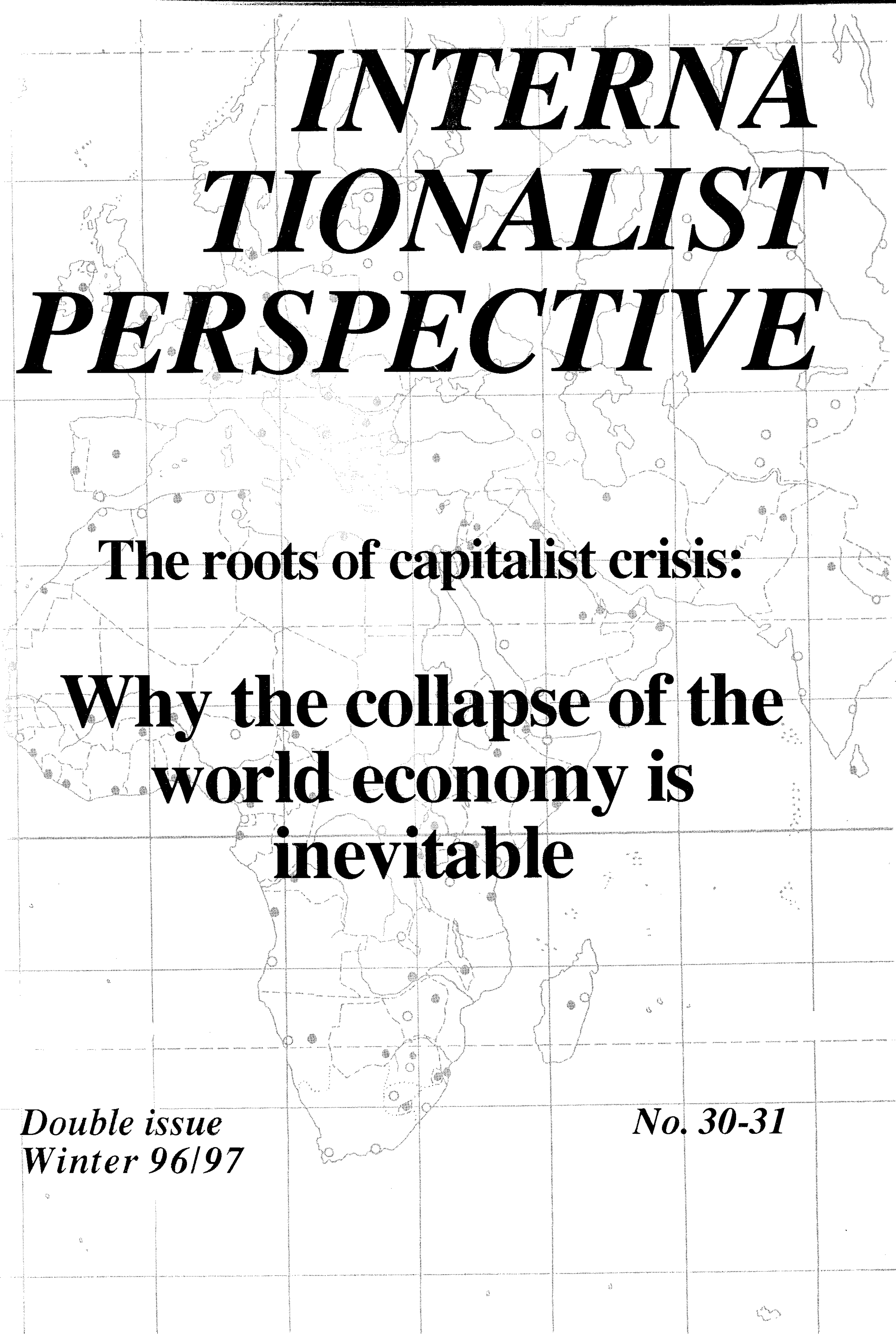
# INTERNATIONALIST PERSPECTIVE



## The roots of capitalist crisis:

# Why the collapse of the world economy is inevitable

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# EDITORIAL

In *Internationalist Perspective* no.29, we saluted the social movements of November-December 1995 in France, and asserted that they indicated the end of a period of downturn in worker's struggles (1984-1994), that they were the sign of a new combativity on the part of the working class. For us, to speak of a "new period" is essentially a matter of pointing out the break with the social apathy which had characterized the downturn in the class struggle in the recent period. It is not a matter of short term prognostications of a generalization of class struggle, nor of a spectacular renewal of working class combativity.

Nonetheless, the term "new period" could lead to confusion because to many it is indicative of a fundamental shift, a transformation, in the historic course. For us, there is no question of asserting the opening of a "new historic period of class confrontations," with a perspective of the outbreak of generalized social conflicts. Rather, for us, the struggles of Autumn '95 are inscribed in the historic course opened up by May '68. The struggles of Autumn '95 interrupted a phase of relative calm, and reactualized the notion of solidarity between diverse sectors of the working class; they showed that the power of collective action was not dead within our class, basically expressing the appearance of a change of attitude within the working class, a new combativity.

Ten years of downturn in struggle, of peaceful acceptance of austerity policies, thus came to an end. A new will appeared within the working class, breaking with its previous paralysis. The Autumn '95 struggles made clear that capitalist exploitation was the same everywhere. They occurred as part of a series of social movements throughout the world; they thereby indicated a general current of determined opposition by the international working class to the austerity policies dictated by the bourgeoisie, pointing up certain hesitations within the ruling teams of the bourgeoisie itself. This basic assertion of a new state of mind within the working class does not mean any kind of triumphalism, but rather simply indicates the opening of a new situation, one favorable to the development of the class struggle.

In our analysis of December 1995, on the basis of the French example, which was the most radical expression of the ongoing movement, we emphasized three aspects in order to grasp the change which had occurred: a rejection by the workers of the austerity policies imposed by the bourgeoisie; a renewed combativity within the working class; a scepticism towards the the political discourse of the ruling class. However, these positive elements in our analysis must not obscure the weaknesses still present in the movement, in particular the tailending of the unions, and the difficulty in developing a truly autonomous class movement.

