

Must The Profit Rate Really Fall? - A defense of Marx against Paul Sweezy Jim Miller, April 1995

The tendency of the rate of profit to fall is a necessary consequence of the evolutionary logic of the capitalist mode of production. This was explained by Marx in *Capital*, Vol. III. Yet many modern Marxist writers do not agree. Here Marx's original conception is explained and defended against the arguments of Paul Sweezy advanced in his 1942 book, *The Theory of Capitalist Development*. It is demonstrated that Marx still has the upper hand against Sweezy and other like-like-minded writers.

INTRODUCTION

This essay is a review of the basic features of Marx's law of the tendency of the rate of profit to fall. After a preliminary definition of terms, we shall attempt to explain why the law is inseparable from the functioning of the capitalist mode of production itself, and why, therefore, knowledge of the workings of this law is identical with knowledge of the workings of capitalism. We will try to show that the practical significance of the law of the tendency of the rate of profit to fall is that the rate of profit must fall in life as the theory explains.

There are a number of counteracting influences which hinder the working of the tendency of the falling profit rate, but we hope to be able to show why these forces cannot, in the final analysis, prevent the profit rate from falling. Naturally, not every influence is touched upon here. But we feel that once the law is properly understood, it will be seen why it must inevitably dominate over the counter-tendencies.

In the course of the exposition, the views of Paul Sweezy will be subjected to critical examination. Ben Fine and Laurence Harris also will also be briefly countered. These are writers who have rejected, in one way or another, Marx's law of the tendency of the rate of profit to fall. The best criticisms of Marx naturally come from those who are the most familiar with Marx's writings, and these are generally writers who consider themselves Marxists. It is hoped that it will be seen from this essay that Marx is superior to his critics.

The tendency of the rate of profit to fall is one of the central features of the capitalist mode of production, and one which, perhaps more clearly than any other, expresses the historical limitedness of this form of society. Marx's analysis of the operation of the law of the tendency of the rate of profit to fall has come under attack from economists who cannot accept the prospect of the ultimate demise of capitalism through the effects of its own inner contradictions. Marx commented on the state of mind of bourgeois economists who begin to confront the possibility of a long-term decline in the profit rate: "But the main thing about their horror of the falling rate of profit is the feeling that capitalist production meets in the development of its productive forces a barrier which has nothing to do with the production of wealth as such; and this peculiar barrier testifies to the limitations and to the merely historical, transitory character of the capitalist mode of production; testifies that for the production of wealth, it is not an absolute mode; moreover, that at a certain stage it rather conflicts with its further development." (Marx, 1962, p. 237)

We live in an age in which the horror of a falling rate of profit increasingly permeates the consciousness of growing layers of capitalists throughout the world. While profit rates fluctuate widely from boom to bust, from one country to another, and from one business or branch of industry to another, the feeling that profits are not what they should be, or not what they used to be, grows.

For the capitalists, and the economists who try to serve them, the shifts in profits that occur on the balance sheets of banks and corporations are not, nor can they be, manifestations of an underlying tendency rooted in the basic character of the capitalist mode of production. If a squeeze on profits becomes apparent, any number of immediate or indirect causes can be pointed to: interest rates, taxes, wages, environmental and other regulations, etc. Instead of probing the inner structure of capital, and the laws of its evolution, they are restricted to examining this multiplicity of conflicting forces that forms the outward appearance of economic relations. As Marx commented about the capitalists and their theoretical spokespersons:

"...it is just as natural for the actual agents of production to feel completely at home in these estranged and irrational forms of capital-interest, land-rent, labor-wages, since these are precisely the forms of illusion in which they move about and find their daily occupation. It is therefore just as natural that vulgar economy, which is no more than a didactic, more or less dogmatic, translation of everyday conceptions of the actual agents of production, and which arranges them in a certain rational order, should see precisely in this trinity, which is devoid of all inner connection, the natural and indubitable lofty basis for its shallow pompousness." (Marx, 1962, p. 809)

For the vulgar (bourgeois-minded) economists, if a problem is recognized, there is always an answer, or set of answers. The superficial and illusory categories in which they conceive the world are referred to as containing the solutions. Thus we have recommendations for trade policies, tax proposals, investment strategies, labor relations tactics, etc. In this conception, there is always a way out of the dilemma. The notion that average profit rates cannot be restored to their previous levels (barring a monumental destruction of capital and reversion to a lower stage of capital accumulation) is something beyond the range of their experience. Or, if they should hear about Marx's theory of a tendency for the profit rate to fall, they dismiss it out of hand, as propaganda.

What is at stake is the fundamental historical character of capitalist society. The bourgeois economists believe that it is essentially an unending form of society. Not that they predict it will last forever (when was the last time any of them gave a thought to what might happen 100 years from now, or even 50?)-but they see nothing happening in the world now that would indicate that capitalism will ever reach the end of its rope.

Marxists, on the other hand, are able to explain the historically transitory character of capitalism. It is not an eternal form of society. And it is the tendency of the average rate of profit to fall over the long run that most convincingly illustrates the temporary nature of capitalism. To understand the operation of this tendency is to come to grips with the logical dynamic of a mode of production that lives: like an organism, it is born, it grows, it matures, it ages and becomes increasingly moribund.

But the law of the tendency of the rate of profit to fall is not a constantly- functioning, mechanical process. It is a tendency which makes its impact felt on the surface of events in a limited way, with many reversals and interruptions, due to the resistance to its operation provided by the counteracting forces which Marx analyzes. But it continues to gather strength the longer, and the more completely, the world's population is drawn into the capitalist mode of production.

The more capital is developed as the exclusive form of the production of the world's goods and services, and the more production corresponds to the requirements of capital, the more does the tendency of the rate of profit to fall express itself as an actual reduction in average profits worldwide, and thus acts as a practical barrier to the further development of the productive forces.

