange values, has reached its greatest development. It is the first society in human history where the major part of production consists of commodities. It is not true, however, that all production under capitalism is commodity production. Two classes of products still remain simple use value.

The first group consists of all things produced by the peasantry for its own consumption, everything directly consumed on the farms where it is produced. Such production for self-consumption by the farmer exists even in advanced capitalist countries like the United States, although it constitutes only a small part of total agricultural production. In general, the more backward the agriculture of a country, the greater is the fraction of agricultural production going for self-consumption. This factor makes it extremely difficult to calculate the exact national income of such countries.

The second group of products in capitalist society which are not commodities but remain simple use value consists of all things produced in the home. Despite the fact that considerable human labor goes into this type of household production, it still remains a production of use values and not of commodities. Every time a soup is made or a button sewn on a garment, it constitutes production, but it is not production for the market.

The appearance of commodity production and its subsequent regularization and generalization have radically transformed the way men labor and how they organize society.

### **Determination of the Exchange Value of Commodities**

Once we have determined that the production and exchange of commodities becomes regular and generalized in a society based on an economy of labor-time, on an accounting system in work-hours, we can readily understand why the exchange of commodities, in its origins and inherent nature, rests on this fundamental basis of an accounting system in work-hours and consequently follows this general rule: the exchange value of a commodity is determined by the quantity of labor necessary to produce it. The quantity of labor is measured by the length of time it takes to produce the commodity.

This general definition of the labor theory of value is the basis of both classical bourgeois political economy from the seventeenth century to the beginning of the nineteenth century, from William Petty to Ricardo; and Marxist economic theory, which took over the theory of labor value and perfected it. However, the general definition must be qualified in several respects.

In the first place, not all men are endowed with the same capacity for work, with the same strength or the same degree of skill at their trade. If the exchange value of commodities depended only on the quantity of labor expended individually, that is, on the quantity of labor expended by each individual in the production of a commodity, we would arrive at this absurdity: the lazier or more incompetent the producer, and the larger the number of hours he would spend in making a pair of shoes, the greater would be the value of the shoes!

This is obviously impossible since exchange value is not a moral reward for mere willingness to work but an objective bond set up between independent producers in order to equalize the various

crafts in a society based both on a division of labor and an economy of labor-time. In such a society wasted labor receives no compensation; on the contrary, it is automatically penalized. Whoever puts more time into producing a pair of shoes than the average necessary hours – an average determined by the average productivity of labor and recorded in the Guild Charters, for example! – such a person has wasted human labor, worked to no avail for a certain number of hours. He will receive nothing in exchange for these wasted hours.

Expressed another way, the exchange value of a commodity is not determined by the quantity of labor expended by each individual producer engaged in the production of this commodity but by the quantity of labor socially necessary to produce it. The expression “socially necessary” means: the quantity of labor necessary under the average conditions of labor productivity existing in a given country at a given time.

The above qualification has very important applications when we examine the functioning of capitalist society more closely.

Another clarifying statement must be added here. Just what do we mean by a “quantity of labor”? Workers differ in their qualifications. Is there complete equality between one person’s hour of work and everybody else’s, regardless of such differences in skills? Once again the question is not a moral one but has to do with the internal logic of a society based on an equality between skills, an equality in the marketplace, and where any disruption of this equality would immediately destroy the social equilibrium.

What would happen, for example, if an hour’s work by an unskilled laborer was worth as much as an hour’s work by a skilled craftsman, who had spent four to six years as an apprentice in acquiring his skill? Obviously, no one would want to become skilled. The hours of work spent in learning a craft would be wasted hours since the craftsman would not be compensated for them after becoming qualified.

In an economy founded on an accounting system of work-hours, the young will desire to become skilled only if the time lost during their training period is subsequently paid for. Our definition of the exchange value of a commodity must therefore be completed as follows: “An hour of labor by a skilled worker must be considered as complex labor, as compound labor, as a multiple of an hour of unskilled labor; the coefficient of multiplication obviously cannot be an arbitrary one but must be based on the cost of acquiring a given skill.” It should be pointed out, in passing, that there was always a certain fuzziness in the prevailing explanation of compound labor in the Soviet Union under Stalin which has persisted to this very day. It is claimed that compensation for work should be based on the quantity and quality of the work, but the concept of quality is no longer understood in the Marxist sense of the term, that is to say, as a quality measurable quantitatively by means of a specific coefficient of multiplication. On the contrary, the idea of quality is used in the bourgeois ideological sense, according to which the quality of labor is supposed to be determined by its social usefulness, and this is used to justify the incomes of marshals, ballerinas and industrial managers, which are ten times higher than the incomes of unskilled laborers. Such a theory belongs in the domain of apologetics despite its widespread use to justify the enormous differences in income which existed under Stalin and continue to exist in the Soviet Union today, although to a lesser extent.

