Paul Mattick. 1934

The Permanent Crisis -

Henryk Grossman's Interpretation of Marx's Theory Of Capitalist Accumulation

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I.

According to Marx, the development of the productive forces of society is the motive power of historical development. In acquiring new productive forces men change their mode of production, and in changing their mode of production, their manner of gaining a living, they change all their social relations. The transformation of the spinning wheel, the hand-loom and blacksmiths sledge, into the self-tending mule, the power-loom and the steam hammer was not only accompanied by a change of the small individual shops of the craftsmen into huge industrial plants employing thousands of workers, but there also came with it the social overturn from feudalism to capitalism; that is, not merely a material revolution, but a cultural revolution as well.

Capitalism as an economic system had the historical mission of developing the productive forces of society to a much greater extent than was possible under any previous system. The motive force in the development of the productive forces in capitalism is the race for profit. But for that very reason this process of development can continue only as long as it is profitable. From this point of view capital becomes a barrier to the continuous development of the productive forces as soon as that development comes into conflict with the necessity for profit. "Then the monopoly of capital becomes a fetter upon the mode of production which has sprung up and flourished along with, and under it. Centralisation of the means of production and socialization of labor at last reach a point where they become incompatible with their capitalist integument".

Marx always considers the economic laws of motion from two points of view: first, as "a process of natural history"; second, in its specific, social form. The development of productive forces went on in every social system, a process consisting of an ever increasing productivity of labor due to better working tools and methods. The productive process

under capitalism, in addition to producing the necessities of life, also produces value and surplus value, and it is only due to this fact that capitalism has been able to accelerate the development of the productive forces so tremendously. They are not only machines, raw-material and labor power, but also capital. The development of the instruments of production means the expanding of production and reproduction of capital, and this is only possible when surplus value or profit is the result of the productive process of capital. By analysis of the process of producing surplus value, Marx finds the tendency of a conflict between the material productive forces and their capitalist integument. When insufficient surplus value results from production, if capital cannot be "utilised", there is no possibility of continuing the development of the productive forces. The capitalistic forms must burst as under to make place for a higher, more advanced, economic and social system.

In the capitalist system wage labor is necessary for the production of surplus value. In buying labor power, the capitalist acquires the right to use it for his own benefit. By his labor, the worker is able to produce a greater value than he consumes, ie – he produces more value than the capitalist pays him in the form of wages. Since the capitalist buys labor-power at its exchange value, and has full control of its use value, the result is the creation of surplus value out of which he takes a part for additional capital, for accumulation, pays interest to the banker and rent to the landlord, allows the merchant his commercial profit, and retains the rest for his own consumption.

All commodities have in common the quality of being products of labor; they are measured and exchanged in proportion to the socially necessary labor time incorporated in them; this includes also the commodity labor-power. The development of the productive forces means increased productivity of labor, and increased productivity means less labor incorporated in each commodity, or less value, and consequently less surplus value. This decrease in the value of one single commodity can only be compensated by the increase of the quantities of commodities produced, which means an increase in the exploitation of labor. This is done by two main methods: by lengthening the working day ("absolute surplus value"), or by shortening the labor time necessary for reproducing the wages of the workers ("relative surplus value"). If the lengthening of the working day is impossible, then there only remains the shortening of the necessary labor time which can only be done by decreasing the value of labor-power. The decrease in the value of commodities is the only means of reducing the value of labor power, but this in its turn can only be the result of increased productivity. This process is, at the same time, an accelerator forcing technical development at an ever increasing tempo towards mass production and gigantic and costly machinery, concentrated in huge industrial plants, eliminating individual and small capitalists in favor of big capitalists and corporations.

Since wage labor is the source of his profit, the capitalist should be interested in exploiting as many workers as possible. The more workers, the more surplus labor and

value, the more profit. But it is nevertheless a fact that from the very beginning of the capitalist epoch, the number of workers employed relative to the capital employed, has been falling. Even if their number has absolutely increased for a period, they have increased more slowly than capital has accumulated. Today the number of workers employed has fallen, not only relatively, but absolutely. (Since 1918, the number of those employed in American industry has continuously decreased though production increased until 1929.) Increased productivity coupled with the process of concentration of capital thus results in a constantly growing mass of commodities produced by fewer and fewer workers - increased production, in increased unemployment. This fact, in the face of the capitalists' urgent need for more extensive exploitation, indicates the limits of capitalist production. The more exploitation is intensified, the faster these limits are reached. "The same circumstances which have increased the productive power of labor, augmented the mass of produced commodities, expanded the markets, accelerated the accumulation of capital, both as concerns its mass and value, and lowered the rate of profit, these same circumstances have also created a relative over-population and continue to create it all the time, an over-population of laborers who are not employed by the surplus capital on account of the low degree of exploitation at which they might be employed, or at least on account of the low rate of profit which they would yield with the given rate of exploitation."

The law of value is, according to Marx, the regulator of the production of commodities and determines in what proportion the work of society is distributed, but this only holds good for society as a whole, not for individual capitalist units. In reality, the law of value is only enforced through the competition of individual enterprises; actual exchange of commodities does not take place according to value, but according to price of production. If one capitalist sells above value, another capitalist sells below. Competition, which results in the establishment of the average rate of profit, also established the law of value as the final and general law which underlies the sum total of individual transactions at the prices of production.

Without this, the rate of profit would differ from one branch of production to another according to the rate of surplus value, period of capital turnover, and the organic composition of capital. The greater the rate of surplus value, the higher the rate of profit. (The rate of surplus value or exploitation is the surplus value divided by the capital invested in wages – the variable capital. The rate of profit is the surplus value divided by the total capital including constant capital:- means of production, and variable capital.) The quicker the turnover of capital – ie the quicker the capitalist gets his capital outlay plus surplus value back – the higher the rate of profit, and vice-versa. The ratio between the means of production and labor power, expressed in value form as constant and variable capital, we call the organic composition of capital. The higher the organic composition, the lower the rate of profit.

As not only the rate of profit for individual capitals, but also the average rate of profit continuously sinks on account of the rise in the organic composition of capital, small capitals would be destroyed if they were unable to increase their capital sufficiently. The existence of the capitalist depends on a continuous increase of his capital by lowering production costs below normal. He strives to gain an extra profit by producing and selling his products over their individual but below their social value. Each capitalist has of necessity the same desire and so each capitalist must accumulate.