In 1996, there have been no social jolts, no new massive struggles. However, throughout the year social agitation has continued in numerous countries, clearly demonstrating the non-acceptance of austerity policies by the workers. Open struggles against austerity measures have continued in the industrialized countries, while certain Third World countries have seen important social movements.

It is possible to make a long list of struggles. In France, there have been strikes at the Banque de France and at France-Telecom. In Marseille, in March, street car drivers renewed their struggle to protest against the loss of wages because of the 1995 strikes. The movement paralyzed Marseille for several weeks, forcing the bourgeoisie to threaten a lock-out. In Bucarest, Romania, public transport was paralyzed for 11 days, leading the bourgeoisie to use force against the strikers. In the US as well, the working class has engaged in struggle, one example being the 17 day strike at GM, which shut down 26 of the companies 29 factories. In Russia, thousands of miners went on strike, despite the images of repression in Chetchenia. In Great Britain, the post office, the railroads, and the Liverpool docks, all experienced strikes. Popular explosions against the rigors of abusive taxation occurred in Jordan, South Africa, Morocco, and in the working class suburbs of Teheran, Iran.

This list, which is far from exhaustive, is the sign of an unstable social situation, indicative of a movement of general discontent, of a breakdown of consensus, even if not reaching the level of the struggles of November-December 1995. These diverse struggles cannot be compared individually to the French Autumn of '95, but they nonetheless indicate a convergence, a general dynamic of rejection of austerity, even while they contain manifest weaknesses, such as control by the unions, and lack of generalization.

Some of these struggles are of particular importance. Thus, at the end of June, in Germany, more than a hundred thousand workers went on strike to protest against the proposed budget cuts of the German government. From an intransigeant position in December vis-a-vis the renegotiation of the social pact, the German employers had to agree to open up eveything to negotiations, and finally refuse to agree to a jobs guarantee. Thus, for the first time in many years, social peace is not assured in Germany.

Clearly, the state of mind within the working class has changed. This change can also be seen within the ranks of the representatives of the political, moral, and ideological order of the bourgeoisie. This, together with the rapid development in the number of the unemployed, could not fail to have an impact on the state of the class struggle. In Belgium, teachers (on strike for many months) and students, attacked the headquarters of the Socialist party on several occasions. The growing awareness of the proletarianization of the teaching body is but one more sign of the change of which we have been speaking. These confrontations illustrate the growing discredit of the ruling class, and reveal fissures in the wall of ideological mystification generated by the state apparatus. At the very least, this is indicative of a tendency which forces the bourgeoisie to react.

A new situation has also arisen in Belgium where, confronted by the miscarriage of justice revealed by the case of the paedophile, Dutroux, the working class reacted spontaneously by work stoppages and demonstrations in the principal industrial centres of the country. These reactions are important because they manifest a quantum leap in the insecurity engendered by the putrefaction of the bourgeois state, by the profound crisis afflicting the political system; they illustrate the divorce between the working class and the democratic state. It is a new situation because the working class has taken the initiative, clearly expressing its distrust of the game of bourgeois politics. Such a situation does not leave the bourgeoisie indifferent. Faced with the loss of credibility of its judicial apparatus, it needs to shed its old corrupt image, hoping for a new lease on life by appointing ‘honest judges’. The result is a series of ‘scandals’ by which -- under the media spotlight -- the bourgeoisie seeks to eliminate the ‘mafioso’ elements from the state apparatus. This well publicized operation seeks to win new credibility for the political apparatus, and to remobilize the populace behind democracy; but it also brings to the forefront populist currents ill-equipped to handle the necessities of a centralized administration of the capitalist economy.

In terms of the adaptation of the bourgeoisie to the changing conditions of the world market, what stands out is the strengthening of the processes of globalization, whereby the ruling class attempts to overcome localized resistance to the necessary alteration of the economic circuits (e.g. the establishment of a single currency for the European Community, creation of a centralized banking system on an international level, strengthening the circuits of free exchange). At the same time, it is increasingly clear that the bourgeoisie is also streamlining its measures of repression (such as the internationalization of police operations, strengthening of controls on immigration in Belgium, France, Germany, Switzerland, the US). This tendency is not new in itself, but it illustrates an unavoidable reality of the crisis: the more and more manifest impossibility for capitalism at the end of the twentieth century to integrate new laboring strata into the process of production, and the preparation of the bourgeoisie for the ineluctable class confrontations.

With the Autumn '95 strikes in France, and the continuation of worker's struggles this past year, a new situation has therefore been created. It is not a situation which is characterized so much by the number of new struggles, as by the spirit of the reactions registered within the working class: reactions of refusal, of disquiet vis a vis the future of capitalist society; reactions of distrust and suspicion of the political apparatus of the bourgeoisie. The workers are increasingly faced with the necessity to resist, not just to defend their wages, but also to be able to simply have the right to the bare elements of a decent life, to literally defend their children's future.

If the struggles of the past year have opened up a new perspective, it is also clear that they have remained characterized by illusions and weaknesses. To demand a more humane system of justice or the right to work is not enough. It is capitalism, with all of its perverse effects, that must be crushed. It is by engaging in class struggle, by organizing resistance in an autonomous manner, by generalizing and extending movements of struggle to all of the workers, that our strength can really be felt.

F.D.

October 1996

# THE ICC: ONE MORE STEP TOWARDS THE ABYSS

Two pages of number 256 of *Revolution Internationale* (May 1996) are devoted to the "defence of the revolutionary milieu." However, what the International Communist Current (ICC) terms 'defence', we consider to be a serious attack on that very same revolutionary milieu. In particular, we denounce the use of a concept, fraught with dangerous implications for the proletariat, namely, 'parasitism'. The manner in which this term has already been used by the ICC in its publications, and in the positions it has taken at its public meetings, shows that the link between parasitism and the bourgeoisie is clearly asserted. Its use of the term is one more example of the ICC's political and theoretical degeneration.

In a resolution adopted by its congress, the ICC provides us with a definition of "parasitic groups":

> "What animates the activity and determines the existence of parasitic groups, is in no way the defence of the class principles of the proletariat, the clarification of political positions, but at best the spirit of a sect or a "circle of friends," the affirmation of individualism and of its individuality vis-a-vis the proletarian milieu. For that reason, the point of departure for a parasitic course leading to the foundation of a parasitic group is based on personal grievances, resentments, frustrations, and other mean-spirited preoccupations, the stale elements of a decomposing petty-bourgeois ideology without a future."