The exchange value of a commodity, then, is determined by the quantity of labor socially necessary for its production, with skilled labor being taken as a multiple of simple labor and the coefficient of multiplication being a reasonably measurable quantity.

This is the kernel of the Marxist theory of value and the basis for all Marxist economic theory

in general. Similarly, the theory of social surplus product and surplus labor, which we discussed at the beginning of this work, constitutes the basis for all Marxist sociology and is the bridge connecting Marx's sociological and historical analysis, his theory of classes and the development of society generally, to Marxist economic theory, and more precisely, to the Marxist analysis of all commodity-producing societies of a precapitalist, capitalist and postcapitalist character.

### **The Origin and Nature of Surplus Value**

And now, what is surplus value? When we consider it from the viewpoint of the Marxist theory of value, the answer is readily found. Surplus value is simply the monetary form of the social surplus product, that is to say, it is the monetary form of that part of the worker's production which he surrenders to the owner of the means of production without receiving anything in return.

How is this surrender accomplished in practice within capitalist society? It takes place through the process of exchange, like all important operations in capitalist society, which are always relations of exchange. The capitalist buys the labor-power of the worker, and in exchange for this wage, he appropriates the entire production of that worker, all the newly produced value which has been incorporated into the value of this production.

We can therefore say from here on that surplus value is the difference between the value produced by the worker and the value of his own labor-power. What is the value of labor-power? In capitalist society, labor-power is a commodity, and like the value of any other commodity, its value is the quantity of labor socially necessary to produce and reproduce it, that is to say, the living costs of the worker in the wide meaning of the term. The concept of a minimum living wage or of an average wage is not a physiologically rigid one but incorporates wants which change with advances in the productivity of labor. These wants tend to increase parallel with the progress in technique and they are consequently not comparable with any degree of accuracy, for different periods. The minimum living wage of 1830 cannot be compared quantitatively with that of 1960, as the theoreticians of the French Communist party have learned to their sorrow. There is no valid way of comparing the price of a motorcycle in 1960 with the price of a certain number of kilograms of meat in 1830 in order to come up with a conclusion that the first "is worth" less than the second.

Having made this reservation, we can now repeat that the living cost of labor-power constitutes its value and that surplus value is the difference between this living cost and the value created by this labor-power.

The value produced by labor-power can be measured in a simple way by the length of time it is used. If a worker works ten hours, he produces a value of ten hours of work. If the worker's living costs, that is to say, the equivalent of his wage, is also ten hours of work, then no surplus value would result. This is only a special case of the more general rule: when the sum total of labor product is equal to the product required to feed and maintain the producer, there is no social surplus product.

But in the capitalist system, the degree of labor productivity is such that the living costs of the worker are always less than the quantity of newly created value. This means that a worker who labors for ten hours does not need the equivalent of ten hours of labor in order to support himself in accordance with the average needs of the times. His equivalent wage is always only a fraction of his day's labor; everything beyond this fraction is surplus value, free labor supplied by the worker and appropriated by the capitalist without an equivalent offset. If this difference did not exist, of course, then no employer would hire any worker, since such a purchase of labor-power would bring no

profit to the buyer.

## **The Fundamental Mechanism of Capitalist Economy**

And now what is the functioning basis of this capitalist society?

If you were to go to the Printed Cottons Exchange on a certain day, you would not know whether there was exactly enough, or too little, or too much printed cottons, measured against the existing needs in France at that moment. You would only find that out after a certain time: that is to say, if there were overproduction and a part of production unsaleable, you would see prices fall. If there were, on the contrary, a scarcity, you would see prices rise. The movement of prices is the thermometer telling us whether there is a scarcity or plethora. And since it is only after the event that we find out whether the quantity of labor expended in an industrial branch has been expended in a socially necessary way or whether part of it has been wasted, it is only after the event that we are able to determine the exact value of a commodity. This value, therefore, is, if you choose to call it so, an abstraction; but it is a real constant around which prices fluctuate.