If he stops re-investing part of his surplus value in his enterprise, he runs the risk of his capital becoming valueless, if its technical form is falling behind the general development of the productive forces. This fact results in again raising the organic composition and further lowering the rate of profit, and thereby hastens the tempo of development by stimulating the search for extra profit. To resist would mean economic suicide for the capitalist.

To understand the action of the law of value and accumulation, we must first disregard these individual and external movements, and consider accumulation from the point of view of total capital, since the total social capital values and total prices are identical. "The most important factor in this inquiry is the composition of capital and the changes it undergoes in the course of the process of accumulation". In the capitalist mode of production, and in that alone, is the development of the productive power not only expressed as a growth of means of production in order to have more results with less labor, (as it is expressed in all economic systems) but as a rise in the organic composition of capital, more constant capital, less variable capital and a consequent falling rate of profit. "A fall in the rate of profit and a hastening of accumulation are insofar only different expressions of the same process as both of them indicate the development of the productive power. Accumulation in its turn hastens the fall of the rate of profit, inasmuch as it implies the concentration of labor on a large scale and thereby a higher composition of capital".

The fall in the rate of profit is at the same time accompanied by an increase in the mass of profit as long as capital accumulates faster than the rate of profit falls. The sinking of the rate of profit and the growth of the mass of profit are therefore both caused by capitalist accumulation. At the same time the sinking rate of profit acts as an *index to the relative fall of the mass of profit*. When the accumulation of capital reaches a certain point, the mass of profit will fall not only relatively to the total capital invested, but also absolutely; a larger social capital will bring an absolutely smaller profit. But this point only appears at the end of a certain period of accumulation. Up to that point, "the same development of social productivity of labor expresses itself in the course of capitalist production on the one hand in a tendency to a progressive fall of the rate of profit, and on the other hand in a progressive increase of the absolute mass of the appropriated surplus

value, or profit; so that in the whole, a relative decrease of variable capital and profit is accompanied by an absolute increase of both." This is the characteristic expression of the progressive development of the productive power of labor under the capitalist mode of production.

II. Accumulation and Crisis

The fall in the rate of profit has thrown bourgeois economy out of balance. For Marx "the falling rate of profit turns into an antagonism of this mode of production at a certain point and requires for its defeat periodical crisis." Accumulation and a higher organic composition of capital are identical. With it goes the fall of the rate of profit. With an organic composition (1:1) say 30 constant capital and 30 variable capital, and a rate of exploitation of 100%, the rate of profit will be 50%. With an organic composition (5:1) say 250 constant capital and 50 variable capital, and the same rate of exploitation, the rate of profit will be 16.6%. (As stated before, the rate of surplus value (here 100%) is determined by the proportion between the necessary and the surplus labor time. But the rate of profit is surplus value divided by the total capital; ie – constant and variable both.) In the above example, both constant and variable capital is increased. Not only is the scale of production expanded, but the number of workers employed increased. We began with a low organic composition (1:1) and end with a high (5:1). This is both a cause and expression of the increased productivity of labor that also must be expressed in an increased rate of surplus value. We had a rate of surplus value of 100%, but the increased productivity shortens the necessary labor time and increases the rate of surplus value, which counteracts the fall of the rate of profit. If the rate of surplus value is increased from 100% to 300%, then even a high organic composition of capital (5:1) would yield the same rate of profit, that is 50%, as the low organic composition (1:1) with a rate of surplus value of 100%. Besides this, through the increased productivity of labor, the rate of surplus value may also rise due to other causes and thereby compensate for the increase in the organic composition. We shall later investigate this, but in whatever way this may be accomplished, the fact is that the falling rate of profit is accompanied by a rise in the mass of profit that counteracts the danger implied in a falling rate. But this growth of capital in turn implies a further fall in the rate of profit. Thus the sinking rate of profit creates further attempts to raise the surplus value as is actually the case.

Since at first the fall in the rate of profit is accompanied by an increase in the mass of profit, it is difficult to understand how the collapse of capitalism would result from the decline in the rate of profit, and what relation there is between periodic crisis and the falling rate of profit. An explanation of this connection has often been attempted, but all of those attempts have failed because in each case the explanation was based on, and limited

to, the investigation of the falling rate of profit alone. Henryk Grossman was the first to point out that the crisis and the final collapse must be explained not only by the falling rate of profit, the mere index of profit, but by the actual mass of profit underlying it. According to Marx, capitalist accumulation is determined not only by the rate of profit, but also by the mass of profit. In other words, the surplus value may absolutely increase, but it will nevertheless be insufficient for the needs of accumulation because the rising organic composition constantly swallows an ever greater part of surplus value.

Capital accumulation initiated a series of great booms interrupted by periodic crises. As the rate of accumulation grew, the intensity of the crises grew with it. The capitalist process of reproduction repeats itself, not in the form of a circle, but as a spiral, narrowing to a point. The production of values must, due to its inherent contradictions, lead to its own negation; but only the accumulation of these contradictions can transform them into something qualitatively different: into revolution. The same laws which had at first constituted the motive force of a rapid development of capitalism, now become the driving force of capitalist collapse. But this collapse does not develop evenly and in a straight downward line. It is continuously interrupted as capitalist reality modifies the general abstract law of capitalist accumulation. Marx elaborated no special theory of crises, but his analysis of the laws of capitalist reproduction, or accumulation, was also a theory of crisis. Let us illustrate with an abstract table the law of capitalist reproduction.

In order that accumulation may be possible, the surplus value must be divided into three parts; one to be invested in additional constant capital, one in additional variable capital, and the remainder to be consumed by the capitalist class as individuals. During the rise of capitalism, variable capital grows as well as constant capital, only more slowly. We begin, in our table below, with an organic composition of 2:1. The constant capital grows at a yearly rate of 10%, the variable at 5%. The rate of surplus value remains 100%. (Constant capital we call **C**, variable **V**. The consumption fund of the capitalists is **R**. **AC** is surplus value available for accumulation of constant capital; **AV** for variable. The value of the yearly product we call **VYP**; the percentage of surplus value consumed by the capitalists we call **R**%; the rate for accumulation **A**%, the rate of profit **P**%.