DEFINITION OF TERMS

The falling rate of profit is rooted in the increasing productivity of labor as it develops under capitalism. As Marx explained, "...the level of the social productivity of labor is expressed in the relative extent of the means of production that one worker, during a given time, with the same degree of intensity of labor power, turns into products. The mass of means of production with which he functions in this way increases with the productivity of his labor. But those means of production play a double role. The increase of some is a consequence, that of others a condition, of the increasing productivity of labor. For example, the consequence of the division of labor (under manufacture) and the application of machinery is that more raw material is worked up in the same time, and therefore a greater mass of raw material and auxiliary substances enters into the labor process. That is the consequence of the increasing productivity of labor. On the other hand, the mass of machinery, beasts of burden, mineral manures, drain-pipes, etc., is a condition of the increasing productivity of labor. This is also true of the means of production concentrated in buildings, furnaces, means of transport, etc. But whether condition or consequence, the growing extent of the means of production, as compared with the labor power incorporated into them, is an expression of the growing productivity of labor. The increase of the latter appears, therefore, in the diminution of the mass of labor in proportion to the mass of means of production moved by

it, or in the diminution of the subjective factor of the labor process as compared with the objective factor." (Marx, 1977, p. 773)

Under capitalist domination, the means of production are not merely physical objects—implements, raw materials, etc.—but are the material repositories of the capital-value advanced by the owners of capital in order to expand its value. This part of the capital is called by Marx "constant capital," since the value of this part of capital is not a source of profit for the capitalists. The value of constant capital is merely preserved by the laborers in the process of production, and passes unchanged into the value of the product. The other part of the capital-value advanced for the purposes of profit-making Marx calls "variable capital," to indicate that it is this part of the capital-value that expands to render an increase of the whole capital. Variable capital is exchanged for labor power, and, as it passes into the hands of the workers, takes the form of wages. But what is really obtained in exchange for variable capital is living labor which creates more value in production than is paid for in the form of wages.

Since the value created in production, on a daily basis, exceeds the daily value of the variable capital which corresponds to wages, there always remains an increment of new value, or unpaid labor value, provided by the laborers to the owners of the means of production. This increment Marx calls "surplus value." The ratio of the surplus value to the variable capital is the rate of surplus value (or rate of exploitation), and the ratio of the surplus value to the whole advanced capital, constant and variable, is the rate of profit.

The tendency of the rate of profit to fall is a consequence of the increase in the value of the constant part of capital, as its mass increases, in relation to the value of the variable part. As Marx indicated, this changing ratio is both consequence and condition of the rising productivity of labor. The increase of constant capital in relation to variable capital, Marx calls the increase in the organic composition of capital.

However, since capital exists as commodities which are use values impregnated with exchange value, the organic composition of capital must be recognized as being the result of changes both in use value and in exchange value. As Marx explained,

"The composition of capital is to be understood in a twofold sense. As value, it is determined by the proportion in which it is divided into constant capital, or the value of the means of production, and variable capital, or the value of labor power, the sum total of wages. As material, as it functions in the process of production, all capital is divided into means of production and living labor power. This latter composition is determined by the relation between the mass of the means of production employed on the one hand, and the mass of labor necessary for their employment on the other. I call the former the value composition, the latter the technical composition, of capital. There is a close correlation between the two. To express this, I call the value composition of capital, in so far as it is determined by its technical composition and mirrors the changes in the latter, the organic composition of capital. Wherever I refer to the composition of capital, without further qualification, its organic composition is always understood." (Marx, 1977, p. 762)

If a manufacturing capitalist hires many laborers, who work with simple tools, most of the advanced capital is in the form of variable capital, and there is only a small constant capital. In this case the rate of profit is high, since all the surplus value produced by these laborers is appropriated by the owner, and the ratio of the appropriated surplus value to the advanced capital is relatively high. If, on the other hand, the capitalist purchases a massive mechanized productive apparatus, and hires only a handful of workers to operate it, most of the capital advanced is non-profit-yielding constant capital, and the variable capital advanced to purchase the labor power is relatively small. In this case, the ratio of the surplus value produced by the few workers to the whole advanced capital is relatively low. Thus, as long as the average organic composition of the total social capital continues to rise, as a result of advancing productivity of labor, the rate of profit should fall.

PRODUCTIVITY AND COMPETITION

Improvements in productive technology which boost the productivity of labor are driven by competition among the various capitalist enterprises within each branch of industry. Competition, in the final analysis, is price competition. As Marx indicated,

"Other things being equal, the capitalist's commodities can only command a more extensive market if their prices are reduced. He will therefore sell them above their individual value but below their social value." (Marx, 1977, p. 434) And further: "No capitalist ever voluntarily introduces a new method of production, no matter how much more productive it may be, and how much it may increase the rate of surplus value, so long as it reduces the rate of profit. Yet every such new method of production cheapens the commodities. Hence, the capitalist sells them originally above their prices of production, or, perhaps, above their value. He pockets the difference between their costs of production and the market prices of the same commodities produced at higher costs of production. He can do this, because the average labor time required socially for the production of these latter commodities is higher than the labor time required for the new methods of production. But competition makes it general and subject to the general law. There follows a fall in the rate of profit-perhaps first in this sphere of production, and eventually it achieves a balance with the rest-which is, therefore, wholly independent of the will of the capitalist." (Marx, 1962, p. 259)

The improvement of technology or the better organization of production that is carried out by the capitalist must reduce the total costs of producing a given quantity of commodities. If a new machine is purchased to replace living labor, the labor value represented in the machine must be less than the labor replaced by the machine. In this way the total labor required to produce the given commodities-both that objectified in the means of production and that expended in the immediate process of production- is lowered. Marx wrote,

"With all application of machinery-let us initially look at the case such as it arises directly, that a capitalist puts a part of his capital into machinery rather than into immediate labor-a part of the capital is taken away from its variable and self-multiplying portion, i.e. that which exchanges for living labor, so as to add it to the constant part, whose value is merely reproduced or maintained in the product. But the purpose of this is to make the remaining portion more productive." (Marx, 1973, p. 819)

Elsewhere Marx noted: "If a machine which cost 100 working days to make replaced only 100 working days, then it would in no way increase the productive power of labor and in no way decrease the cost of the product." (Marx, 1973, p. 765)

Competition enforces the lowering of prices of commodities, which can only be achieved in the long run by lowering their values. Thus mechanization, the replacement of living labor by machinery, must be carried out in such a way that the total labor time socially required to produce a given commodity is less than before. The problem of reducing labor time through better machinery, equipment or organizational methods is a problem of science and its application to production. Although new technology may sometimes be introduced that raises the labor time required for the production of particular commodities, this is only possible as an exception, and cannot generally improve the competitive position of the capitalist who introduces such technology. Such counterproductive innovations will be weeded out and discarded in the course of price-cutting competition.