As a result, the ICC concludes, quite naturally, that such groups a not a part of the revolutionary milieu. Therefore, it is quite logical to find in this same resolution, the following assertion:

> "Finally, and above all, our organization has shown the specific role that the parasitic milieu plays today as an instrument for the bourgeoisie's attack on the proletarian political milieu."

Thus, in line with these ideas, the ICC has launched a campaign of public denunciation of some of its former comrades, following the logic of the Stalinist purges.

At the time of its own formation, and the elaboration of its theoretical arsenal, the ICC had developed the idea of "class lines." For it, this totality of political positions clearly defined who belonged to the revolutionary camp, and who to that of the class enemy. This distinction has always been, and today remains fundamental, for the working class and the development of its consciousness, as well as for the processes which will lead to the creation of a class party. These class lines, therefore, define the contours of a revolutionary milieu, within which a confrontation between antagonistic positions, a theoretical deepening, and an eventual common intervention within class movements, can occur. These three elements are vital to the process of development of the class consciousness of the proletariat.

Little by little, however, this concept of "class lines" has become, for the ICC, a purely theoretical idea, while in practice, for it, other criteria shape the debate within the revolutionary milieu, and within the ICC itself. Thus, in 1984 the characterization of ideas, and organizations, as 'centrist' or 'opportunist' was reintroduced into the revolutionary milieu by the ICC. These terms, these designations for political currents, whatever they had been historically, became for the ICC types of *behaviour*. Thus, militants accused of 'hesitation' or 'oscillation' were designated as centrists. Political organizations which had openly betrayed the revolutionary camp were redefined as hesitant or oscillating - not counter-revolutionary - on the grounds that they still counted revolutionaries in their midst. The German USPD thereby re-aquired the status as a proletarian group thanks to the magic of the ICC's own historical revisionism. This surrender of political criteria, by the ICC, can be explained by the degeneration and sclerosis which afflicted that organization, little by little replacing theoretical activity and political analyses by subjectivity and psychological analyses. Already, in June 1985, several months before our own expulsion from the ICC, our comrade, M. Lazare, wrote:

> "Two methods confront one another: historical materialism and the ideological method of political psychology. That the ICC has begun to abandon the first in favor of the second in the debate is serious; that it implicitly formalize this by a change in its platform would be much more so. These methods have implications on all levels, and the direct influence of the ideological method is already clear, both at the general theoretical level, and in the analysis of the present situation." (Text published in *IP* no. 3)

This diagnosis has proven itself to be all too correct with respect to the implications of the ICC's method for its political analyses. Today, the ICC is an organization totally cut off from reality, incapable of recognizing the movements of its own class, solely fixated on the Machiavellian strategies and conspiracies of a bourgeoisie in full decomposition. In particular, when in the Autumn of '95 the French working class unleashed its most important strike movement since May '68, the ICC denounced the movement, seeing in it only a vast undertaking of trade union provocation. The ICC thereby demonstrated its total incapacity to grasp reality, to provide a sound analysis and, what is still worse, orchestrated an intervention which went counter to the development of the potential of that movement, and, therefore, of the general interests of the proletariat itself.

In such a context, where the revolutionary milieu is experiencing a crisis, one of whose principal causes is its lack of theoretical tools, political debate and analysis must constitute a permanent and overriding concern for every revolutionary. Nonetheless, far removed from such a preoccupation, the ICC can no longer even envisage such a debate. Whether in their press, vis-a-vis their old comrades, or in their interventions at public meetings, the militants of the ICC make no other "contribution" than programmed reiterations of the correctness of their positions and a systematic denunciation of any divergent analysis, culminating in a call for the pure and simple disappearance of opposing organizations. As a result, we can only conclude that the ICC has excluded itself from all political debate.

Today, throughout the world, the proletariat is rediscovering the path of class struggle. This path is marked by the difficulty of providing itself with a clear perspective. In that context, the revolutionary milieu has an important role to play, by virtue of its capacity to offer the class a global perspective on the present situation, and of the historic stakes that flow from it. We can, therefore, only denounce the inquisitorial practices of the ICC which are in direct opposition to the historic interests of the proletariat; practices consonant with a sect only concerned with the defence of its own existence, rather than being driven by the need to reflect on the general political situation and to intervene in the life of the working class.

Rose

# REPLY TO COMMENTS ON THE BOOK

# ‘*COMMUNISM HAS NOT YET BEGUN*’

In our last issue (*IP*#29) we published a review of Claude Bitot's new book "*Communism has not yet begun*". The following text is his response. In our view, it does not invalidate our critique but it does confirm that there are disagreements between us. However, we won't respond to his remarks directly. Rather than pursuing this debate in a ping-pong fashion, we aim for a deeper, more theoretical effort. Concerning the crisis of capitalism, its causes and mechanisms, we think that the reader will find many answers to the issues raised by Claude Bitot in the text by Sander, of which the two first parts are published in this issue. We will come back to other aspects discussed by Bitot in future articles. As usual, we invite all readers interested in this debate to write a contribution, which we will publish when possible.

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Thanks for reviewing my book. I think the book itself answers most of your critiques, so I will not attempt to refute them all in another long text. I will limit myself to rectifying the positions which Adele has erroneously attributed to me or which she has misrepresented because she didn't understand what I meant.

On page 16 of *IP*#29 it is stated that in my view, "a catastrophic crisis begins in the ‘70s". I don't say that. In my periodisation, capitalism entered the final phase of its historical cycle, but so far this is not yet catastrophic for capitalism. On page 194 I write:

> "Whatever time it will take before this catastrophic evolution is verified, capitalism has clearly entered the end of its historical cycle."

On page 17 of IP, it is said: "But CB's argument is based o a false premiss: the idea that there is an absolute limit, a point beyond which capitalism can no longer develop its productive forces." This argument doesn't come from me but from Marx, who writes: "A social formation never disappears before all the productive forces are developed which it is large enough to contain." (Preface to Critique of Political Economy, 1859) Or also:

> "The real barrier of capitalist production is capital itself. It is that capital and its self-expansion appear as the starting and the closing point" (Capital, volume 3, p.250) If capital had no economic limit, it would be eternal, as bourgeois economists pretend; it would be "the impassable and inevitable horizon of humanity" as they say these days.