Yr	C	V	R	AC	AV	VYP	R%	A%	P%
1	200,000	100,000	75,000	20,000	5,000	400,000	75.00	25.00	33.3
2	220,000	105,000	77,750	22,000	5,250	430,000	74.05	25.95	32.6
3	242,000	110,250	80,539	24,200	5,511	462,500	73.04	26.96	31.3
4	266,000	115,762	83,374	26,600	5,788	497,524	72.02	27.98	30.3

We see how in this table accumulation increases in spite of a falling rate of profit. Accumulation pays for the capitalists, for while their revenue becomes smaller relative to the surplus value as a whole, it increases absolutely. During the first year the capitalists command 75,000 as revenue (**R**); during the fourth year, 83,374.

This table is a fiction that should in no wise be mistaken for reality. A progressively higher organic composition accompanied by a constant rate of exploitation is an impossibility, nay an absurdity. The table is only meant to illustrate the tendency of accumulation with no disturbing and complicating tendencies. Even with a constant rate of surplus value, accumulation can take place so much faster with an increased rate of exploitation. This table also reflects accumulation only in its value-form, not expressed in the quantity of use values; to express it thus, would cause many modifications. The devaluation of capital necessarily connected with accumulation here has been disregarded.

If we, like Henry Grossman, extend this table to the 35th year, we shall be able to show if not actual capitalist accumulation, at least its "inner law". But to arrive at capitalist reality, we must in addition to basing ourselves on the inner law of capitalist accumulation also take into account the elements disregarded in the illustrating table. It must be borne in mind, however, that the elements disregarded in the table only determine the *tempo* of the process of accumulation, either hastening or slowing it down; but in either case the process remains essentially the same. Let us follow the table:

Yr	C	V	R	AC	AV	VYP	R%	A%	P%
5	292,600	121,500	86,213	29,260	6,077	535,700	70.93	29.07	29.3
6	321,860	127,627	89,060	32,186	6,381	577,114	69.70	30.30	28.4
20	1,222,252	252961	117,832	122,225	12,634	1,727,634	46.63	53.37	17.1
21	1,344,477	265325	117,612	134,447	13,266	1,875,127	44.33	55.67	16.4
34	4,641,489	500,304	11,141	464,148	25,015	5,642,097	0.45	99.55	9.7
35	5,105,637	525,319	0	510,563	14,756	6,156,275	0	104.61	9.3

The table shows that the same forces which at first made the rise of capitalism possible at a certain phase of accumulation lead to *over-accumulation* and its consequences. The constant capital that in the first year (first table) was 50% of the year's production, demands in the 35th year (second table) 82.9%. The revenue (**R**) that until the 20th year only increased relative to the total mass of surplus value as shown by (**R%**) from then on decreases absolutely. In the 35th year it disappears completely. It is only after the 20th year that the fall in the rate of profit is first felt as an absolute fall in that part of the mass of profit which the capitalist class had at its disposal for its own private consumption. Until the 20th year, accumulation was a paying proposition as measured by the returns. From the 21st year, these returns dwindle down to a vanishing point. Besides that, from the assumption made that the additional variable capital increases yearly 5%, **AV** has a deficit. Instead of the needed 26,265 in the 35th year, only 14,756 is available, leaving a

deficit of 11,509. This deficit would represent the industrial reserve army as the inevitable outcome of the capitalist process of accumulation. The capital accumulated in the 35th year can't function completely. Because 11 509 workers cannot be employed, the whole additional constant capital (AV: 510,563) cannot be reinvested. On the basis of our assumption, a population of 551,548 in the 36th year would require a constant capital of 5,616,200; consequently, by a population of 540,075 only 5,499,015 constant capital could be invested. There is a capital surplus of 117,185 that cannot be used. Insufficient capital "utilisation" has led to over-accumulation. We have a surplus of capital unable to expand and an unusable surplus population. (The empirical researches, eg by WC Mitchel in the USA has shown that in time of economic expansion profit is uninterruptedly increasing, while a crisis is preceded by a decrease of profits.) Thus, increasing "utilisation" of capital is the chief cause of capital accumulation, and the lack of a sufficient "utilisation" of capital the cause of crisis.

The theoretical formulation of the theory of over-accumulation as here presented was first undertaken by Henryk Grossman who considers his work as only a reconstruction of Marx's theory of accumulation which is the theory of crisis and collapse. According to Grossman, if accumulation is to take place, the organic composition of capital must increase and then a relatively ever greater part of the surplus value must be taken for the purpose of the additional constant capital (**AC**). As long as the absolute mass of the total social capital of a low organic composition is small, the surplus value is relatively large, and leads to a rapid increase in accumulation. For example: by a composition of 200**C**:100**V**:100**S** (surplus value), the constant capital can (assuming the total surplus value to be used for the accumulation) be increased by 50% of its original size. At a higher stage of capital accumulation, with a considerably higher organic composition, eg 14,900**C**: 100**V**: 150**S**, the increased mass of surplus value is only sufficient, when used as additional capital (**AC**) for an increase of 1%.

By continued accumulation on the basis of an ever higher organic composition, a point must be reached when all accumulation ceases. Not every fragment of capital can be used for expansion of production. A definite minimum proportion is needed which grows continuously with the progressive accumulation of capital. Therefore, since in the development of capital accumulation, a not only absolutely but also relatively greater part of the mass of surplus value must be used for the purpose of accumulation. At a higher stage of accumulation, where the total social capital is of huge size, the part of surplus value demanded for additional constant capital (AC) must become so great that it finally absorbs all of the surplus value. A point must come when the parts of surplus value to be used for additional workers and for capitalist consumption (AV and R) must decease absolutely. This would be the turning point at which the previously latent tendency to collapse begins to be active. It is now evident that conditions necessary for the progress of accumulation no longer can be met, that the mass of surplus value though grown

absolutely is insufficient to take care of its three functions. If the additional constant capital (AC) is taken from the surplus value in necessary quantity, then the revenue at disposal is insufficient to take care of the consumption of workers and employers at the prevailing scale. A sharpened struggle between the working class and employers over the division of the revenue thus becomes inevitable. If, on the other hand, the capitalists by pressure form the workers are forced to maintain the wage scale and the part earmarked for accumulation (AC) thus decreases, the tempo of accumulation slows down, and the productive apparatus cannot be renewed and expanded to keep pace with technical progress. All further accumulation must, under such conditions, increase the difficulties, since for a given population the mass of surplus value can only be raised by a trifling amount. Surplus value flowing from the previously invested capital must therefore lie fallow, and there arises a surplus of idle capacity vainly looking for possibilities of investment.