SUBSTITUTION OF MACHINES FOR LIVING LABOR

However, it may not always be clear why technical innovation, automation or mechanization in the final analysis must necessarily increase the mass of the means of production in relation to living labor, i.e. increase the technical composition of capital. Paul Sweezy, for example, in a 1981 lecture, tries to build a case for the possibility of substantial growth in the productivity of labor without substituting machinery for living labor. He argues: "...Marx's law of the falling tendency of the rate of profit was rooted in the conditions of nineteenth-century capitalism. But it must be added that it loses plausibility when applied to the fully mature capitalism that emerged in the twentieth century.... "The way for capitalists to increase labor productivity (and hence raise their rate of profit) can no longer be assumed generally to be through substituting machinery for living labor. It may equally well be through substituting more productive machines and processes." (Sweezy, 1981, p. 52) To bolster this assertion, he then quotes *Capital*, Vol. I, where Marx states: "A part of the functioning constant capital consists of instruments of labor such as machinery, etc., which are not consumed, and therefore not reproduced or replaced by new ones of the same kind until after long periods of time. ...If the productiveness of labor has, during the using up of these instruments of labor, increased (and it develops continually with the uninterrupted advance of science and technology), cheaper machines, tools, apparatus, etc., replace the old. The old

capital is reproduced in a more productive form, apart from the constant detail improvements in the instruments of labor already in use." (Marx, 1977, p. 753) But Marx's judgment here does not support Sweezy's view that substituting more productive for less productive machines differs from substituting machinery for living labor. These two processes are one and the same. The expression: "more productive machine (or process)" cannot mean anything other than: "substitute machine (or process) for living labor." A more productive machine is one which makes possible the production of more units of physical output per worker-hour, which is the same as saying that it produces the same number of units with less labor time. In other words, the ratio between machinery and living labor increases, or, machinery is substituted for living labor.

And it makes no difference whether this process occurs in the nineteenth, twentieth, or any other century. Machinery is a qualitative leap in the evolution of the instruments of labor, to be sure, but this evolution, in itself, from its earliest days, has always involved the substitution of tools, or systems of tools, or instruments, for living labor. And the process of substituting better, more productive, tools for the ones in use, is quite synonymous with the substitution of tools, equipment, instrumentation, etc., for labor. Marx has pointed out, "The increasing productivity of labor (insofar as it is connected with machinery) is identical with the decreasing number of workers relatively to the number and extent of the machinery employed." In order to illustrate this principle, he continues, saying: "Instead of a simple and cheap instrument a collection of such instruments (even though they are modified) is used, and to that collection has to be added the whole part of the machinery which consists of the moving and transmitting parts; and also the materials used (like coal, etc.) to produce the motive power (such as steam)." (Marx, 1971, p. 365)

Here Marx draws attention to the mechanization of handicraft industry, and not to the further mechanization of machine industry. But the increasing use of improved machinery and more efficient productive methods only perpetuates and deepens the initial mechanization on its own basis, institutionalizing it. Just as the first machine replaces a certain number of workers engaged in handicraft production of the given article, a better machine replaces yet more. Marx maintained: "It is an incontrovertible fact that, as capitalist production develops, the portion of capital invested in machinery and raw materials grows, and the portion laid out in wages declines." (Marx, 1971, p. 364)

COUNTERTENDENCIES TO FALLING PROFIT RATE

The law of the tendency of the rate of profit to decline thus assumes a capitalist system in which competition cannot be annulled, and in which, therefore, improvements in the productivity of labor are enforced by the laws of competition. But many who regard themselves as Marxists, including Sweezy, question or deny the validity of the law of the tendency of the rate of profit to fall, on the grounds that the forces which tend to raise the rate of profit, thus counteracting its fall, might permanently or indefinitely uphold the profit rate. The counteracting influences to the falling profit rate were outlined by Marx in chapter 14 of *Capital*, Vol. III. They include the increasing intensity of exploitation, the cheapening of the elements of constant capital, and others—and more could be added, as Marx indicated. But none of these countertendencies, whether regarded as acting singly or in concert, can permanently obstruct the decline in the rate of profit.

It will be explained below why this conclusion is inescapable, but at this point a secondary issue should be addressed which may be helpful in establishing the framework for this discussion. And that is this: recognizing that the tendency of the rate of profit to decline is not a mechanical process, and acknowledging that its actual operation is hindered by countervailing forces, it is beside the point to attempt to predict how rapidly the rate of profit might fall in any given period of capitalist development. This discussion focuses upon attempting to understand the essential character of capitalist production, and to see the law as part of the internal necessity of its development. Such questions as: whether the profit rate is currently falling, and if so at what rate, or, what has been the actual measured rate of profit for the past 100 years, etc., are questions which should be set aside as not relevant to the problem posed here. These questions are not unimportant, but they fall outside the scope of this theoretical study. If it could be empirically demonstrated that the rate of profit has actually been constantly rising for the past 150 years, this would be absolutely insufficient as a refutation of Marx's law. Recognizing the scientific validity of the law means understanding the logic of capitalist development, but it does not mean proving that the law has already demonstrated its power in any particular historical time span. But if it were true that the rate of profit has risen for 150 years, this would only mean that the

counteracting forces have so far stifled the strength of the falling tendency in the average profit rate. The law states that the profit rate must fall only in the final analysis and in the long run.

There have been several efforts by Marxists to empirically delineate the direction in profit rates for certain historical periods. These efforts are worth pursuing, in spite of the difficulties entailed, because they might provide some evidence of the stage reached in the concrete experience of capitalist development. But whatever the results of such studies, they cannot prove or disprove the law of the tendency of the rate of profit to fall. If the rate of profit has not yet fallen, or its direction is not yet definitely demonstrated, nonetheless it must inevitably fall eventually. It will be shown below why this is so.