What causes the movement in these prices and consequently, in longer terms, the movement in these values, in this labor productivity, in this production and in this overall economic life?

What makes Sammy run? What causes capitalist society to move? Competition. Without competition there is no capitalist society. A society where competition is radically or completely eliminated would no longer be capitalist to the extent that there would no longer be a major economic motive for accumulating capital and consequently for carrying out nine tenths of the economic operations which capitalists execute.

And what is the basis of competition? Two ideas are basic to it but these do not necessarily overlap. First is the idea of the unlimited market, the market without restrictions, without exact boundaries. Then there is the idea of a multiplicity of decision centers, above all in matters of investment and production.

If all production in a given industrial sector were concentrated in the hands of a single capitalist firm, competition would still not be eliminated, because an unlimited market would still exist and there would still be a competitive struggle between this industrial sector and other sectors to capture as much of this market as possible. Furthermore, there would always be a possibility that a foreign competitor might enter the scene and provide new competition right in the very same sector.

The reverse is also true. If we can conceive a totally and completely limited market, but one in which a great number of enterprises are righting to capture a part of this limited market, then competition must obviously survive.

Therefore only if these two phenomena were to be suppressed simultaneously, that is to say, if there were only one producer for all commodities and the market became absolutely stable, frozen and without any capacity for expansion, could competition disappear completely.

The appearance of the unlimited market displays all of its significance when compared with the period of small-scale commodity production. A guild in the Middle Ages generally worked for a market limited to the city and its immediate suburbs, and in accordance with fixed and specific labor techniques.

The historical passage of the limited market to the unlimited market is illustrated by the example of the “new clothiers” of the countryside which replaced the old city clothiers in the fifteenth century. There were now cloth manufacturers without guild regulations, without production limits, therefore without any market restrictions, who tried to infiltrate everywhere, seek clients everywhere, and not only went beyond the immediate area of their production centers, but even tried to organize an export trade to very distant countries. On the other hand, the great commercial revolution of the sixteenth century stimulated a relative reduction in the prices of a whole set of products which had been considered great luxuries in the Middle Ages and were only within the purchasing range of a small part of the population. These products suddenly became far less expensive, and even came within the reach of a significant part of the population. The most striking example of this trend is sugar, which has become a commonplace product today and is undoubtedly to be found in every working-class household in France or in Europe; in the fifteenth century, however, it was still a highly luxurious article.

The apologists for capitalism have always pointed to the reduction in prices and widened market for a whole set of products as the benefits brought about by this system. This argument is true. It is one of the aspects of what Marx called “the civilizing mission of Capital.” To be sure we are concerned here with a dialectical but real phenomenon where the value of labor-power has a tendency to fall by virtue of the fact that capitalist industry produces the commodity equivalent of wages with ever increasing rapidity while it simultaneously has a tendency to rise by virtue of the fact that this value of labor-power progressively takes in the value of a whole series of commodities which have become mass consumer goods, whereas formerly they were reserved for a very small part of the population.

Basically, the entire history of trade between the sixteenth and twentieth century is the history of a progressive transformation from trade in luxury goods into trade in mass consumer goods; into trade in goods destined for an ever increasing portion of the population. It is only with the development of the railroads, of the means for fast navigation, of telegraphy, etc., that it became possible for the whole world to be marshalled into a real potential market for each great capitalist producer.

The idea of an unlimited market does not, therefore, merely imply geographic expansion, but economic expansion, available purchasing power, also. To take a recent example: the extraordinary rise in the production of durable consumer goods in world capitalist production during the past fifteen years was not at all due to any geographic expansion of the capitalist market; on the contrary, it was accompanied by a geographic reduction in the capitalist market, since a whole series of countries were lost to it during this period. There are few, if any, automobiles of French, Italian, German, British, Japanese or American manufacture exported to the Soviet Union, China, North Vietnam, Cuba, North Korea, or the countries of East Europe. Nevertheless, this expansion did take place, thanks to the fact that a much greater fraction of the available purchasing power, which had increased absolutely as well, was used for buying these durable consumer goods.

It is no accident that this expansion has been accompanied by a more or less permanent agricultural crisis in industrially advanced countries, where the consumption of a whole group of agricultural products has not only ceased to increase on a relative basis but is even beginning to show an absolute decline: for example, the consumption of bread, potatoes, and of commonplace fruits like apples, pears, etc.