On page 17 it is said that in my view the crisis of 1929 was solely overcome through "mass consumption". But I don't limit myself to that. On page 175 of my book, I write:

> "It is precisely by developing mass consumption that the capitalist system could overcome the catastrophic crisis of 1929. It made it at the same time possible to relaunch the sector of the production goods, because the expansion of the sector of the consumption goods triggered new demand for machines and infrastructure."

Furthermore, IP claims that I don't say a word on the policies of large "public works". Yet on page 148, I write:

> "More or less inspired by Keynes, the state becomes a direct economic agent (through its program of "public works" and its support for the unemployed) to raise "the global demand" in order to relaunch the economy."

Still on page 17, IP makes me say that the crisis of 1929 was "a crisis of profit" which was solved by increased mass consumption, which makes it possible to find my analysis "absurd":

> "To develop the consumption capacity of the working class by increasing its wages, means only to increase the paid labor (wages) at the expense of the unpaid labor (profit). It's hard to see how this could resolve the crisis of profit." (p.18)

But nowhere do I say that the crisis of 1929 was "a crisis of profit". On page 147 of my book, I explain that this crisis was caused by the saturation of the market, due to the fact that the demand was essentially limited to sector I (means of production) while sector II (means of consumption) was limited by the consumption of luxury goods by the capitalists and by the wages of workers. On p.174 I return to the crisis of 1929 and its deeper cause to conclude with Marx: "the ultimate reason for all real crises always remains the poverty and restricted consumption of the masses..." After 1929, this consumption increases, but I'm careful to point out, on p.175:

> "On the other hand, to prevent an excessive reduction of profits, these measures require an increased growth of productivity; in other words, the part of profit creamed off must be compensated by a more intense exploitation of the working class whose productivity ceaselessly grows: starting in the thirties, there is a generalisation of Taylorism, of piece-work and assembly lines."

That's what's been called ‘Fordism’: the increase of mass consumption in exchange for the increased production of surplus value, which partially counterbalances the fall of the rate of profit.

I write indeed that 1974-75 was a crisis of profitability of capital and, on p.176, I list its causes:

1. the decline of the growth of productivity since the middle of the sixties, due to the resistance of the workers (absenteeism, strikes against the work pace and so on) which causes a loss of relative surplus value for capital;

2. excessive expenditures by the state, financed by high taxation which erodes the profits of capital;

3. the increase of unproductive employment which must be paid by a transfer of a part of the surplus value of the productive capital to the unproductive sector.

I conclude that this shows the bankruptcy of ‘the Keynesian model’, which forces capitalism to return, little by little, to its classic, liberal model and thus to wage austerity. That doesn't mean that "the working class now consumes too much", as *IP* writes on p.18. The decline of wages (which can go below their value) is part of the methods of capital to check momentarily the growing and historic fall of its profit-rate. It can't be denied that in the Anglo-Saxon countries, where real wages have gone down by about 20%, the crisis of profit has been partially overcome. In Europe, and in Germany where wages are especially high, this is far from the case. Hence the permanent marasmus. That doesn't mean that this crisis of profit won't be partially overcome there too. But, like I wrote on p.195, that doesn't mean that capitalism will be out of the woods: "It will find itself facing the old problem of overproduction, which it thought to have solved since 1945; otherwise said, it will jump out of the frying pan of production into the fire of the market." Hence the return to periodic, ever more severe, crises of which the one of 1991-93 was but a mild foretaste."

On page 19, my position on the Bolshevik revolution is clearly misunderstood: I'm credited with the idea that the proletarian takeover in October 1917 should not have been done. I know very well that history doesn't obey such recommendations. Marx warned in 1870 that Paris Commune would be "a desperate folly", but that didn't prevent the Commune from becoming reality in 1871. We should, however, note that in contrast to the Commune, which came about in a mostly spontaneous and improved way, the armed insurrection of October 1917 was lead by the Bolshevik Central Committee and by Lenin in particular (in other words, by a small minority). It is not at all certain that it would have taken place without their organised initiative. But whatever the case may be - since it failed - we must look for the causes of this failure. I think that the socialist revolution couldn't succeed, neither on a national, nor on an international scale. I get faulted for "an attempt to rationalize the defeat after the event" (p.19) How about that! When one draws lessons isn't it always after the event? One should at least use the advantage of hindsight to discern the deeper causes of the failure. That's what Marx did, ten years after the Commune, in his letter to Domela Nieuwenhuis. But, once again, it wasn't my intent to say, after the event, that the insurrection shouldn't have taken place. Even if in theory one can always say this, in practice it doesn't work that way, a revolution isn't something which can be set in motion by pushing a button; too bad if it's doomed, objectively speaking, to crack its skull in the hard contact with reality, or to have catastrophic consequences such as the Bolshevik insurrection giving way to Stalinism!

Also on p.19, it's claimed that I think that "the necessary conditions (for revolution) will be assembled when the absolute pauperisation of the working class reaches the depths of the worst conditions of the 19th century." On page 191 and following, I speak only of "a generalized social regression". As for the absolute pauperisation which I do indeed mention, it seems to me that capitalism today is indeed going in that direction. Whether the proletariat will accept a return to living conditions comparable to the 19th century, is another story, and which I don't discuss. But I do note that, in order to avoid such a situation, it will need the force to challenge capitalism. It won't be enough to resist within the framework of the system, otherwise it's very likely that this absolute pauperisation will occur.