"INDETERMINACY" IN THE DIRECTION OF THE PROFIT RATE

As mentioned above, some who criticize Marx's view of the falling rate of profit tend to accept that the tendency exists but believe that its operation is counterbalanced by the opposing forces in such a way that the ultimate direction of the profit rate is indeterminable. An example of this approach is in *Rereading Capital*, by Ben Fine and Laurence Harris. The authors state: "When Marx refers to an economic law he explicitly means a tendency. He makes this clear in the very title of Vol. III, Chapter 13, and the first paragraph of Chapter 14; and elsewhere (for example *Capital*, Vol. III, p. 175) he states that it is the meaning of all economic laws. But the meaning of a tendency is understood differently by different writers. One meaning in the present context is that if one collects data on the rate of profit over a definite period of history one will observe a definite downward trend (or regression line). We shall call this an 'empirical tendency.' A second meaning is that if one abstracts from the counteracting influences one identifies an 'underlying' direction of movement of the rate of profit. This interprets a tendency as a proposition developed at a certain level of abstraction which by itself yields no general prediction about actual movements in the rate of profit. Actual movements depend on a complicated relationship between the tendency and the counteracting influences which have been abstracted from-their particular balance at particular times. We shall call this an 'abstract tendency.' The latter is Marx's concept of the law of the TRPF. The observable effect of the law cannot be a simple tendency for the actual rate of profit (in value or price terms) to fall. ... In short, the law of the TRPF is an abstract and not an empirical tendency." (Fine and Harris, p. 64)

In this passage Fine and Harris introduce a scientifically impermissible gap between the abstract and the empirical. If the effects of the law can never be empirically observed or verified, it is not merely "abstract," it is non-existent. Abstraction is merely a process of stripping away the surface manifestations of the dynamics of a process in order to recognize and define the inner law. The inner law is the ultimate cause of fundamental changes in the movement of the system. When any form of motion is defined in this way, as a law, the observable phenomena which follow upon the action of this law will serve as a test to determine whether the law itself is real or illusory. In other words, the rate of profit must fall in life, or the theory is incorrect. Of course, this does not mean that it must fall continuously. The operation of the law is erratic, but in the long run it is unidirectional and irreversible. Fine and Harris are familiar with this argument, which is to be expected, and this is how they respond to it: "But if Marx was not predicting an empirical tendency, if the rate of profit in value or price terms may go up, down, or neither over any particular time period, why say that its movements are subject to a law? At one level we have given an answer-the law refers to an abstract tendency not an empirical tendency. The substantive problem posed by Hodgson (1977), for example, is what is the significance of a law if it does not offer simple predictions of an empirical trend? The point which the question fails to grasp is that an abstract tendency does have a connection with observable phenomena even though it does not involve simple predictions of trends. The TRPF and tendency for counteracting influences to operate actually exist in capitalism in contradictory relationship with each other. ...Indeed particular movements in the actual observable rate of profit are associated with these cycles. At times the rate of profit will actually fall, at others it will actually rise. ...The point is simply that these definite movements in observable phenomena are the complex ultimate result of contradictions between abstract tendencies; they are not the simple empirical tendency of falls in the rate of profit which only writers such as Hodgson would endow with the title 'law'." (Fine and Harris, p. 71) Here the writers correctly point to the link between law and observable phenomena, but now they have changed the name of the law from "the law of the tendency of the rate of profit to fall" to "the law of the tendency of the rate of profit to rise, fall, or go whichever way it pleases." This is not at all what Marx had in mind. Fine and Harris conclude that the actual

direction in the rate of profit is indeterminate, since, in their view, the strength of the rising organic composition of capital is counteracted by an equally strong array of opposing influences. This is basically the same position taken by Paul Sweezy in his book, *The Theory of Capitalist Development*, in which the argument is advanced much more directly than in Fine's and Harris's book.

MARX'S THEORY AND ITS MODE OF PRESENTATION

In his book Sweezy's first criticism of Marx (on the falling profit rate) seems not to deal with the substance of the theory, but with the manner in which Marx chose to present his case in the 13th Chapter of *Capital*, Vol. III. Here Sweezy begins to confuse the economic theory with the method of exposition of the theory. He argues: "We have also seen that the tendency of the rate of profit to fall is deduced by Marx on the assumption that the organic composition of capital rises while the rate of surplus value remains constant. There seems to be no doubt about the propriety of assuming a rising organic composition of capital. Is it justifiable, however, to assume at the same time a constant rate of surplus value?" (Sweezy, 1942, p. 100) At the beginning of Chap. 13, *Capital*, Vol. III, Marx illustrates the falling tendency of the rate of profit with a table showing that the rate of profit falls to the same degree that the value composition of capital rises. For the purposes of simplification, Marx assumes a constant working day, a constant number of workers, and a constant rate of surplus value. He is here only interested in introducing his readers to the most essential form of the relationship between the value composition of capital and the profit rate, stripped of all modifying and counteracting factors. Yet Sweezy does not believe it is scientifically legitimate for Marx to isolate a particular relation in this way, holding in abeyance the action of other forces. He maintains, "In the first place, our whole analysis up to this point leads us to expect a rising rate of surplus value. ...The assumption of a constant rate of surplus value with rising labor productivity appears to neglect this effect. ...It seems hardly wise to treat an integral part of the process of rising productivity separately and as an offsetting factor; a better procedure is to recognize from the outset that rising productivity tends to bring with it a higher rate of surplus value. Furthermore, this is what Marx usually does." (Sweezy, 1942, p. 101) The key word in this passage is "recognize." Marx of course "recognized" the effect of rising productivity on the rate of surplus value. As labor becomes more productive, the value of the workers' means of subsistence falls. Assuming a constant real wage under these conditions, and a constant working day, the rate of surplus value rises. Yet for the purposes of the exposition in Chap. 13, Marx neglects the rising rate of surplus value. Thus it is not a question of what Marx did or did not "recognize," but rather a question of making the necessary distinction between Marx's theory, on the one hand, and his method of abstracting and isolating certain features for exposition, on the other. And this method, by the way, is not peculiar to Marx, but is typical in scientific inquiry. It should be noted, however, that in a footnote to a 1981 lecture, Sweezy maintained, "in expounding the 'theory of the law,' Marx assumed a constant rate of surplus value and a rising organic composition. But this was no more than a device for simplifying the presentation of the logic of the argument." (Sweezy, 1981, p. 50) But Sweezy's main complaint is not against Marx's method of explaining his theory. If it were merely a matter of an explanatory device, Sweezy probably would not have raised an objection at all. As it turns out, the confused wrangling over Marx's procedure of exposition is merely a preliminary skirmish leading to a disagreement with Marx over the substance of the question. As Sweezy proceeds, he shifts into a deeper criticism: "It would appear, therefore, that Marx was hardly justified, even in terms of his own theoretical system, in assuming a constant rate of surplus value simultaneously with a rising organic composition of capital. A rise in the organic composition of capital must mean an increase in labor productivity, and we have Marx's own word for it that higher productivity is invariably accompanied by a higher rate of surplus value. ...If both the organic composition of capital and the rate of surplus value are assumed variable, as we think they should be, then the direction in which the rate of profit will change becomes indeterminate. All we can say is that the rate of profit will fall if the percentage increase in the rate of surplus value is less than the percentage decrease in the proportion of variable to total capital." (Sweezy, 1942, p. 102) This last sentence is correct if a limited time period is assumed. The rate of surplus value, among other things, may change in such a way as to cause the rate of profit to rise for a certain time. But the point of Marx's law is to show why the rate of profit must fall in the long run. And this is a conclusion Sweezy avoids.