Thus accumulation is a process that inevitably leads to overproduction of capital, to ever increasing unemployment, to a surplus of **capital unable to function profitably**, and an unuseable surplus population. And this is the final great contradiction of capitalist production that causes it to go to pieces. "The fact that the means of production and the productivity of labor increases more rapidly than the productive population, expresses itself, therefore, capitalistically in the inverse form that the laboring population always increase more rapidly than the conditions under which capital can employ this increase for its own self-expansion".

On the basis of this analysis of accumulation, the question no longer is whether the capitalist system will collapse, but rather why it has not already collapsed. We have hitherto followed the process of accumulation in a fictitious capitalism. Reality is different. The law of capitalist collapse as demonstrated by us functioned in a "pure" capitalism – a capitalism that actually does not exist. In order to best illustrate the law of capitalist accumulation and consequences following there from, we have had to disregard the secondary features and tendencies that are characteristic of the real capitalism. For the purpose of our investigation up to now, they were quite irrelevant since they only obscure the inner law of the process of capitalist accumulation. Outside of the already mentioned simplifications, we dealt only with the process of production, disregarding modifications of accumulation by the process of circulation. Only the dynamics of society as a whole interested us, so that we did not consider the individual spheres of production, and disregarded competition and its modifying effect on the tempo of accumulation. In our analysis of accumulation there was no foreign trade which from the point of view of capitalist production is of great importance. We disregarded the middle class groups, and spoke only of capital and labor. There was in our analysis no credit problem. We disregarded it as well as other more important items that more or less modify the absolute law of accumulation. In short, our analysis of accumulation is based on a non-existent

capitalism. All that we set out to do was to demonstrate that by following the process of accumulation in such a "pure" capitalist system, the result would with mathematical certainty be the collapse of the system.

Since, in reality, there is no such "pure" capitalist system, it follows that the tendency to collapse does not operate in the above described "pure" form. Instead, the pure" tendency of capitalist accumulation is slowed down in its dizzy pace by counteracting tendencies which also arise out of the capitalist development. The tendency towards collapse which is expressed through crises is nevertheless slowed down and temporarily halted by these very crises though they be the embryonic form of the final collapse; but the countertendencies are essentially of a temporary character. They can postpone the collapse of the system. If the crisis is only an embryonic collapse, the final collapse of the capitalist system is nothing else but a crisis fully developed and unhindered by any counter tendencies.

If the causes of crisis are over-accumulation which makes the "utilisation" of capital impossible, then new means must be established to assure again the necessary capital "utilisation" in order to end the crisis. According to Marx, a crisis is only a process of healing, a violent return to further profitable expansion; from the point of view of the capitalists, a "cleaning out". But after the "cleaning", with its series of capitalistic bankruptcies, and the starvation of the workers, the process of accumulation is continued and after a while the "utilisation" of capital again becomes insufficient. The self-expansion stops as the accumulated capital again becomes too large on its new basis. The new crisis sets in. In this manner, the tendency towards collapse is broken up into a series of apparently independent cycles.

III. How Crises Are Overcome

The changing periods in the economic cycle may be longer or shorter, but their periodicity is a fact. It is furthermore a fact that the boom periods are always growing shorter, while the duration and intensity of the periods of crisis is increasing. This reveals the fact that the tendencies which serve to delay the collapse of capitalism, while being an integral part of capitalist accumulation, are nevertheless greatly weakened with every passing cycle; and the overcoming of crisis becomes an ever-greater difficulty. The United States has passed through a series of industrial crises followed and preceded by boom periods. The crisis of 1837 was preceded by a feverish activity of construction. A nationwide network of roads was built, canals were constructed and steamship traffic developed. Gigantic amounts of capital were imported, and a general optimistic

anticipation of profits developed speculation. By the first sign of insufficient profit-production, "business" flowed into speculation that then took the most bandit-like forms. A crisis shortly followed. To bourgeois economists, the crisis appeared to be caused by the "impossibility of paying interest on borrowed capital, as the rate of profit that could be yielded was too small". The panic of 1857 was preceded by a period of intoxication due to the discovery of California gold, and the large railroad constructions aiding industrial development in general. Again prosperity was transformed into intensified speculation which is always the case when profits become small. The crisis was again explained by the problems of "interest". According to bourgeois conceptions, the railroads were constructed too "quickly", industry developed too "hastily", and it became impossible to pay interest on the money invested in industry. Capital had grown faster than the possibility of "utilising" this growth. This was followed by the crisis of 1873, 1893, 1907, 1921 – to name only the most important.

In whatever manner these crises were explained, each individual explanation suggested that profits were insufficient, that further expansion of industry was unprofitable and for that reason could not take place, so that each explanation, unconsciously it its true, gives over-accumulation as the cause of crises. But no one spoke about this as the inevitable outcome of the capitalist process of accumulation; this fact was always disguised as "overproduction of commodities", "a too heavy burden of debts and inability to pay interest". The fall of prices, therefore, was accepted as the cause of crisis.

According to Marx, in times of crisis, the rate of profit and with it the demand for industrial capital almost disappears. There is no lack of purchasing power with which to expand production, but no use is made of this purchasing power because it does not pay to expand production since expanded production does not bring in more but less surplus value than on the previous scale. Though expansion of production has become unprofitable, production at first continues at its previous volume. By this continuation of production at its previous rate, each year, there is produced surplus value part of which is intended for accumulation, but without any chance for such application. Thereby the stock of unsold means of production, of unsold goods in general grows; cost of storing increases, plant equipment is unnecessarily tied up since there is no reflux through sales of commodities produced. The capitalist must at any cost sell, to obtain the means of continuing production at its previous scale. This leads to price cutting and limited operations of factories. Enterprises go bankrupt; unemployment grows.

The capitalist solution to this problem lies in the re-establishment of the "utilisation" of capital. To do this, either the value of the constant capital must be decreased, or the surplus value increased. Both possibilities are found in the sphere of production as well as in the sphere of circulation. We shall deal here only with a few of the tendencies that overcome crises and delay the collapse of the system.

