Nick Beams replies to a reader's question about the law of the falling rate of profit

29 March 2000

The following is a question by a reader in Germany concerning the law of the falling rate of profit and a response by WSWS *Editorial Board member Nick Beams.*

Dear editorial board,

In your article "Marxist Internationalism vs. the Perspective of Radical Protest" you write on the fall of the rate of profit, as predicted by Marx.

In a reply to a correspondent you further elaborate that the rate of profit is being equalized throughout the entire economy. This is consistent as a law within the framework of Marxist economy.

However, I do ask myself how, in spite of this, the economy as a whole or at least those branches using the most modern means of production, were, following World War II, in a position for decades to gain higher rates of profit than before the war. This is what you describe in part 2 of your article. Also, I ask myself whether, considering this background, there exists a necessity that capitalism will collapse in our time. Could it not be possible that, just like during the post-war boom, again new techniques of production will be developed which guarantee a high rate of profit. You will probably reject this perspective. In this case, however, you will have to demonstrate that there is a qualitative difference between the capitalist economy of 1945 and that of 2000.

As I regard myself an opponent of capitalism just like you, my question does not aim at a refutation of Marx, but I inquire why Marx's theories are true despite the post-war boom.

Yours,

FR

Dear FR,

Your letter on the rate of profit raises a number of important questions which require a fairly extensive reply.

First of all, Marx did not maintain that the rate of profit everywhere and always continues to fall. Rather, he made clear that like all laws of capitalist production, the law of the falling rate of profit operated as a tendency which continually exerted itself.

Marx described this tendency as the “most important law of political economy” above all from “an historical point of view”. This is because the tendency of the rate of profit to fall is the driving force behind the revolutionising of the productive forces, the chief means by which capital attempts to overcome its effects.

Before going into the specific question you raise, it is necessary to establish the basis of the law as such. The origin of surplus value, and profit, is the difference between the value of the commodity labour power (the capacity to work which the worker sells to the capitalist in the wage contract) and the value which the use of that labour power creates in the production process. These are two entirely different magnitudes and this difference represents the surplus value which is rendered to the capitalist.

Marx explains that the working day can be divided into two components. One portion of the working day comprises the time taken by the worker to reproduce the value of his labour power (necessary labour), with the rest of the working day—the time beyond this point—comprising surplus labour.

The rate of surplus value is given by the ratio of these two components. If, for example, a working day of 8 hours divides in the proportions 4 hours of necessary labour and 4 hours of surplus labour, then the rate of surplus value will be 4/4 or 100 percent.

The rate of profit, however, is determined by the ratio of surplus value to the total capital employed in the production process. The total capital comprises two components: constant capital, i.e., the means of production (raw materials and machinery used up in the production process), and the capital laid out on the purchase of labour power—variable capital.

The rate of profit is the ratio of surplus value to the total capital employed in the production process. Thus, for example, if the total capital is 100, comprising 80 constant capital and 20 variable capital, and the rate of surplus value is 100 percent, meaning that a surplus of 20 is extracted in the production process, the rate of profit is 20/100 or 20 percent.

The tendency for the rate of profit to fall arises from the fact that as the productivity of labour is developed the proportion of constant capital in the production process tends to rise. That is, the new living labour in the production process tends to decline in relation to the means of production which it sets in motion. But as living labour is the sole source of surplus value, the rate of profit, calculated on the total capital employed, tends to decline.

Suppose that we now have a capital of 200 comprised of 180 constant capital and 20 variable capital. With a rate of surplus value of 100 percent, giving a surplus of 20, we find that the rate of profit on this capital is now 20/200 or 10 percent.

The tendency of the rate of profit to fall is the driving force behind the development of new technologies and the revolutionising of the productive forces, which Marx insisted was characteristic of the capitalist mode of production.

As I drew out in my recent correspondence with RS, and as you note in your letter, the rate of profit is equalised throughout the economy. Each section of capital shares in the total surplus value extracted from the working class according to its share of the total capital. This process is regulated by the market. The price received by each section of capital for the commodities it produces will tend to that price which returns the average rate of profit.

But if a particular capitalist firm is able to reduce its costs of production to below the social average it will receive increased profits, at least for a time. Confronted with a fall in the average rate of profit, individual sections of capital will attempt to counter this tendency by introducing new technologies which enable them to reduce production costs to below the social average. Of course, such benefits will only be able to be enjoyed until the new methods spread more generally and the more efficient method of production becomes the social average.

The development of new production methods will enable particular sections of capital to counter the tendency of the rate of profit to fall. But it is clear that this does not yet explain how it is that technological change can bring about an increase in the average rate of profit.

It will be able to do so insofar as technological change is able to bring about an increase in the productivity of labour to such an extent that necessary labour is reduced and surplus labour is increased in the economy as a whole. In other words, while technological development increases the proportion of constant capital, thereby reducing the average rate of profit, it also increases the extraction of surplus labour, thereby tending to increase the rate of profit. If this increase in surplus labour is sufficiently large, the fall in the profit rate may be arrested and the profit rate may even increase.

Of course our analysis immediately raises the following question: is it possible for technological innovation to continuously counter the tendency of the rate of profit to fall by reducing necessary labour and increasing surplus labour or are there inherent limits to this process?

Let us return to our depiction of the working day. Suppose that it is initially divided in the proportions 4 hours necessary labour and 4 hours surplus labour. Suppose that technological innovations reduce the necessary labour from 4 to 2 hours. Surplus labour will increase from 4 to 6 hours—a rise of 50 percent. Suppose there is another series of technological changes which further reduce necessary labour from 2 to 1 hour. Surplus labour will increase from 6 to 7 hours—an increase this time of only 16 2/3 percent. What this example shows is that every succeeding round of technological change produces a smaller proportionate increase in surplus labour.