Production for an unlimited market, under competitive conditions, results in increased production, for an increase in production permits a reduction in costs and affords the means for beating a competitor by underselling him.

If we look at the long-term change in the value of all commodities which are produced on a large scale in the capitalist world, there can be no doubt that their value has declined considerably. A dress, knife, pair of shoes, or schoolboy's notebook today has a value in hours and minutes of labor which is far lower than it was fifty or a hundred years ago.

Obviously real production values must be compared and not sale prices, which include either enormous distribution and sales expenses or swollen monopolistic superprofits. Using gasoline as an example, especially the gasoline distributed in Europe and originating in the Middle East, we find that its production costs are very low, barely 10 percent of the sale price.

In any event, there can be no doubt about the fact that this drop in value has actually taken place. Growth in labor productivity means a reduction in the value of goods, since the latter are manufactured with an ever reduced quantity of labor-time. Therein lies the practical tool which capitalism possesses for enlarging its markets and defeating its competitors.

What practical method does the capitalist have for sharply cutting his production costs and simultaneously sharply increasing his production? It is the development of mechanization, the development of means of production, mechanical instruments of labor of ever increasing complexity, originally powered by steam power, then by gasoline or diesel oil, and finally by electricity.

### **The Growth in the Organic Composition of Capital**

All capitalist production can be represented in value by the formula:  $C+V+S$ . The value of every commodity consists of two parts: one part represents crystallized or conserved value and the other newly created value. Labor-power has a dual function, a dual use value: that of preserving all existing values in the instruments of labor, machines, buildings, while incorporating a fraction of this value into current production; and that of creating a new value, which contains surplus value, profit, as one of its components. Another part of this new value goes to the worker, and represents the counter-value of his wage. The surplus value portion is appropriated by the capitalist without any counter-value.

We call the equivalent of wages variable capital and designate it by  $V$ . Why is it capital? Because, in effect, the capitalist advances this value; it constitutes, therefore, a part of his capital, which is expended before the value of the commodities produced by the workers in-question can be realized.

We call that part of capital which is transformed into machines, buildings, raw materials, etc., whose value is not increased by production but merely preserved by it, constant capital and designate it by  $C$ . The part of capital called variable capital,  $V$ , the part used by the capitalist to buy labor-power, is so termed because it is the only part of capital which lets the capitalist increase his capital by means of a surplus value.

Since this is the case, what is the economic logic of competition, of the drive to increase productivity, to increase mechanical means, machine labor? The logic of this drive, that is to say, the fundamental tendency of the capitalist system, is to increase the weight of  $C$  the weight of constant capital, with respect to variable capital. In the fraction  $C/V$ ,  $C$  tends to increase, that is to say, the part of total capital made up by machines and raw materials, but not in wages, tends to increase with the advances in mechanization and wherever competition compels capitalism to step up labor productivity.

We call this fraction  $C/V$  the organic composition of capital: it is therefore the ratio between constant capital and variable capital, and we say that in the capitalist system this organic composition has a rising tendency.

How can the capitalist acquire new machines? What is the meaning of the statement that constant capital keeps on increasing?

The fundamental operation of capitalist economy is the production of surplus value. But so long as the surplus value has merely been produced, it remains locked in the commodities and the capitalist cannot use it; unsold shoes cannot be transformed into new machines, into greater productivity. In order to be able to buy new machines, the industrialist possessing shoes must sell these shoes, and a part of the proceeds of this sale can then serve to purchase new machines, as a supplementary constant capital.

Expressed another way: realizing surplus value is the necessary condition for the accumulation of capital, and capital accumulation is simply the capitalization of surplus value.

Realizing surplus value means the sale of goods but also the sale of such goods under conditions where the surplus value they contain can actually be realized in the market. All businesses operating at average productivity in society – whose total production therefore corresponds with socially necessary labor – are supposed to realize the total value and surplus value produced in their plants, neither more nor less, when their goods are sold. We saw previously that those enterprises which are above the average in their productivity will capture a part of the surplus value produced in other enterprises, whereas those operating at a lower than average productivity will not realize a part of the surplus value produced in their plants but must surrender it to other plants which are technologically ahead of them. Consequently, the realization of surplus value means the sale of goods under conditions in which all of the surplus value produced by the workers in a plant manufacturing commodities is actually paid for by their purchasers.