We said the capitalist always sees the fall of prices as the cause of crisis. A rise in prices, consequently means to him the beginning of recovery. Bourgeois economists claim that as prices fall, bankruptcies increase proportionally, and they offer statistical demonstrations of this fact. According to them, price stability is a guarantee of social stability. But what they really show is only the increased productivity of labor expressed in prices. The bemoaning of bankruptcies only illustrates the process of capitalist concentration, in spite of this, bourgeois economists have always, in their superficial manner pointed to the fall of prices as the cause of crises, and they still hold to this stupid explanation in face of the fact that in the US since 1925 a boom period took place with falling prices. It is also a fact that the expansion of the productive apparatus takes place in times of depression when prices are low. Only when the demand created by that expansion exceeds supply will prices increase. Therefore, the rise in prices, if it takes place, which is not absolutely necessary, is the effect and not the cause of recovery. Nay, profitable operation must be made possible at the low price level before recovery can begin. This demands increased productivity of labor which again means higher organic composition of capital, or the reproduction of the crisis on a higher plane.

Increased productivity is, besides other things, a process of concentration and centralisation accompanied by amalgamation of industrial units and general rationalisation. So that the crises, even though they are accompanied by "overproduction" are always overcome, in spite of that, by a further expansion of production. That this leads to increased laying off of workers first relative to capital employed, later also absolutely does not alter its necessity. Statistics show that in periods of upswing in the United States those bankruptcies which occurred involved small enterprises, and that while these bankruptcies increased, trusts made superprofits in spite of falling prices. Trustification made larger profits at lower prices possible, while the small enterprises outside this movement of "rationalisation" succumbed. Prof Eitemann writes:

"The low prices which had prevailed during the depression of 1873, encouraged the introduction of labor-saving devices by industry in order to cut cost of manufacture. This search for cheaper methods of production continued even after the return of prosperity, and resulted in a steady downward trend of prices".

The increased productivity of labor, and the thereby relatively diminished cost of constant capital, makes the "utilisation" of capital again possible. This tendency is apparent during the present crisis. Reports like the following are not infrequent:

"General Electric's new power plant of \$4,000,000 will be ready for operation next spring. According to the estimates of the engineers, the plant will produce steam and kilowatt hours of energy at a lower cost than has ever before been attained".

At the same time that the "Merchant Fleet Corporation" allowed 124 ships of approximately one million tons to be destroyed, the construction of 20 million tons of new ships are planned even though "overproduction" leaves a great number of these ships idle in port. In the crisis, in spite of "overproduction", the apparatus of production instead of becoming restricted has been enlarged. Nevertheless, previous crises have passed. The crisis, then, is not a restriction of the real apparatus of production, but a breakdown of an accepted system of prices and values, and its reorganisation on a new level.

According to Marx, the tendency in the fall of the rate of profit is accompanied by an increase in the rate of surplus value, or in the rate of exploitation of labor. By the development of the productive forces, commodities are made cheaper. Insofar as this happens to commodities consumed by the workers, the elements of variable capital are made cheaper. The value of labor power sinks and rate of exploitation increases. The same effect is gained by intensifying labor by technical rationalisation and by more pitiless modes of speed-up, or by lengthening the working day. One of the most important means is by the forcing of wages below the value of labor power by taking advantage of the growing army of the unemployed during a crisis. (The lowering of wages below value has already become a "basis" of existence for the whole system.) The ridiculous conception that by increasing the purchasing power of labor the crisis can be overcome has always and still is answered by capitalism reducing that purchasing power still further. It is exactly in this manner, by wage cutting, that capitalism tries to overcome the crisis. Thus, the "Commercial and Financial Chronicle" writes:

"The manufacturer is no longer able to produce goods at a profit, and accordingly he stops producing at all and as a consequence, hosts of wage-earners find themselves idle and out of employment. If the President could be induced to prevail upon the wage earners to adjust wages to a lower basis, one more nearly in accord with the times, trade depression would soon become a thing of the past."

Statistics, for example those of the US Steel Corporation, show that crisis and increasing exploitation run parallel.

Aug. 1,	1918	10% increase in wages
Oct. 1,	1918	8 hour basis day adopted
Feb. 1,	1920	10% increase in wages
<i>May 16</i> ,	1921	20% decrease
June 6,	1921	Basic 8 hour day abolished
Aug. 29,	1921	Decrease to 30 cent hourly
Sept. 1,	1922	20% increase
April	1923	11% "

16,		
Oct. 1,	1931	10% decrease

The crisis of 1921 destroyed the previously adopted 8 hour day and led to sharp wage cutting. In 1931 this was repeated. The intensification of exploitation is one of the strongest tendencies working against capitalist collapse.

The shortening of the time of capital turnover is also a force acting against collapse. The main means for accomplishing this, outside of increased productivity, are better and more direct means of communications, especially transport, and diminuation of stock in storage, etc. Furthermore, an increase in use-values at the same exchange-value, and the founding of new spheres of production with lower organic composition weakens the tendency towards the collapse since these branches of production yield exceptionally high profits. As the capitalist class cannot dispose of the appropriated surplus value alone, but must divide it with the middle-class groups, the crisis is always the beginning of an intensified fight between these groups in the form of a fight of "actual" producers against ground-rent, commercial profits, and all other "parasitical" elements. In short, a fight of industrial capitalists against all other capitalist and the middle class groups who exploit labor indirectly through the industrialists.

An important element in re-establishing profitable operations is the devaluation of capital. This devaluation is expressed by the same amount of means of production being represented at a smaller value. The technical composition (MP:L) remains; the organic composition (c:v) sinks. The mass of surplus value remains the same, but as it is now calculated on a smaller capital basis, the rate of profit has risen. In practice, devaluation takes the place of sale at ruinous prices. Crisis and capitalist wars are gigantic devaluations of constant capital by violent destruction of value as well as of use value forming its material base.

By ever drawing in new foreign use-values, capitalist production is expanded and the tendency towards collapse weakened. The importing of cheap foodstuffs lowers the value of labor power and increases the rate of surplus value proportionally. By the furnishing of cheap raw materials, the elements of constant capital are made cheaper and the rate of profit increased. This is why the struggle for sources of raw materials contributes one of the main objectives of international capitalist politics. Through the tendency of the equalisation of profits, the more highly developed countries can appropriate part of the surplus value created in the less developed countries. This extra profit counteracts the sinking of the rate of profit. By foreign trade, the movement towards collapse is slowed down, and as this, with the development of accumulation, becomes a matter of life and death to the capitalist system, it leads imperialist expansion to become more and more violent.