ONCE AGAIN, "INDETERMINACY"

But it now becomes clear why Sweezy began his argument by saying that Marx ought to have showed the falling profit rate countered by a rising surplus value rate in his initial presentation in Chapter 13. Sweezy believed that if Marx had presented it that way he could not have shown a declining rate of profit, but rather a rate of profit that could go either way depending on which tendency was stronger. It was Marx's view that, in the long run, the rising organic composition of capital would overcome all obstacles, and that, in fact, the tendency of the rate of profit to fall would express itself as a palpable historical fact. In other words, in the long run, the falling tendency in the rate of profit is stronger than any force, or combination of forces, which obstructs it. But Sweezy denies this. He maintains: "If these arguments are sound, it follows that there is no general presumption that changes in the organic composition of capital will be relatively so much greater than changes in the rate of surplus value that the former will dominate movements in the rate of profit. On the contrary, it would seem that we must regard the two variables as of roughly coordinate importance. For this reason Marx's formulation of the law of the falling tendency of the rate of profit is not very convincing." (Sweezy, 1942, p. 104) But what arguments does Sweezy advance to prove his case? Only that: "The general impression of the rapidity of growth of the organic composition of capital seems to be considerably exaggerated." (p. 103) And, "all that can ever be observed is the net change in the organic composition which is the resultant of both forces." (p. 104) But Sweezy provides no discussion of why the two "variables" should be considered as of "roughly coordinate importance." But precisely here is the nub of the question. If it is believed that, in the long run, the rate of profit might just as easily rise as fall, or that it will tend to perpetually oscillate around some average value, pushed up as much as it is pushed down, then the capitalist mode of production takes on the character of a permanent, ongoing system, one that possesses an internal harmony resulting from the balance of its own conflicting forces. But the reality is just the opposite: the capitalist mode of production is driven deeper and deeper into irresolvable crisis precisely because of the inner logic of its own evolution. The law of the tendency of the rate of profit is Marx's explanation of this logic, of why capitalism is a system that generates the forces that destroy it.

THE "RISING WAGES" ARGUMENT

Although the logic of Sweezy's argument points toward a capitalist mode of production that generates the forces that guarantee its own indefinite perpetuation, he does not overtly draw that conclusion. In his further comments he expresses the view that the rate of profit will in fact tend to decline, but not for the reason advanced by Marx. Instead he finds a different cause, supposedly derived from Marx, but in fact this is a misinterpretation of Marx's theory. Sweezy claims: "It was explained in the last chapter how the accumulation of capital, taken by itself, operates to increase the demand for labor power and hence to raise wages. Other things remaining equal, such a rise in wages leads to a reduction in the rate of surplus value, and this, in turn, expresses itself in a fall in the rate of profit. Since, as Marx again and again insists, 'the capitalist process of production is essentially a process of accumulation,' it follows that from this fact alone there arises a persistent tendency for the rate of profit to fall." (Sweezy, 1942, p. 105) Thus profit falls because wages rise. But Marx's view of the long-term effect of capitalist accumulation on the rate of wages was exactly the opposite. Marx argued, "That is to say, the mechanism of capitalist production takes care that the absolute increase of capital is not accompanied by a corresponding rise in the general demand for labor." (Marx, 1977, p. 793) And further: "...the higher the productivity of labor, the greater is the pressure of the workers on the means of employment, the more precarious therefore becomes the condition for their existence, namely the sale of their own labor power for the increase of alien wealth, or in other words, the self-valorization of capital." (Marx, 1977, p. 798) It is well-known that Marx spoke of the general result of the process of capitalist accumulation as "accumulation of wealth at one pole ... accumulation of misery, the torment of labor, slavery, ignorance, brutalization and moral degeneration at the opposite pole..." (Marx, 1977, p. 799) This does not suggest a rising tendency in the rate of wages. (In Sweezy's discussion of Marx's views on accumulation, he manages to avoid mentioning this conclusion so as to project his theory of rising wages without appearing to contradict Marx.) And in Chapter 14 of *Capital*, Vol. III, which analyzes the counteracting influences to the tendency of the rate of profit to fall, Marx asserts that, "... (the) depression of wages below the value of labor power" is "one of the most important factors checking the tendency of the rate of profit to fall." (Marx, 1962, p. 230) And further: "The tendency of the rate of profit to fall is bound up with a tendency of the rate of surplus value to

rise, hence with a tendency for the rate of labor exploitation to rise. Nothing is more absurd, for this reason, than to explain the fall in the rate of profit by a rise in the rate of wages, although this may be the case by way of an exception." (Marx, 1962, p. 234)