To conclude, a general remark. On page 16, it is recognized that "with this book, CB brings a Marxist view of history, written in a clear and precise language, within everybody's reach." Yet further (on page 18), it is stated that "CB gives us a view of history that seems to come straight out a novel". You have to decide! Either I'm a Marxist, or I'm a novelist! On balance, you think I'm the latter, since you feel you have to give me a lesson in Marxism: "Marxism has always explained society's great events on the basis of the developments of the productive forces and not on the base of the mindset of individuals, as reactionary as they may be." Yet two pages further, I learn that my "hyper-determinism cannot explain the major events of this century". So, after being "Marxist", then "a novelist", now I'm a "hyper-determinist". I must have written a Marxist novel with a hyper-determinist tendency...But enough nonsense. It doesn't serve any purpose to call A. Mayer "bourgeois" (p.18) or to call me a "novelist" or "hyper-determinist" because our view of the history of the 20th century, which is not identical but parallel, does not conform to your ideology of capitalism's 'decadence' since 1914. With 'the thirty years war' of the 20th century (1914-1945), I have precisely explained the events "on the basis of the developments of the productive forces": they result from the transition of a largely formal domination of capital to its real domination on all levels (not just economic but also social, ideological and cultural) This transition occurred through a whole process of wars, revolutions, counter-revolutions, class struggles putting all the nations and all classes of European societies up against the wall. It's your cycle of "crisis-war-reconstruction" which doesn't hold water: it is now 50 years since the last war finished and the "reconstruction" has been over for a long time so, according to the 'logic' of your cycle, a new world war should have already taken place!

Claude Bitot

# THE ROOTS OF CAPITALIST CRISIS

# Why the collapse of the world economy is inevitable

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## Introduction

> "All science would be superfluous if the outward appearance and the essence of things directly coincided." (Marx)

For the learned economists of universities, governments and think tanks, the unstoppable slide of the world economy towards chaos and turmoil seems to take place in a dense mist. They are all experts in describing and measuring what is right in front of their noses but, for the total picture, they don't have a clue. The mist was less dense for the ‘classic’ bourgeois economists of the eighteenth and early nineteenth century like Smith and Ricardo, who were not afraid to probe the fundamental mechanisms of the system that was growing before their eyes. Today, that system is no longer enjoying a healthy expansion but is bogged down in structural crisis.

For today's bourgeois economists, the fundamental questions have become too frightening. What distinguished the ‘classic’ economists from their epigones is that they dared to look at the economy as a whole, as one integrated system. It was through the study of the totality that they gained insight in its parts. For today's bourgeois economists, that viewpoint has become too frightening. They study the parts, but because they run away from the analysis of the totality, they fail miserably even at that. With their vision limited by the blinkers of the competitive class interests they serve, they can only raise questions such as how to compete better, how to gain wider markets, how to cut costs here and there. They try to impress us with statistics and computer models but then complain that it's the fault of today's world's complexity, not of their methods, that all their forecasts are unreliable. As for the solution to today's structural crisis, they shout with one voice that the growth rate of productivity must increase, but admit with refreshing honesty that they don't really know what made it stagnate in the first place. Clearly, for them it would sound as a total absurdity to say that this very productivity was not only the cause of capitalism's phenomenal success in transforming the world and creating ever more wealth, but also the cause of its decay and insoluble crisis.

That view was Karl Marx's whose ideas are supposedly forever condemned by the collapse of the Eastern Bloc, even though the only connection between the regimes there and Marx was that they usurped his name and legacy. To find a cogent explanation of the world economy's crisis, Marx's work is still the only possible point of departure.

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It is not the stagnation of productivity that causes capitalism's crisis but the other way around: capitalism's crisis turns the potential bounty of the productive forces into a nightmare. Productivity is higher than ever and, with the rapid development of information technology, there is no technical reason why it couldn't rise faster than at any time since the industrial revolution. Capitalism's apologists, who pretend that the present economic dislocations are merely the birth-pangs of a new era of rapid capitalist development, blabber like excited children about the global transformation of life and work that becomes possible. But what we see instead is a world economy in which a large part of mankind must scratch out a living with primitive production methods, in which an ever larger part is excluded from productive activity altogether, and in which even the most developed part of the economy grows anaemically - if at all - and more and more human needs are unmet.

Why, if the technological potential is so great, do we see more and more hunger, homelessness, epidemics, decay, violence and despair? Why are we moving closer, not to some promised land, but to global catastrophe? We have the wings to fly and yet we're afraid to leave the path that leads straight to the abyss.

It's true that this path has led to progress. Productivity has grown throughout capitalism's history. Capitalism lays claim to humanity's continued servitude because it has succeeded better than any other mode of production in developing the means to produce what humans need. But while it boasts that it is the most efficient, indeed the only possible, method to satisfy our needs in this era that is not its purpose. It justifies its existence on the base of its capacity to produce the use values we need but, for capitalism, the production of use values is only the means to produce exchange value. That use value and exchange value are not the same is clearly demonstrated by the wide gap between the ever greater know-how and resources to meet human needs, and the ever larger number of needs that are not met. The first expresses a growing capacity to expand use values, the second a growing incapacity to expand exchange value. The second blocks the first because, in capitalism, the growth of use values is but a by-product of the growth of exchange value. Capitalist production cannot exist without the growth of exchange value. If the exchange value of what is produced and sold is not higher than the exchange value of the labour and materials consumed in production then there is no profit and thus no reason to produce.

Exchange value, as classic economists such as Adam Smith discovered, is based on the labour power used in production. But the continuous growth of productivity implies that ever more can be produced with ever less human labour. Commodities become cheaper and more abundant since the same quantity of use values contains ever less exchange value. But that also means that ever more use values must be produced to obtain the same quantity of exchange values. This has two important implications which explain why capitalist production must break down.

First, capitalist production assures the growth of exchange value because the exchange value of the labour power that it buys with wages, is lower than the exchange value of the product of this labour power. The difference is surplus value, the unpaid part of the labour power used in production, the source of the capitalist's profit. But the more the overall labour power in production declines as a result of growth in productivity, the more its unpaid part declines and thus the more the rate of profit tends to fall.

Second, it is not enough that exchange value grows in production, this expanded exchange value must also be realised. In the form of unsold goods, it loses its value. But selling it is not enough either. Artificial demand can be created easily. But for production to continue and expand, the bulk of the product must be exchanged in such a way that the wheels of production continue to turn. Exchange value must return into the production process and it can only do so if it takes the form of the use values that make production possible: infrastructure, tools, raw materials and means of living for the producers. So it is the market for the use values productively consumed that must expand fast enough to make the completion of the cycle of exchange value possible. This market must expand at an ever-faster rate, because the rise of productivity implies that the same quantity of exchange value is embodied in an ever larger quantity of use values. But the rise of productivity also implies the decline of the use of labour power in production and therefore a relative decline in the number of producers. So the market for the use values consumed by producers must decline too, along with the market for the means of production that are used to produce these use values. But is precisely these markets which must grow ever more rapidly to make the expansion of exchange value possible.