The international character of crisis develops with foreign trade. The same factor also leads to the development of world monopolies, yet even though so much capital has been accumulated that further accumulation, though necessary, is unprofitable, a collapse of the system need not follow as long as sufficient capital in the form of foreign loans and investments can find a new and satisfactory basis for "utilisation". This makes the export of capital characteristic of imperialism. All these elements, concentrated in imperialism, are remedies against the insufficiency of profits. The final consequence of imperialism is the political annexation of foreign territories, so that the securing of an additional stream of surplus value helps to postpone capitalist collapse. As the progress of accumulation makes the threat of collapse more imminent, the imperialist tendencies are proportionally strengthened.

IV. Permanent Crisis

We have previously shown that the Marxist theory of accumulation is the law of the collapse of the capitalist system. We have further demonstrated that this law is overcome by counter-tendencies for certain periods. But these counter-tendencies are themselves overcome in the course of development or lose their effect through overaccumulation. Rationalisation becomes failing rationalisation. Amalgamation, or merging of industrial units, is made unfavourable by the dead weight of closed-down units. Wage-cutting and intensified exploitation also have their limits. The workers cannot permanently be paid below their cost of reproduction. Dead and starving workers produce no surplus value. The shortening of the time of capital turn-over has its limits beyond which it breaks the continuity of production and circulation. Even if commercial profits were eliminated altogether, the sinking of the rate of profit would still continue. Foreign trade as a countertendency eliminates itself by turning capital-importing countries into capital exporting countries by forcing their industrial development through a hot house growth. As the force of the counter-tendencies is stopped, the tendency of capitalist collapse is left in control. Then we have the permanent crisis, or the death-crisis of capitalism. The only means left for the continued existence of capitalism is then the permanent, absolute and general pauperisation of the proletariat.

In previous crises it has been possible to regain sufficient capital "utilisation" without permanent cutting of real wages. Marx said: "In the measure as capital accumulates, the situation of the workers, whatever its pay, high or low, must become worse". All statistics available show that accumulation and pauperisation of the workers are two sides of the same process. But in the period of the rise of capitalism only a relative, but not necessarily absolute, pauperisation of the workers took place. This fact formed the basis for

reformism. Only when the proletariat must necessarily be absolutely pauperised are objective conditions ripe for a real revolutionary movement.

If, instead of misleading ourselves by the actual increase of nominal wages in the United States during the last three decades, we examine the trend of wages in relation to production, we shall have a true picture of the relative pauperisation of the American proletariat. If we divide the index of real wages by the index of production, we have the index of the purchasing power of the workers.

Year	Index of purchasing power	Year	Index of purchasing power
1899	100	1922	73
1904	91	1923	68
1909	70	1924	76
1914	70	1925	68
1919	65	1926	68
1920	67	1927	71
1921	91	1928	70

The purchasing power of factory workers in the United States has not increased in proportion to the total product of the factories; it has lagged. The workers' position is relatively worse. This is true in spite of real wages having increased from 100 in 1900 to 123.6 in 1928. But in the same period the volume of production increased from 100 in 1899 to 283.8 in 1928. The workers lived better, but were more exploited in 1928 than in 1900. To Marx this relative pauperisation was only a phase of absolute pauperisation. If wages at first only decline relatively to general wealth, they later decline absolutely as the quantity of commodities falling to the worker's share becomes absolutely smaller. This relative worsening of the workers' position in the face of absolute improvement, only continues as long as conditions permit sufficient increase in the mass of surplus value to allow sufficient "utilisation" of capital. In the final phase of capitalism, the surplus is insufficient for the maintenance of both previous wage levels and satisfactory "utilisation". Therefore, the crisis can now only be overcome by a satisfactory rate of accumulation and the re-establishment of profits at the cost of the workers. What differentiates the final from all previous crises is that with renewed profitable operation the wage level cannot be re-established – that the latter will sink permanently in times of "prosperity" as during the crisis. While capital "overcomes" the crisis, the workers remain under its sway, and if they refuse to let themselves be destroyed, they have no other recourse but the abolition of the capitalist system.

The level of world industrial production is today below the scale of 1904. The depression is world-wide. Relative to the high stage of accumulation, the crisis may vary from country to country, but the international character of the crisis is everywhere perceptible. The shrinking of the domestic market sharpens competition in the world market which likewise shrinks due to protective tariffs. The shrinkage of world trade intensifies the crisis by making their economic and financial status more precarious. These events are paralleled by a heavy loss in profits. The condition of bank capital is catastrophical. The number of unemployed in the United States alone in 1933 was about 16 millions. All this indicates that the present crisis in the United States as everywhere differs from all previous crises by its extent and intensity. It is the greatest crisis in capitalist history; whether it will be the last for capitalism, as well as for the workers, depends on the action of the latter. The "Roosevelt prosperity" in the United States to which the bourgeois press referred as the "end" of the depression was of a very temporary character and did not affect the world crisis at all. Anything the US did gain for a short while was a loss for some other country. The inflationary policy allowed the United States to compete better on the world market, but only as long as the other countries were not ready to hit back, by inflating their own money or find other means of fighting the American competition. Inflation as the means of general wage cutting and the elimination of the middle class, as well as the elimination of profit-eating bank capitalists, to a certain extent may spur production because this again becomes profitable for a short while. But this profit is only gained by a pauperisation process, not only of relative but of absolute character. It is a "boom" in the death-crisis, a gain that does not indicate development but decay. It shows that we are not at the "end", but only at the beginning of the crisis.