As soon as the stock of goods produced in a given period is sold, the capitalist is reimbursed with a sum of money which constitutes the counter-value of the constant capital expended in achieving this production, that is to say, the raw materials used together with the fraction of the value of machines and goods amortized by this production. He has also been reimbursed with the counter-value of wages which he advanced in order to effect this production. In addition, he is in possession of the surplus value produced by his workers.

What happens to this surplus value? A part of it is unproductively consumed by the capitalist, for the poor fellow has to live, has to keep his family alive together with his entourage; and everything he spends for these purposes is completely withdrawn from the process of production.

A second part of the surplus value is accumulated and is utilized by being transformed into capital. Accumulated surplus value is, consequently, that entire part of surplus value which is not unproductively consumed in meeting the private needs of the ruling class, and which is transformed into capital, either into supplementary constant capital, that is to say, into a supplementary quantity (more exactly: a value) of raw materials, machines, buildings; or into supplementary variable capital, that is to say, means for hiring more workers.

We now understand why the accumulation of capital is the capitalization of surplus value, that is to say, the transformation of a large part of surplus value into supplementary capital. And we also understand how the process of growth in the organic composition of capital represents an uninterrupted succession of capitalization processes, that is to say, of the production of surplus



value by workers and its transformation by the capitalists into supplementary buildings, machines, raw materials and workers.

It is consequently inaccurate to say that it is the capitalist who creates employment, since it is the worker who produced the surplus value, which was capitalized by the capitalist, and used, among other things, for hiring more workers. In reality, the entire mass of fixed wealth we see in the world, the whole mass of plants, machines, roads, railroads, ports, hangars, etc., etc., all of this enormous mass of wealth is nothing but the materialization of a mass of surplus value created by the workers, of non-reimbursed labor which was transformed into private property, into capital for the capitalists. It is, in other words, a colossal proof of the continuous exploitation undergone by the working class since the origin of capitalist society.

Do all capitalists progressively add machines, increase their constant capital and the organic composition of their capital? No, the increase in the organic composition of capital takes Place antagonistically, by way of a competitive struggle governed by that law which the great Flemish painter, Peter Breughel, portrayed in an engraving: the big fish eat the little.

The competitive struggle is therefore accompanied by a continuous concentration of capital by the displacement of a large number of businessmen by a smaller number, and by the transformation of a certain number of independent business people into technicians, managers, foremen, and even simple subordinate office personnel and workers.

### **Tendency of the Average Rate of Profit to Decline**

We saw previously that the surplus value produced by the workers in each factory remained “locked” in the products, and that the question whether or not this surplus value would be realized by the capitalist factory owner was decided by market conditions, that is to say, by the possibility for the factory to sell its products at a price which would allow all of this surplus value to be realized. By applying the law of value developed earlier, we can set up the following rule: all enterprises which are producing at the average level of productivity will, roughly speaking, realize the surplus value produced by their workers, that is to say, they will sell their products at a price equal to the value of these products.

But this will not be the case for two categories of enterprises: those operating below and those operating above the average level of productivity.

What is the category of enterprises operating below the average level of productivity? This is nothing but a generalization of the lazy shoemaker we mentioned previously. It is, for example, a steel mill which produces 500,000 tons of steel in 2.2 or 2.5 or 3 million man-hours, when the national average for this production is 2 million man-hours. It is therefore wasting social labor-time. The surplus value produced by the workers in this factory will not be realized in its entirety by the owners of this plant; it will work at a profit below the average rate of profit for all enterprises in the country.

But the total mass of surplus value produced in society is a fixed mass, dependent in the last analysis on the total number of labor hours supplied by all workers engaged in production. This means that if there are a certain number of enterprises which do not realize all the surplus value produced by their workers because the enterprises are operating below the average level of productivity and have therefore wasted social labor-time, then there is an unexpended balance of surplus value available which is captured by the plants operating above the average level of productivity. Having economize on social labor-time, the latter are rewarded by society.

This theoretical explanation is a general demonstration of the mechanism determining the movement of prices in capitalist society. How does this mechanism operate in practice?