THE RISING RATE OF SURPLUS VALUE

It was Marx's view that the rise in the rate of surplus value brought about by increasing productivity of labor could not, in the long run, effectively compensate for the falling rate of profit caused by the growth of the constant part of capital at the expense of the variable part. As he explained, "Moreover, it has already been demonstrated—and this constitutes the real secret of the tendency of the rate of profit to fall—that the manipulations to produce relative surplus value amount, on the whole, to transforming as much as possible of a certain quantity of labor into surplus value, on the one hand, and employing as little labor as possible in proportion to the invested capital, on the other, so that the same reasons which permit raising the intensity of exploitation rule out exploiting the same quantity of labor as before by the same capital. "...It might be asked whether the factors that check the fall of the rate of profit, but that always hasten its fall in the last analysis, whether these include the temporary, but always recurring, elevations in surplus value above the general level, which keep occurring now in this and now in that line of production redounding to the benefit of those individual capitalists, who make use of inventions, etc., before these are introduced elsewhere. This question must be answered in the affirmative." (Marx, 1962, p. 228) The point is that increasing the rate of surplus value—and thereby the amount of surplus value in relation to the advanced capital—can only be achieved by methods which also increase the mass and value of the constant capital employed in relation to the number of workers engaged in the production process. This is the point that Sweezy has missed in his treatment of the issue. Relative surplus value is increased through improvements in the means of production which reduce the necessary labor time required for the production of the workers' means of subsistence. At a constant real wage, the value of these articles of consumption declines as they are produced with less and less labor. The portion of the working day required to replace the value of labor power declines in relation to the portion rendering surplus value. The rate of surplus value climbs in this way, and—all else equal—the profit rate as well. But how can the workers' means of consumption be cheapened other than by productivity increases which can only be brought about by an increase of constant capital in relation to variable capital? The organic composition must increase. And it is this unavoidable growth in organic composition of capital that ultimately sinks the rate of profit, no matter how high the rate of surplus value may climb. Marx argued as follows: "Hence every single commodity contains a smaller sum of labor materialized in means of production and of labor newly added during production. This causes the price of the individual commodity to fall. But the mass of profits contained in the individual commodities may nevertheless increase if the rate of the absolute or relative surplus value grows. The commodity contains less newly added labor, but its unpaid portion grows in relation to its paid portion. However, this is the case only within certain limits. With the absolute amount of living labor newly incorporated in individual commodities decreasing enormously as production develops, the absolute mass of unpaid labor contained in them will likewise decrease, however much it may have grown as compared to the paid portion." (Marx, 1962, p. 221) Suppose, for example, that the value composition of the product were $99c + 0.5v + 0.5s$. In this case, even if v were reduced to zero, the rate of profit could be no more than 1%. Now suppose the product value composition were to advance to $99.9c + 0.01v + 0.09s$. The rate of profit could not exceed 0.1%, even if v were eliminated entirely. If newly added labor is reduced to one-one thousandth of the commodity value, then it matters little how this tiny amount is divided between variable capital and surplus value. If a wage is paid at all, reducing it to nothing cannot raise the rate of profit to any noticeable extent. The adoption of an extreme example here is only intended to illustrate the point that the more advanced the organic composition of capital, the less effect a rising rate of surplus value can have in overcoming the dwindling profit rate. The reason for the shrinking ratio of newly-added labor to previously-objectified labor in the means of production is that with the advancing productivity of labor, fewer laborers are hired for every 100 of capital advanced. With fewer laborers working, the product's value becomes increasingly composed of value reflecting the contribution of constant capital, for which the capitalist has paid an equivalent in money. But Sweezy has an answer for this. He states: "Some Marxists have attempted to solve the problem by a kind of pseudomathematical reasoning. From a purely mathematical standpoint, the argument goes, there is no limit to the increase in the organic composition. If the ratio of constant to variable capital starts at one-to-one, it can obviously rise to two-to-one, ten-to-one, or whatever

your imagination fancies. On the other hand there is a limit to the increase in the rate of surplus value: necessary labor can never be reduced to zero, since that would mean that workers would starve to death. From this the conclusion is drawn that the organic composition can rise indefinitely while the increase in the rate of surplus value runs into an impenetrable barrier. QED. "The argument is silly, even from a mathematical standpoint. The amount of necessary labor can tend toward zero without ever reaching it (total automation with only one worker needed to set the apparatus in motion and watch over its functioning, all others living on unemployment insurance paid out of surplus value), which would mean that both the rate of surplus value and the organic composition (ratio of constant to variable capital) would tend toward infinity." (Sweezy, 1981) Here Sweezy imagines an extreme scenario which distracts attention from the particular evolution of the ratio between the rate of surplus value and the organic composition of capital. The problem is not what might result in some far-off time, but what is the mathematical relationship as it develops from the very start, and continues throughout the lifespan of capital. And further, it makes no difference, as far as the mathematical argument is concerned, whether wages are conceived as very small, or zero. At the extreme end of the process of increasing surplus value, wages approach insignificance, infinitesimality, relative meaninglessness, as far as the rate of profit is concerned.

SURPLUS VALUE AND PRODUCTIVITY

Marx discussed the increasing futility of raising the rate of surplus value as a means to stave off the falling rate of profit: "The extent to which the productive force of labor increases the value of capital (i.e. increases the rate of surplus value) thus depends on the original relation between the portion of labor objectified in the worker and his living labor. This portion is always expressed as a fractional part of the whole working day, 1/3, 2/3, etc. The increase in productive force, i.e., its multiplication by a given amount, is equal to a division of the numerator or the multiplication of the denominator of this fraction by the same amount. Thus the largeness or smallness of the increase of value depends not only on the number which expresses the multiplication of the productive force, but equally on the previously given relation which makes up the part of the work day belonging to the price of labor." (Marx, 1973, p. 337) Here Marx is discussing the increase in relative surplus value gained by the capitalist due to the cheapening of the means of subsistence through the increasing productivity of labor. The lower the rate of surplus value, the greater effect will a given change in productivity have in increasing this rate. The multiplier of the productive force is the divisor of the fraction of the working day equivalent to variable capital, or wages. Suppose, for example, a rate of surplus value of 25 %, a low rate. This is expressed as $20s / 80v$. If the working day contains ten hours, 2 hours are surplus and eight hours are necessary. Thus the fraction of the working day representing variable capital = $8/10$. Suppose productivity doubles. The multiplier of the productive force is two. Divide $8/10$ by 2 and get $4/10$. This is the new fraction representing variable capital's portion of the work day. The variable capital is now 4 hours out of ten hours, and the rate of surplus value has gone to $60s / 40v = 150\%$. A big change from 25 %. But now suppose the rate of surplus value = 400 %, or $80s / 20v$. Here the variable fraction = $2/10$, and if productivity is doubled, $2/10$ divided by 2 = $1/10$. The variable portion is now one hour out of ten, and the new rate of surplus value is 900%. In both cases productivity doubles. In the first case, the rate of surplus value increased from 25 % to 150 %, a six-fold jump. In the second case, because of surplus value's already large take from the day's labor, the same doubling of productivity caused an increase in the rate of surplus value from 400 % to 900 %, an increase of a little more than double. If this series is extended further it will be seen that as the rate of surplus value climbs, each new doubling of productivity has less and less effect on the rate of surplus value. And this means that the method of using the increasing rate of surplus value as a means of offsetting the falling rate of profit becomes increasingly ineffective. Marx went through this series in the Grundrisse, and concludes by saying, "Thus the more developed capital already is, the more surplus labor it has created, the more terribly must it develop the productive force in order to realize itself in only smaller proportion, i.e. to add surplus value—because its barrier always remains the relation between the fractional part of the day which expresses necessary labor, and the entire working day. It can only move within these boundaries. The smaller already the fractional part falling to necessary labor, the greater the surplus labor, the less can any increase in productive force perceptibly diminish necessary labor; since the denominator has grown enormously. The self-realization of capital becomes more difficult to the extent that it has already been realized." (Marx, 1973, p. 340) When Sweezy says that, "necessary labor can never be reduced to zero since that would mean workers would starve to death," he misses the point