The actual beginning of the present depression in the United States is always connected with the stock market crash, though the latter was the effect rather than the cause of the crisis which had already begun. As far back as 1927 the "utilisation" of capital in the US had become more and more difficult. The falling rate of profit indicated the overaccumulation. But in spite of that, expansion of industry took place until 1929, but not to such an extent as would have been necessary according to the rate of accumulation in previous years, and on the basis of accumulated capital already existing. Industrial profits, which could not more fully be reinvested in industry, flowed to the banks. The surplus lay fallow in the banks; deposits in member banks of the Federal Reserve System was, by the end of 1927, 17 billions of dollars more than in 1926. While an increase of 5% was considered normal, this amounted to 8%. Simultaneously, available credit grew. Speculative loans for the stock market and speculatively inflated stock quotations were the result, bringing on the Wall Street fever of speculation ending in the stock market crash. But the speculative fever was only the index of the lack of possibilities for sufficient productive investments. As the surplus of capital lowered the rate of interest to 1 percent, the industrial crisis was followed by a bank crisis; and in spite of the low rate of interest, from which the bourgeois economists expected the turn towards prosperity, no credit was

demanded by industry. The "Chicago Daily Tribune" writes: "What idle money has piled up in banks had difficulty in finding safe outlets, interest rates dropped but loans and investments did not increase". This situation is not peculiar for the United States, but general throughout the whole world. JP Morgan testified at a Senate inquiry: "The depression, for the first time as far as I know in the history of the world, is so widespread no country can lend money in any other. At the present time, there is no demand for capital for industry."

This situation can, nevertheless, only be overcome by further accumulation; ie expansion of the productive apparatus or renewal of the fixed capital on a larger scale. The mass necessary for accumulation is dependent on the previous volume of fixed capital regardless of whether this has only been utilised at half of its capacity, because accumulation is determined by the rate of speed it has previously gained; and this accumulation must take place on a lower price level as expansion of production is coupled with a fall in prices. Therefore, if accumulation is to continue, then the expansion of production must lower the cost of production so that the expected mass of profit will compensate for the fall in the rate of profit. For this reason, "Barrons Weekly" says in its yearly survey: "the extent to which the pressure of accumulating capital may be effective in promoting economic recovery depends on whether the necessary adjustments have been made in other parts of the mechanism – in cost of production and prices, in supply and demand relationship for individual commodities, and in the governmental services, in their cost to the taxpayer and their real value to the country; in short, on whether capital can earn a profit and keep it".

A static system of capitalism is an impossibility; capital must either go forward, ie - accumulate, or collapse. Accumulation presupposes reestablishment of profitable operation; hence we see violent efforts on an international scale to achieve this end. But all previous measures taken to overcome the depth of the present crisis have failed miserably.

As we have said before, the resumption of profitable operation depends on the lowering of the organic composition of capital, or the increase, by other means, of the surplus value. The devaluation of capital lowers the organic composition. In practice, this means the ruin of many individual capitalists; from the point of view of total capital, from the point of view of the system, it means rejuvenation. The devaluation of capital is a continuous process, an expression of increased productivity of labor, but in the crisis it progresses violently. The increased rate of bankruptcies shows that the devaluation of capital is also taking place today. But bankruptcies, while expressing the speedy and violent devaluation taking place, are not symptoms of an intensification of the crisis; up till now they have been aids in overcoming it. In all previous crises, the number and speedy growth in the number of bankruptcies were connected with a speedier overcoming of the crisis. That

today this effect is gone merely proves that accumulation has reached a point where devaluation ceases to be an effective element in overcoming the crisis.

There are not enough bankruptcies, or the devaluation accomplished is insufficient to lower the organic composition of capital enough, to make continued profitable accumulation again possible. This fact is closely connected with the structural change in capitalism from competition to monopoly capital.

"Classical" capitalism answered a crisis with a general fall in prices that led to widespread bankruptcies and forced the survivors to adapt themselves to the new price level by installing new machinery. The demand of fixed capital felt in some industries caused other industries to be drawn into the boom. But in monopoly, or as Lenin called it, "stagnant" capitalism, the crisis does not have the same results. Here we have a prolonged condition of huge masses of industrial machinery lying idle without being destroyed as the characteristic feature of crisis under monopoly capitalism. The reserve funds of fixed capital created by monopoly capitalism are, in boom periods, put at the service of production and make the construction of additional enterprises unnecessary, and thereby increase the difficulties of a transition to expanding production. When the crisis comes, production is restricted, and when later the demand increases it is supplied by opening the closed enterprises. In this manner technical progress is hindered by monopoly capitalism, and the market for means of production narrowed. How small the importance of violent devaluation of capital is can be seen when one compares the monopolies with the total of socially productive forces. (We have in the United States 37 tyre producers; five of them account for 70% of the total production, the other 32 divide the remaining 30% among themselves. In the automobile industry, 75% of the total production is accounted for by two enterprises: General Motors and Ford. Two steel trusts (US Steel and Bethlehem) control 52% of the total steel production. In the meat packing industry 70% of the total production is controlled by four firms: Swift, Armour, Wilson and Cudahy.) In other industries similar situations are found. What effect can the collapse of small enterprises have here? The fusion of capital and the resulting strengthening of monopolies strengthen this tendency towards stagnation and decay, which really means that permanent depression is a characteristic of monopoly capitalism. Even the huge writing down of capital values is only a raid on the small share holders, but not a move towards recovery. It is also clear that a technical revolution scrapping huge masses of capital by antiquating them, cannot be expected today since the restriction of productive forces has become a "necessity" of capitalism. To expect an end of depression through devaluation is to pin hope on a still higher form of capitalism than monopoly-capitalism, and that is impossible within the framework of private property in the means of production. (State capitalism is not a higher economic form of monopoly capitalism, but only a different political mask trying to straighten out the maladjustments of class forces, which due to the narrowing

down of the ruling class and its retainers under monopoly capitalism needs more direct state interference to maintain class rule.)

To increase the mass of surplus value, the cost of production must be lowered. This is attempted through the process of general rationalisation; but increased rationalisation leads to irrationalisation. For a time the profits of individual enterprises are increased by its application, but the net income from the total social labor is diminished. Individuals become richer, society poorer. How far this sort of rationalisation has gone can be seen by the researches of the technocrats. Rationalisation is only effective when the saving in wages made possible is greater than the increased cost of fixed capital made necessary. Rationalisation causes the shut-down of many enterprises, and therefore the saving in wages must exceed, not only the increased cost of fixed capital in the rationalised enterprises, but in addition, balance the loss caused by depreciation of fixed capital in idle enterprises. If the costs of fixed capital are increased, all enterprises become more sensitive to downward fluctuation of economic activity. Rationalisation, therefore, leads to an increase instead of a decrease in cost of production, and thus increases the difficulties of overcoming the crisis. By overdeveloping the productive apparatus, rationalisation at a high stage of accumulation hastens the collapse of capitalism instead of delaying it. The American productive apparatus was rationalised in the years of prosperity following 1921, and this was one of the causes of the length of that phase. In spite of continued rationalisation, the crisis arrived and created a situation which hardly allowed the utilisation of 50% of the rationalised enterprises, and thereby annulled the increase in surplus value gained by rationalisation. This case of "irrationalisation" shows definitely the impossibility of recovery through further rationalisation.