Let us say the average selling price of a locomotive is a million dollars. What then will be the difference between a plant operating below the average productivity of labor and one operating above it? The first will spend, let us say, \$900,000 to produce a locomotive, and its profit will be \$100,000. On the other hand, the plant producing above the average level of labor productivity, will spend, let us say, \$750,000 and will make \$250,000 profit, that is 33 per cent on its current production, whereas the average rate of profit is 18 per cent and enterprises working at this average social labor productivity produced locomotives at a cost of \$850,000, realizing \$150,000 in profit, that is to say, 18 per cent.

In other words, capitalist competition favors those enterprises which are technologically ahead; these enterprises realize superprofits as compared with the average profit. Average profit is basically an abstract idea, exactly like value. It is an average around which the real profit rates of different branches and enterprises fluctuate. Capital flows toward the branches where there are superprofits and flows away from those branches in which profits are below the average. By virtue of this ebb and flow of capital from one branch to another, the rates of profit tend to approximate this average, without ever completely reaching it in an absolute and mechanical way.

This is the way then that equalization of the rates of profit is effected. There is a very simple way to determine this abstract average rate of profit: we take the total mass of surplus value produced by all workers in a given year and in a given country, and draw its ratio to the total mass of capital investment in that country.

What is the formula for the rate of profit? It is the ratio between surplus value and total capital. It is therefore  $S/(C+V)$  Still another formula must be considered as well: this is the rate of surplus value, or better still, the rate of exploitation of the working class. It specifies the way in which the newly produced value is divided between workers and capitalists. If, for instance,  $S/V$  equals 100 per cent this means that the newly produced value is divided into two equal parts, one part going to the workers in the form of wages, the other going to the bourgeois class in the form of profits, interest, dividends, etc.

When the exploitation rate of the working class is 100 per cent, the 8-hour working day then consists of two equal parts: 4 hours of labor in which the workers produce the counter-value of their wages, and 4 hours in which they supply gratuitous labor, labor which is not paid for by the capitalists and its product appropriated by the latter.

At first sight, it seems that if the organic composition of capital  $C/V$  increases, the profit rate  $S/(C+V)$  will decline, since  $C$  becomes increasingly greater relative to  $V$ , and  $S$  is a product of  $V$  and not of  $C$ . But there is a factor that can neutralize the effect of an increase in the organic composition of capital: it is precisely an increase in the surplus value rate.

If  $S$  over  $V$ , the surplus value rate increases, this means that in the fraction  $S/(C+V)$ , both the numerator and denominator increase, and in this case the value of the fraction can remain the same, under conditions where the two increases occur in a certain proportion.

In other words, an increase in the surplus value rate can neutralize the effects of an increase in the organic composition of capital. Let us assume that the value of production  $C+V+S$  goes from  $100C+100V+100S$  to  $200C+100V+100S$ . The organic composition of capital will therefore go from 100 to 200 per cent, the profit rate will fall from 50 to 33 per cent. But if at the same time the

surplus value goes from 100 to 150, that is to say, the surplus value rate goes from 100 to 150 per cent, then the profit rate  $150/300$  remains at 50 per cent: the increase in the surplus value rate neutralizes the effect of the increase in the organic composition of capital.

Can these two movements occur in exactly the necessary proportions for them to neutralize each other? Here we touch the basic weakness, the Achilles heel of the capitalist system. These two movements cannot develop proportionally over the long run. There is no limit whatever to the increase in the organic composition of capital. For  $V$  there is a theoretical limit of zero, assuming the arrival of total automation. But can  $S/V$  also increase in an unlimited way, without any limit whatever? No, for in order to produce surplus value it is necessary to have working workers, and this being the case, the fraction of the workday in which the worker reproduces his own wage cannot fall to zero. It can be reduced from 8 hours to 7, from 7 hours to 6, from 6 hours to 5, from 5 hours to 4, from 4 hours to 3, from 3 hours to 2, from 2 hours to 1, from 1 hour to 50 minutes. It would already be a fantastic productivity which would permit the worker to produce the counter-value of his entire wage in 50 minutes. But he could never reproduce the counter-value of his wage in zero minutes and zero seconds. There is a residual which capitalist exploitation can never suppress.

This means that in the long run the fall in the average rate of profit is inevitable, and I personally believe, contrary to the idea of quite a few Marxists, that this fall is also demonstrable in statistics, that is to say that the average rates of profit today in the big capitalist countries are much lower than they were 50, 100 or 150 years ago.