entirely. The barrier is the working day itself, and its division into its variable and surplus fractions. Marx explained, "Inasmuch as the development of the productive forces reduces the paid portion of employed labor, it raises the surplus value, because it raises its rate, but inasmuch as it reduces the total mass of labor employed by a given capital, it reduces the factor of the number by which the rate of surplus value is multiplied to obtain its mass. Two laborers, each working 12 hours daily, cannot produce the same mass of surplus value as 24 who work only 2 hours, even if they could live on air and hence did not have to work for themselves at all. In this respect then, the compensation of the reduced number of laborers by intensifying the degree of exploitation has certain insurmountable limits. It may, for this reason, well check the fall in the rate of profit, but cannot prevent it altogether." (Marx, 1962, p. 242) Further, Sweezy fails to examine the specific character of the interdependent relation between surplus value and the organic composition of capital. It will be recalled that he went over this relation and concluded that: "We must regard the two variables as of roughly coordinate importance." (Sweezy, 1942, p. 104) He seemed to regard the two "variables" as originating independently, or at least interacting as if they were independent forces. And here he overlooked Marx's explanation of how these two trends are specifically interdependent. Marx pointed out: "But since the same influences which raise the rate of surplus value (even a lengthening of the working time is a result of large-scale industry) tend to decrease the labor power employed by a certain capital, it follows that they also tend to reduce the rate of profit and to retard this reduction." (Marx, 1962, p. 229) The rate of surplus value-in its relative form-is increased by reducing the necessary labor time required for producing the workers' means of sustenance. This effect is brought about by improvements in labor productivity in those sectors which produce goods designed for workers' consumption. Also, improvements in productive technology in sectors which produce the means of production reduce the value of the commodities purchased by workers because the equipment and raw materials which go into the production of these commodities are themselves reduced in value. As the value of grain falls, so does the value of bread, even when bakery technology remains unchanged. Thus, in order to raise the relative rate of surplus value, capitalists must advance the productivity of labor, increase the ratio of machines to workers, heighten the organic composition of capital, and thereby build up the prerequisites for a long-term, secular fall in the rate of profit. This is true, even though the immediate effect of raising the rate of surplus value is to increase the ratio of profit to advanced capital. This is the most critical aspect of Marx's theory. As he put it: "We have thus seen in a general way that the same influences which produce a tendency in the general rate of profit to fall, also call forth countereffects, which hamper, retard, and partly paralyze this fall." (Marx, 1962, p. 233) So it is not true that the organic composition of capital and the surplus value rate are independent variables, either one of which might overpower the other.

CHEAPENING OF CONSTANT CAPITAL

Sweezy's thinking on the question of the cheapening of constant capital is parallel to his approach to the question of the rising rate of surplus value. Marx had argued that the cheapening of the elements of constant capital (tools, machinery, raw materials and auxiliary materials) was one of the influences which counteracted the tendency of the rate of profit to fall. As each worker operates more and productive equipment, processes raw materials more rapidly, etc., the ratio between the means of production and living labor increases. Yet this machinery and these raw materials, though they increase in mass in relation to the employed workforce, decline in value as they themselves are produced with less and less labor time. Marx maintained, "In short, the same development which increases the mass of the constant capital in relation to the variable reduces the value of its elements as a result of the increased productivity of labor, and therefore prevents the value of constant capital, although it continually increases, from increasing at the same rate as its material volume, i.e., the material volume of the means of production set in motion by the same amount of labor power." (Marx, 1962, p. 231) As a result of advancing productivity, the value composition of capital increases more slowly than its technical composition. This raises the question: can the means of production decline in value so fast that, even while the technical composition of capital increases, its value composition declines in the long run? Sweezy's comments on this issue only serve to create confusion. He states: "It might seem that it would be preferable to look first at what might be called the 'original' increase in the organic composition, to observe the effects of this on the rate of profit, and only then to take account of the cheapening of the elements of constant capital which is itself due to the rise in productivity associated with the 'original' increase. It might be held that if this were done, the rate of increase of the organic composition would appear much larger and that this fact is prevented from showing

in the statistics only by one of the 'counter-acting causes'." (Sweezy, 1942, p. 103) By using the word "original" here, Sweezy apparently means that the means of production are to be regarded as first increasing at the old values of the elements of constant capital, then later corrected for the decline in their values resulting from higher productivity. He then continues: "It is doubtful, however, whether any useful purpose can be served by such an attempt to preserve Marx's implied distinction between the primary rise in the organic composition and the counteracting (but smaller) fall due to the cheapening of the elements of constant capital. All that can ever be observed is the net change in the organic composition which is the resultant of both forces." (Sweezy, 1942 p. 104) Here Sweezy manages to avoid saying anything that would shed light on the issue, and merely raises an objection against a particular mode of framing the problem. However, by concluding that all that can be "observed" is the "net change," he shifts away from an attempt to explain why the cheapening of the elements of constant capital can only retard, but cannot reverse, the tendency of the rate of profit to decline. And he gives the impression that the direction of change in the rate of profit may be indeterminable in the long run. While he does not state that the cheapening of constant capital might block the rise in the organic composition of capital, he leaves open the possibility. Yet Marx made it clear that the cheapening of the elements of constant capital, just as the rise in the rate of surplus value, could neither reverse nor permanently obstruct the rise in organic composition and the fall in the rate of profit. As he pointed out, "As a result of this increasing productivity of labor, however, a part of the existing constant capital is continuously depreciated in value, for its value depends not on the labor time that it cost originally, but on the labor time with which it can be reproduced, and this is continuously diminishing as the productivity of labor grows. Although, therefore, the value of the constant capital does not increase in proportion to its amount, it increases nevertheless, because its amount increases even more rapidly than its value falls." (Marx, 1968, p. 416) But Marx doesn't explain here why the value of the constant capital must grow, even if more slowly than its mass grows. This must be understood in order to clarify why the organic composition of capital must rise in the final analysis, and that the cheapening of the elements of constant capital can only retard, but cannot reverse, this trend. On one occasion Marx posed the question this way: "One may ask with regard to raw material: if, for example, productivity in spinning increases tenfold, that is, a single worker spins as much as ten did previously, why should not one Negro produce ten times as much cotton as ten did previously, that is, why should the value ratio not remain the same? The spinner uses ten times as much cotton in the same time, but the Negro produces ten times as much cotton in the same time. The ten times larger amount of cotton therefore costs no more than a tenth of this amount cost previously. This means that despite the increase in the amount of the raw material, its value ratio to variable capital remains the same. In fact it was only the large fall in the price of cotton which enabled the cotton industry to develop in the way it did. "...To this it is quite easy to answer that some kinds of raw materials, such as wool, silk, leather, are produced by animal organic processes, while cotton, linen, etc., are produced by vegetable organic processes and capitalist production has not yet succeeded, and never will succeed, in mastering these processes in the same way as it has mastered purely mechanical or inorganic chemical processes." (Marx, 1971, p. 368) Here Marx points to the inherent difficulties involved in attempting to gain control over biological systems which have their own laws. One cannot produce ears of corn or bolls of cotton on demand. One must wait for the harvest. But the implication here is that if these biological obstacles could be overcome, then it might be possible to advance productivity in agricultural labor to the same extent as in the factory processing of these agricultural raw materials. In the example chosen Marx maintains one cannot advance productivity in cotton production as much as can be done in spinning cotton into yarn. But if it could be done, then the cheapening of the raw material (cotton) would offset the advancing technical composition of capital in the spinning industry, and the value composition of capital in that industry would not change. The spinners would be putting out ten times as much cotton as previously, but the value of that amount would be no higher than the former output of one tenth the size. And this, of course, depends both on the advance in spinning and on the disputed advance in cotton growing. But if, as Marx indicates, it is impossible to speed up organic processes to the same extent as mechanical or chemical industrial processes, then the growth in productivity in agriculture (including animal husbandry) cannot keep pace with the growth in manufacturing and processing of raw materials. This is one factor that tends to retard the cheapening of constant capital. While the elements of constant capital are progressively devalued with advancing productivity, there is this brake on the devaluation process: biology. Thus the value composition of capital grows in, e.g., cotton spinning, but not as fast as its technical composition grows.