Increase in surplus value through shortening the time of capital turnover, likewise finds its objective limits in the development of accumulation. The period of turnover of total capital has been prolonged by the decreased utilisation of fixed capital. The same rate of profit for one period of turnover becomes thus a much smaller yearly rate of profit. The fall of prices, though limited by monopoly capitalism, today outweighs the still remaining possibilities of reducing the period of turnover. Decreasing the stock to raise the rate of profit is limited by the demand for continuity in production and circulation. Outside of this, the action of the crisis causes an increase in the stock of unsold commodities that further decrease the rate of profit both by the cost of storing and by the further causing a fall in prices through forced sales. The net effect is that stock on hand increases, the period of turnover is prolonged, and the rate of profit falls. The increased stock is especially evident in raw materials. The world's supply of raw materials were at the end of 1929 – 192, and 1933 – 265. To reduce them to normal would mean the cessation of world production for months.

The cost of circulation increases due to sharpened competition during the crisis. While the number of workers engaged in production permanently decreases, the number of those in distribution increases. (Advertising expenses alone have lately been over a billion dollars a year in the United States.) This naturally further decreases profits.

In the crisis of 1920 and 1921, 30% of all enterprises in the United States were idle representing approximately a 30 billion dollar investment. If depreciation and maintenance is estimated at 10%, this means a clear loss of three billion dollars or the value of the labor of one and a half million workers. This takes place today on an even larger scale causing a further fall in the rate of profit. As 16 million workers are unemployed in the United States, it becomes necessary for those employed besides compensating for the causes already mentioned, also to produce as much additional surplus value as these workers would have produced if employed, or the mass of profit will decrease and sufficient accumulation becomes still more difficult. The decrease in the mass of profit sharpens the struggle for its division. The banks have advanced capital to industrial enterprises during the period of prosperity; credit that was based on prices as they then were. Falling prices "freeze" these credits and cause, first, industrial bankruptcies, and second, bank failures, hastening the process of concentration of capital generally. At the same time, there has been an enormous change in the division of profits between industrial and money capital in favour of the latter. The acuteness of the crisis and the price fall makes the load of debts unbearable for industrial capital. Only a general reduction of debts makes general bankruptcies unnecessary. This is done through inflation, which unloads the liquidation of these debts on the workers, the professional middle class, and money capital.

The depth of the crisis is also shown in the vicious attacks of capital on the standard of living of the middle class groups. In spite of increasing expropriation of the middle classes, reducing those catering directly to capitalist consumption, the crisis continues to deepen, nullifying those methods of retaining a greater part of surplus value in the hands of the capitalist class. But after all, these groups could only be eliminated once, and even before this was done, another barrier would have been set up against further expropriation of them by the fact that the continued rule of the capitalist class depends on their existence. And in contradiction to these strenuous efforts to eliminate expenditures for unproductive activity, these expenditures are increasing. The growth in taxation was more rapid than the growth of the national income in the United States. Increasing pauperisation causes increasing relief expenditures, and increasing expenditures for the purpose of violent repressions of revolt, and for imperialist designs.

In the present crisis, a fall in the ground rent "has to some extent softened the fall in the rate of profit" but at the cost of raising the threat of agrarian revolt. As a matter of self-preservation, it has been necessary for the capitalist class to counteract these tendencies

favourably to themselves by allotment plans, agrarian protective tariffs, price subsidies, etc. A sufficient increase of profit by a decrease in ground rent cannot longer be expected.

In this crisis, all forces working towards overcoming it have thus either neutralised each other, or have been insufficient! This even applies to the strongest imperialist means of recovery: capital export. During the last years there has practically been no capital exported from the United States. In other imperialist countries, the situation is similar. This has sharpened the competitive struggle for the world market tremendously between all industrial nations. The profit flowing back to the United States from previous capital export in the form of interest on foreign investments can neither be invested here or abroad. Simultaneously, the United States makes it impossible for the debtor nations to pay interest by forcing them out of their markets for means of production. This also makes it impossible for them to buy raw materials and foodstuffs, as they are unable to sell means of production to pay for them. The end of this development must either be an insoluble, irrational crisis, or a new world-scale butchery.

The law of accumulation is the law of the collapse of capitalism. A collapse delayed by counteracting tendencies until these tendencies have spent themselves or become inadequate in face of the growth of capital accumulation. But capitalism does not collapse automatically; the factor of human action, though conditioned, is powerful. The death crisis of capitalism does not mean that the system commits suicide, but that the class struggle assumes forms that must lead to the overthrow of the system. There is, as Lenin said, no absolutely hopeless situation for capitalism; it depends on the workers as to how long capitalism will be able to vegetate. The "Communist Manifesto" sounds the alternative: Communism or Barbarism! A static capitalism is impossible; if the accumulation cannot continue, the crisis becomes permanent, and the condition of the workers will continually worsen. Such a crisis is barbarism!

Today, half the workers in the great industrial countries are unemployed and the enormous increase of exploitation does not compensate for the smaller number of workers employed; and still there is no other way for capitalism but continuous attacks on the workers. The general, absolute and permanent pauperisation of the workers has become an absolute necessity to the existence of capitalist society. Thus, according to Marx, the final and most important consequence of capitalist accumulation and the final reason for every real crisis is the poverty and the misery of the broad masses, in contradiction to the essential driving force of capitalism to develop the productive forces to such an extent that only the absolute consumption possibilities of society be its barrier. Under such conditions, the bourgeoisie can rule no longer, since, as the "Communist Manifesto" pointed out, "it is unfit to rule because it is incompetent to assure an existence to its slaves within his slavery, because it cannot help letting him sink into such a state that it has to feed him, instead of being fed by him".

The analysis of capitalist accumulation ends, as Marx said in a letter to Engels: "In the class struggle as a finale in which is found the solution of the whole smear!" In the phase of accumulation where the further existence of the system is only based on the absolute pauperisation of the workers, the class struggle is transformed. From a struggle over wages, hours and working conditions or relief, it becomes, even as it fights for those things, a struggle for the overthrow of the capitalist system of production – a struggle for proletarian revolution.

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