These two fundamental and insoluble contradictions - the tendential fall of the rate of profit and the growing rift between production and productive consumption - and their interaction are the subject of this text. InPart One, we analyse the tendendial fall of the rate of profit. We will see that this fall is inevitable, because the disease and its apparent cure are identical. The rise of productivity reduces the use of labour power in production and thereby pushes down the average rate of profit; yet every capitalist tries to escape from this downward trend by raising productivity, to lower his production costs under the average and so obtain a surplus profit - and, over time, causing a further decline of the average rate.

We shall show that no compensation for, or tempering of, the fall in the rate of profit is achieved either by the increase in the absolute mass of profit, or by the apparent cheapening of the components of the production process, or by the growth of stock-capital. We shall study in some detail the real counter-tendencies which slow (and at times arrest) the fall of the rate of profit, and their limitations. We shall also show why the fall of the rate of profit in itself does not cause a global breakdown of capitalist production, which can only be understood through the interaction of capital's twin economic contradictions. We shall analyze the mistakes of the influential theory of Grossmann-Mattick, (which denies the second contradiction yet fails to understand the first), a theory based on false assumptions and that cannot explain reality

In Part Two, we shall examine the second contradiction, caused by the barrier on capital's market, imposed by its own relations of production. We shall explain why this does not just mean a lack of ‘effective demand’ and why this contradiction cannot be solved by increasing the consumption of workers, capitalists or others. We shall explain why the market contradiction is neither static nor permanent and will demonstrate (both on empirical and theoretical grounds) why the static theory of Rosa Luxemburg, who thought that the market contradiction is triggered by the disappearance of extra-capitalist markets, is based on errors.

Because of the limitations of space, the text ends at that point in this issue of *IP*. In Part Three, to be published in the next issue, we shall continue our analysis of the market contradiction. We shall show why the conflict between exchange value and use value is not solved by the difference in the accumulation-rates and thus in the proportions of the different sectors of production; on the contrary, these (dis)proportions are themselves influenced by this conflict. We shall analyze how, when the fall of the rate of profit has created the conditions, the market contradiction leads to the global breakdown of capitalist production.

Finally, in Part Four, we shall examine more concretely how the two contradictions have developed and interacted, from the industrial revolution to the present-day dead-end. We shall analyze the role of war, reconstruction and the expansion of capitalism's terrain of action, as well as the unfolding of the crisis today.

One final note. Although this text could not have been written without the input of other comrades in IP, it is signed individually. This debate is far from finished in our group and we hope that others in the revolutionary milieu will participate in it. No-one can deny that the subject is of vital importance if we want to develop the clarity and coherence we need in order to play our role in the coming, decisive battles. Those who dismiss this concern as ‘academic’, those who reject this contribution because it threatens their sectarian dogmas, prove only that they haven't understood this role at all.

# Part One

# The inevitable fall in the rate of profit

## ITS CAUSE: THE LAW OF VALUE

For capitalists, all is well when they make a sufficient profit. When the growth of the capitalist economy is impeded, the reason is always a lack of profit. But before we examine what undermines the profit-rate, we must recall where profit comes from. The easy answer is: from a successful sale. But that begs the question: how are commodities exchanged? How is the value of something determined when it is bought or sold? By the laws of supply and demand, the bourgeois economists answer. And indeed, it's easy to see that, when the demand for a commodity exceeds its supply, its price rises; and that it falls when the supply exceeds the demand. But the market always tends to bring supply and demand into balance. The rising price of a commodity that is short in supply will attract capital for its production, which conversely will move away from the production of commodities whose prices are falling because of oversupply. Besides, the price-oscillations caused by temporary imbalances in supply and demand tend to cancel each other out: when purchasing power remains unchanged, the increased demand and rising price of one commodity causes the declining demand and price of others. When demand and supply are in balance, they cease to explain anything.

Yet the fact that commodities can be exchanged means that they can be compared in value to each other. They can be compared because they have something in common. One thing they have in common is use-value: they must be desirable. But use-value is quite distinct from exchange-value. Air, for instance, has use-value but no exchange-value, although with the increase of air pollution, it may one day become an object of trade too (1). When people produced things for themselves without trading, their products had a use-value but no exchange-value. In communism, when the satisfaction of human needs is the sole purpose of production, there will be use-value but no exchange-value. But from the time when communities produced enough to start trading with each other, and until humans can produce enough for all and have adapted their society to this new reality, exchange-value (value for short) has and will rule the market. But trade can't be based on use-value alone: how do you compare the use-value of a bread and a knife? When you discount the wins and losses resulting from salesmanship and fluctuations in supply and demand, there can be only one basis for trade: the fact that, besides having a use-value, commodities have his in common: they all are products of labour. They all contain a certain amount of labour-power necessary to produce them. That's what determines their exchange-value and makes it possible to compare and trade them. If, on a given market, commodity A is the result of 10 hours of labour and commodity B is the result of 1 hour of labour, commodity A will be worth 10 commodities B. Provided, of course, that these commodities contain the amount of labour time that is the average needed for their production for that particular market. If a producer needs more time than the social average to make a commodity, he will be unable to recover in its sale part of the value he has put into it. Conversely, if a producer needs less time than the social average to make a particular commodity, he can sell it for more than the value he put into it, and pocket an extra profit.

Each commodity, of course, contains not only the value of the labour-power of the last producer who worked on it, but also the value of the labour of all producers who contributed to its different stages. The exchange-value of each bread, for instance, does not only contain the value of the labour that the baker devoted to it, but also the value of labour contributed by the miller, the farmer, the carpenter who built the mill, the mason who built the oven, the trucker who transported the ingredients, etc. For the last producer, the baker, all the past labour of the other contributing producers appear only as costs to himself which he has to transfer to his customers.