However, if we leave to one side the issue of the productivity of labor in organic raw material production, and focus on other elements of constant capital (raw materials and auxiliary materials of inorganic origin, tools, machines, containers, buildings, etc.), the question is still posed: is it not possible for these elements to be cheapened fast enough by advances in the efficiency of the labor that produces them, so that, for the total capital of society, the organic composition of capital cannot advance? In other words, can the falling tendency in the profit rate be counteracted permanently by the cheapening of constant capital? Marx argued that, "Despite the cheapening of individual elements, the price of the whole aggregate increases enormously and the increase in productivity consists in the continuous expansion of the machinery." Marx, 1971, p. 366) In this discussion in *Theories of Surplus Value*, Vol. III, Marx mentions the increasing speed of machinery, its greater durability and its more efficient applications as factors which intensify the concentration of more and more capital in the form of machinery as compared with living labor. And as this process advances, each worker transforms greater and greater quantities of raw materials into semi-finished or finished products. As far as material is concerned, a growing fraction of the mass of the finished product is attributable to the machinery and raw material, and a dwindling fraction to the useful effect of the living labor immediately employed in the production process. The value of the means of production, passed on to the value of the product grows also, but not as fast as the mass of its material, due to the constant cheapening of the elements of constant capital. In this analysis, it must be emphasized that the gains that are achieved in reducing the labor value of the elements of constant capital can only be brought about by increasing the technical composition of capital in those branches of industry which produce these machines, tools, mineral ores, locomotives, etc. In other words, living labor shrinks while fixed capital equipment grows in mining, agriculture, raw material processing, as well as in the manufacture of machinery, hardware, trucks, etc. Thus the process of the cheapening of constant capital can only be advanced by the method of increasing the ratio of means of production to the employed workforce. And this feeds the growth of the organic composition of capital of the total social capital. This is why the value of the means of production cannot fall fast enough to stave off the long-term tendency of the rate of profit to fall. Every innovation in the production of the means of production increases the ratio of previously-objectified labor to living labor. While these innovations reduce the value of these tools, materials, etc., in relation to their physical mass, such innovations are only possible if the methods by which these tools, etc., are produced further intensify the accumulation of the mass and value of the industrial equipment operated by each worker. Thus the increase in the organic composition of capital, and the consequent fall in the rate of profit is assured in the long run.

CENTRAL CONTRADICTION OF CAPITALISM

The central contradiction of the capitalist mode of production can be expressed as the conflict between the increasingly social and universal character of the development of the forces of production, and the limits imposed on this development by the private ownership of the means and conditions of production. The mechanism that drives capitalist production is profit. The rate of profit expresses the degree to which the capitalists are successful in exploiting the laborers (rate of surplus value), as well as how much of their capital they can use to hire workers to exploit. As time goes on, and as a result of the inexorable logic of their own competition, they are forced to lay out an ever larger fraction of the capital available to them to purchase means of production, and thus face growing limitations on their ability to exploit wider layers of working people. This barrier combines with the intensifying downward pressure on wages, shrinking the mass market for consumer goods, and producing a crisis of shrinking possibilities for capital accumulation. The capitalists attempt to increase the intensity of exploitation of the workers under their domination, and they may succeed to a certain extent, depending on the workers' capacity to resist. But this resistance tends to increase in the long run as the workers sense the weakness of their exploiters. But no intensification of exploitation can reverse the growing organic composition of capital. The law of the tendency of the rate of profit to fall is the most general quantitative expression of the growing antagonism between the dynamic development of the forces of production under capital, and the degree of success achieved by the capitalists in utilizing that development for their private gain. The declining rate of profit is a measure of the growing irrelevance of private ownership to the further development of the productive forces. Throughout this essay it has been the objective of this writer to demonstrate Marx's superiority over his critics, in this case Paul Sweezy. Too many modern writers stand much closer to Sweezy than to Marx in their approaches to this and other debated issues in economic theory. Marx remains unsurpassed to

this day, as a scientist, as a revolutionist, as a human being to be studied and emulated. Those of us who are drawn to him, in most cases, I believe, wish not so much to know all the right answers to the theoretical questions posed by the evolution of human society, and the capitalist mode of production in particular, but to be able to absorb and incorporate Marx's revolutionary outlook and methodology into our own lives. And the more we succeed in this latter goal, the more we will be able come up with the right answers as well.

Questions and comments on this essay welcome. Send email to jamiller@igc.apc.org

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