Of course, if we examine shorter periods, there are fluctuations up and down; there are numerous factors which come into play (we will discuss them later, when dealing with neocapitalism). But for the long run, the movement is very clear, both for interest rates and profit rates. We should point out, moreover, that among all the developmental tendencies of capitalism, this was the one most clearly perceived by the theoreticians of capitalism themselves. Ricardo speaks of it; John Stuart Mill stresses it; Keynes is highly aware of it. There was a maxim in England at the end of the nineteenth century which was practically a popular saying: capitalism can withstand anything except a fall in the average interest rate to 2 per cent, because that would kill investment incentive.

This maxim obviously contains a certain kind of error in its reasoning. Calculations of percentages, of profit rates, have a real value, but it is still, after all, a relative one to a capitalist. What interests him is not exclusively the percentage he makes on his capital, but also the total amount which he makes. And if the 2 per cent applies not to \$100,000 but to \$100 million, it still represents \$2 million, and the capitalist would do an awful lot of thinking before he would say that he preferred to let his capital lie idle rather than to accept the revolting profit of a mere \$2 million a year.

In practice, we see therefore that there is no total halt in investment activity following a fall in the profit and interest rates but rather a slowing down proportional to the fall in profit rate in an industrial branch. On the other hand, when there is more rapid expansion and a rising tendency of the profit rate in certain industrial branches or in certain periods, then investment activity resumes, speeds up, the movement then seems to feed on itself, and the expansion appears to have no limits up to the time when the tendency reverses once more.

## **The Fundamental Contradiction in the Capitalist System and the Periodic Crises of**

## Overproduction

Capitalism has the tendency to extend production without limits, to extend its arena of activity over the whole world, to view all human beings as potential customers. (Parenthetically, there is a pretty contradiction worth stressing, one which Marx already mentioned: each capitalist always likes to see other capitalists increase the wages of their workers, because the wages of those workers are purchasing power for the goods of the capitalist in question. But he cannot allow the wages of his own workers to increase, for this would obviously reduce his own profit.)

The world is consequently structured in a most extraordinary way, having become an economic unit with an interdependence of its different parts which is extremely sensitive. You know all the clichés which have been used to depict this: if someone sneezes on the New York Stock Exchange, 10,000 peasants are ruined in Malaya.

Capitalism produces an extraordinary interdependence in incomes and a unification in tastes for all human beings. Man has suddenly become conscious of the wealth of human possibilities, whereas in pre-capitalist society, he was enclosed in the narrow natural possibilities of a single region. In the Middle Ages, pineapples were not eaten in Europe, only locally grown fruits, but today we eat fruits which may have been produced anywhere in the world and are even beginning to eat fruits from China and India which we were not accustomed to eating prior to the second world war.

There are consequently mutual links being established among products and among men. Expressed in other terms, there is a progressive socialization of all economic life, which is becoming a single assemblage, a single fabric. But this whole movement of interdependence is simply centered in an insane way around private property, private appropriation, by a small number of capitalists whose private interests, moreover, collide more and more with the interests of the billions of human beings included in this assemblage.

It is in the economic crises that the contradiction between the progressive socialization of production and the private appropriation which serves as its driving power and its support, breaks out in the most extraordinary way. For capitalist economic crises are incredible phenomena like nothing ever seen before. They are not crises of scarcity, like all pre-capitalist crises; they are crises of overproduction. The unemployed die of hunger not because there is too little to eat but because there is relatively too great a supply of foodstuffs.

At first sight the thing seems incomprehensible. How can anyone die because there is a surplus of food, because there is a surplus of goods? But the mechanism of the capitalist system makes this seeming paradox understandable. Goods which do not find buyers not only do not realize their surplus value but they do not even return their invested capital. The slump in sales therefore forces businessmen to suspend their operations. They are therefore forced to lay off their workers and since the laid-off workers have no reserves, since they can subsist only when they are selling their labor-power, unemployment obviously condemns them to the starkest poverty and precisely because the relative abundance of goods has resulted in a slump in sales.

The factor of periodic economic crises is inherent in the capitalist system and remains insurmountable. We shall see further on that this remains equally true in the neocapitalist regime in which we are now living, even if these crises are now called “recessions.” Crises are the clearest manifestation of the fundamental contradiction in the system and a periodic reminder that it is condemned to die sooner or later. But it will never die automatically. It will always be necessary to give it a conscious little push to effect its demise, and it is our job, the job of the working-class movement, to do the pushing.