If the world consisted only of direct producers like the baker and the miller and the farmer, it would never have known the stupendous productivity which capitalism made possible. The big difference between capitalism and all previous economic systems is the existence of a very particular commodity: labour-power, that can be freely bought and sold. The market value of this commodity is determined in the same way as of any other: by the socially average labour time necessary to produce it. To keep a worker productive, he must receive food, clothing, a dwelling, medical care and certain other necessities that may vary according to cultural conditions and the stage of development of society. The socially average labour time needed to produce these necessities determine the value of his labour-power and hence his wage. But the capitalist does not hire him for the sake of creating employment. He only does so because the value of the labour-power which he buys from the worker, is higher than the value of what he returns to the worker in the form of wages. The difference is the surplus-value, the sole source of the capitalist's profit.

Doesn't his machinery create profit too? No. It certainly adds value to the product, but only the value of the past labour that it already contains. The value of the machinery doesn't increase during the production process, it is simply transferred to the product. Equipment which has a lifespan of ten years will have lost half its value in five years but the other half will be transferred into the commodities produced in the meantime. That's why the machinery, infrastructure and raw materials used in production are called ‘constant capital’. The labour-power bought with wages is called ‘variable capital’, because it is this capital which increases the value of the output over the value of the total capital advanced for its production. If there were such a thing as a fully automated plant, requiring no human labour whatsoever in the entire production process, then the value of the production of this plant would be exactly equal to the value of the plant itself and of the raw materials consumed in production. There is no reason why the output of this plant would be worth anything more, since no labour is added, no additional costs would be incurred during production. Hence, there would also be no surplus-value, no profit. (Actually, the profit of the owner of such a plant would be huge - but only because of his cost advantage over his competitors. The source of his profit would be surplus-value extracted by them and it would disappear if they all possessed such a wonderful plant too - but we'll get to that in a minute).

When he sells his products, the capitalist recovers the value of the capital he invested to make them (and pockets the surplus-value). In theory, he can spend his profit any way he wants. But competition - and human ingenuity - won't let him. He has no choice but to constantly reinvest the bulk of his profits into the expansion of his productive apparatus. The reason is that, through the development of technology, new production methods constantly appear which make it possible to produce the same commodities cheaper, that is to say, using less labour.

The capitalist who introduces such a new production method, reaps a windfall profit - that's what motivates the constant search for new, more efficient technology. The cost of his constant capital increases, but that is more than offset by the increase of labour productivity made possible by his new production method. Since the market value of a commodity is determined by the socially average labour-power needed to produce it, and his new production method requires less labour-power, he can sell his products above the value they contain and pocket a surplus profit. Or, if he so chooses, he can sell them at their lower value to eliminate his competitors from the market. They then have no choice but to follow suit and incorporate in their turn the new production methods if they want to survive. And so it goes on and on. The productivity growth unleashed by this process, continuously cheapens all commodities, because they contain progressively less labour (inflation and added costs such as taxes, which we shall analyze later on, may mask this trend but do not alter it). But because labour-power (or at least the unpaid portion of it) is the source of profit, the rate of profit has the inevitable tendency to fall. The very thing which for the individual capitalist appears as the nearest source of an increase of his profits - the introduction of new, labour-saving technology - becomes for capitalist production as a whole, exactly the opposite.

> "It is likewise just another expression of the social productivity of labour, which is demonstrated precisely by the fact that the same number of labourers, in the same time (i.e., with less labour) convert an ever increasing quantity of raw and auxiliary material into products, thanks to the growing application of machinery and fixed capital in general. To this growing quantity of value of the constant capital -although indicating the growth of the real mass of use-values - corresponds a progressively cheapening of products. Every individual product, considered by itself, contains a smaller quantity of labour than it did on a lower level of production, when the capital invested in wages occupies a far greater place, compared to the capital invested in the means of production."(2)

Let's try to picture this more concretely. Imagine a factory where boats are made. The owner of the plant has invented $70 millions in machinery and infrastructure (called ‘fixed capital’) which needs to be replaced after a production cycle of say, 10 years. In this period his plant can process $30 millions worth of raw materials. His total investment in constant capital over the production cycle is thus $100 millions. In this period, he employs 10 million hours of labour time and he pays his workers 10 dollars an hour. His investment in variable capital is thus $100 millions, which brings his total investment for the production cycle to $200 millions. This results in the production of 1000 boats. His cost per boat is therefore $200 millions divided by 1000, or 200,000 dollars. The value of each boat is of course higher, because it also contains surplus-value, labour that was not paid for, the source of all profit. We'll come to that in a minute.

First, let's examine how the illusion that the source of profit is something else - i.e. technological change - comes into being and forces capitalism to attack its real source of profit. In his next production cycle, our boat-builder has the opportunity to invest in new, more efficient machinery which costs him $100 millions. He can now process twice as much raw materials in the same period, so its value doubles. His investment in constant capital has therefore increased to $160 millions. The increased scale of his production requires more labour, but the increase of variable capital must obviously be smaller than the increase of constant capital, otherwise his new equipment wouldn't save him any labour and wouldn't bring an increase in productivity, which is the reason why he makes the investment in the first place. So let's say his wage-costs increase to $110 millions. The new production cycle results in the manufacture of 2000 boats. Apparently, the capitalist has made a wise investment: his total production costs have only risen by 35% (to $270 millions) but his output has increased by 100%. His costs per boat have therefore gone down from $200,000 to $135,000.

If our boat-builder is the first of all the boat companies who compete on our given market, to use the new equipment, he has struck gold. Since his cost per boat is 65,000 dollars lower than that of his competitors, he reaps a surplus profit of the same amount. Or, if his expanded production has saturated the market, he can lower his surplus profit and sell considerably cheaper than his competitors to drive them out of the market.

But this advantage disappears to the degree that other boat-builders are making the same investment. It is totally gone when all boat companies have introduced the same improved equipment. Instead of reaping a windfall profit, his normal profit-rate now falls. Because he is now producing with relatively less labour, he also obtains less unpaid labour, hence he obtains less profit per unit of capital advanced. Every new production method creates such a cycle: first a phase in which it creates enormous profits for a happy few, then a phase in which these profits gradually decline but go to more capitalists, finally reaching the point where the profit-rate is lower than before for everybody. In the meantime, of course, other technological changes have engendered the same patterns which overlap the first, but which all move in the same historical direction, exacerbating this fundamental contradiction of the capitalist mode of production.