Summarising this result Marx wrote: “The larger the surplus value of capital *before the increase of the productive force*, the larger the amount of presupposed surplus labour or surplus value of capital; or, the smaller the fractional part of the working day which forms the equivalent of the worker, which expresses necessary labour, the smaller is the increase in surplus value which capital obtains from the increase of productive force. Its surplus value rises, but in an ever smaller relation to the development of the productive force. Thus the more developed capital already is, the more surplus labour it has created, the more terribly it must develop the productive force in order to realize itself in only smaller proportion.... The self-realization of capital becomes more difficult to the extent that it has already been realized” (Marx, *The Grundrisse*, p. 340).

On the basis of this theoretical analysis, we are now in a position to examine the changes in the accumulation of surplus value in the period since World War II.

In the final analysis, the post-war boom rested upon the increase in the mass of surplus value made possible by the extension of the more productive assembly-line methods of mass production, first developed by American capitalism, to Europe and Japan. The Marshall Plan for the reconstruction of Europe, initiated in June 1947, was not simply aimed at providing an injection of demand to finance the expansion of European markets. One of its key features was to establish the necessary framework for the investment of capital by removing the economic barriers between the European states which had constricted markets in the 1920s and 1930s and blocked the development of new mass production techniques. In steel, for example, it was impossible in the pre-war period to develop new methods because the market was constricted by cartels and restrictions on production by which firms attempted to maintain their profits.

In your letter you inquire whether “Marx's theories are true despite the post-war boom”. I would say that Marx's analysis of value and surplus value and the relationship of the accumulation of surplus value to the profit rate provides the only scientific understanding of the development of the post-war boom and its inevitable demise.

The development and extension of assembly-line methods of production throughout the capitalist world in the period after the war brought an enormous increase in the productivity of labour. That is, these methods saw an increased extraction of surplus labour through a considerable reduction in necessary labour.

The consequent expansion of the overall mass of surplus value brought an increase in the average rate of profit—benefiting the more efficient and less efficient firms alike—leading to further investment, expansion of industry and employment. Out of the growing mass of surplus value, capitalist governments were able to finance social welfare spending and other concessions to the working class.

However, the very expansion of capital to which the post-war boom gave rise led to the re-emergence of the tendency of the rate of profit to fall. This tendency had clearly developed by the end of the 1960s and manifested itself in 1974-75 in the deepest recession since the 1930s.

Capital has responded to the re-emergence of falling profit rates in two interconnected ways: It has undertaken a continuous drive against the living standards and social position of the working class, and it has initiated a vast reorganisation of production based on new technologies to try to increase the rate of accumulation of surplus value.

We saw previously how each capitalist firm is driven by the competitive struggle to appropriate surplus value to adopt new production methods in order to try to cut costs. In that way, some firms are able to maintain or even to increase their profits. But the development of these new methods cannot bring an increase in the overall mass of surplus value because the previous development of labour productivity (from the steam engine to the assembly-line) has reduced necessary labour to a relatively small fraction of the working day. As we saw from our numerical example, this means that even a vast development of the productive forces will only produce a tiny proportionate increase in surplus labour. Consequently, the development of new technology is unable to increase the average rate of profit as it did in the past.

I should emphasise at this point that we are examining tendencies of development. In reality all sorts of other, secondary factors come into play. But having said that, the analysis of the contradictions in the accumulation of surplus value is the key to understanding the present situation.

Last month, the US recorded the 108th consecutive month of economic growth—an historical record. Yet it is clear that this “boom” is vastly different from anything experienced in the post-war period. For a start, real wages have been stagnant or declined for the majority of workers. In the post-war period, economic expansion brought an increase of secure, relatively well-paid jobs. Today the situation is the reverse as major corporations maintain their profits not through expansion of production, sales and employment but through downsizing and cost-cutting. Every other social statistic shows the same tendency. These differences are rooted in the crisis of surplus value accumulation.

It is useful to contrast the analysis of the post-war period obtained with the method of Marx and the theories advanced by the bourgeois economists. In the first place, they can provide no scientific explanation of the post-war expansion, and indeed admit as much referring to the German “economic miracle” or the Japanese “economic miracle” as if the boom were the product of some kind of divine intervention. Likewise, bourgeois economics can provide no explanation of its demise. According to some schools, the oil price shock of 1973-74 brought the boom to a close. Others blame the demise of Keynesian economics, others the advance of wage struggles by the working class which pushed down profits and so on.

Least of all can any school of bourgeois economics provide an explanation as to why, in the midst of arguably one of the periods of greatest technological development in history, and in contrast to the experience of the 1950s and 1960s, living standards and social conditions are worsening.

In conclusion, I would like to point out that the aim of this analysis is not to show that, to use your phrase, “there exists a necessity that capitalism will collapse in our time”. Marx's analysis of the contradictions of value was grounded upon the laws of historical development which he uncovered. Marx explained that at a certain stage of development the material productive forces of society come into conflict with the existing social relations leading to an era of social revolution.

However, there is nothing automatic in this process. While the "changes in the economic foundation lead sooner or later to the transformation on the whole immense superstructure" Marx made clear that it was necessary to "distinguish between the material transformation of the economic conditions of production, which can be determined with the precision of natural science, and the legal, political, religious, artistic or philosophic—in short ideological forms in which men become conscious of these conflict and fight it out."

The aim of our analysis is not to show that capitalism will "collapse" at some point in the *future* but rather to reveal that the *present-day* crisis of the capitalist economy and the deepening social ills to which it gives rise are rooted in the objective conflict between the productive forces and the social relations of capital, which can only be resolved through the socialist transformation of society.

Yours sincerely,

Nick Beams

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