Let's see now what happens to our boat-builder's normal profits, assuming that his production methods are no better or no worse than average or, in other words, that the organic composition of his capital (the ratio of constant to variable capital he employs) is the average of the entire boat-industry in both cycles of production, so that, on the market, he neither has a competitive advantage nor disadvantage. In the first cycle, he has paid $100 millions for his constant capital to other capitalists. He has paid its value in toto: he has reimbursed the production costs of the producers of machinery and raw materials and has paid their profits too. The value of his constant capital did not increase during the production cycle: it was simply transferred over the course of the 10 years to the finished products, the 1000 boats.

The same is not true for variable capital, the labour-power. Here, the costs of the capitalist do not equal the value that is transferred over the course of the production cycle. He pays only a part of that and that part corresponds to the value of the necessities which the workers need to remain productive workers. The rest is unpaid, the surplus-value, source of his profit. Let's assume that in the first production cycle, the unpaid part of the value of the labour added during production, equals the paid part, the wages. That would mean that the workers have produced $100 millions of surplus-value in the first cycle; and, since we assumed that the organic composition of the plant is average, this will also be the amount of his profit. So he will make $100,000 profit on each boat.

Because of continuous development of productivity-raising technology, in each new production cycle, each worker sets in motion a progressively higher quantity of machinery and raw materials. So therefore, our boat-builder's constant capital grows much faster than his variable capital. Let's assume that in the second cycle, his additional investment in constant capital is 5 times higher than in additional workers; 10 times higher in the third cycle and so on. It doesn't take long before he runs into trouble. After investing in the second cycle ($150 millions in constant capital and $110 millions in wages), he still keeps a net profit of $40 millions, from his first cycle-revenue of $300 millions. But he barely breaks even after investing in the third cycle ($250 millions in constant capital and $120 millions in wages, with a second cycle-revenue of 150 c + 110v +110s or $370 millions). For the fourth cycle, he needs $400 millions to invest in constant capital and $130 millions for wages, but his revenue of the third cycle is only $490 millions ( 250 c + 120 v + 120s). He therefore faces a shortfall of $40 millions.

It goes without saying that the figures in this example are imaginary (the capitalist wouldn't have run into trouble so soon if his organic composition hadn't risen so fast or if we had taken into account the factors that counteract the falling rate of profit, which we'll discuss later). But the tendencies they express are not. They illustrate that:

- the rising productivity leads to a continuous devalorisation or cheapening of commodities: each commodity contains less wear and tear of machinery and infrastructure, cheaper raw materials, less wage costs and less surplus-value or profit;
- the value of these components of each commodity do not diminish equally: each commodity mirrors the organic composition of the capital employed in its production. Its value, therefore, expresses more and more that of the constant capital transferred during production, and less and less that of labour added during production;
- the capitalist process of production must also be a process of accumulation: with the development of production, an ever larger quantity of capital is required to employ the same, let alone increased amount of labour, and the faster productivity grows, the larger this quantity must be;
- the mass of profit grows in absolute terms, but the faster the organic composition grows the sooner it will fall short of the amount of surplus-value needed to maintain the rate of accumulation.

Capitalism isn't paralyzed when this occurs. Because of their competitive advantage, the stronger capitals still obtain the necessary surplus-value to continue their accumulation, but the weaker ones increasingly don't. The result is increasingly unequal development, a growing rift between the most developed capitals, and the others which are gradually driven from the market by the former, against whom they cannot compete. But the elimination of the weaker capitals, those which operate with a lower organic composition and which therefore infuse relatively more value into the world economy, inevitably exacerbates the falling rate of profit.

The fall of the rate of profit is of course a tendency, which dynamically interacts with capitalism's other contradictions, and which is slowed and at times even arrested by counteracting influences, which we will discuss further. But these counter-influences cannot alter the historic progression of the trend. The fall of the rate of profit is inevitable, because its cause and its apparent cure are identical. The more this cure (the hunt for surplus profits through rising productivity) is applied, the deadlier the disease becomes.

## THE FALL OF THE RATE OF PROFIT AND THE RISE OF THE MASS OF PROFIT

Precisely because of this paradox, the cause of the fall of the profit-rate is impossible to grasp for a capitalist. On the surface, as Marx noted, "it appears as if the capitalist adds less profit to the price of the individual commodity (...) and makes up for it through the greater number of commodities he produces."(3) Not only capitalists suffer from this illusion. Many Marxists have fallen prey to a vulgar distortion of Marx's theory which confuses the same appearances with the underlying reality. Thus, they declare that capitalism compensates "for the fall in the rate of profit (..) by a rise in the mass of profit, i.e. by producing and selling more commodities." (4) Or: "The decrease in value of the individual commodity is counterbalanced by the increase in the quantity of commodities, so that profitability of capital is maintained, despite falling prices." (5) And so on. The quotations are easy to find because the mistake is so common. The fact that those quoted above, while strongly disagreeing on other aspects of crisis theory, all accept the idea that the fall of the rate of profit is compensated or at least tempered by a rise of the mass of profit, caused by greater productivity, i.e. by the greater output of use-values, is quite remarkable. The more so because Marx himself explicitly criticized and even ridiculed this idea. (6).

Marx of course recognized that the mass of profit grows together with capitalism, but for him, this does not result from the growing volume of use-values, the unceasing capacity for "producing and selling more commodities". Yet this seems true. It's plain to see that, when a capitalist can increase his production faster than his production costs, his profit usually increases. It therefore seems as if his capacity to produce more is the cause of his good fortune. But in reality, the increase of his profit results from the competitive advantage he obtains by raising 'his' productivity over the average. For total capital, competition does not exist; the total profit is not influenced by competitive advantages, which affect only the way the total profit is divided among capitals. Therefore, for the amount of profit available to capitalism, it really doesn't matter in itself how large or small the volume of production is. This seems paradoxical, even absurd and that's why this is hard to understand. But the paradox, the absurdity, is in the capitalist system itself, which sinks deeper into crisis and turmoil to the degree it is more successful in increasing productivity and creating more wealth. This shows most clearly that its historic mission is completed and that it must be cast aside.

Let's return for a moment to our boat-builder, who can serve as a stand-in for capitalism as a whole, since we assumed that the organic composition of his capital, and therefore its productivity is average, so that his profit-rate, like the profit-rate of capitalism as a whole, is not changed by competition. In our example (first cycle), he produced 1000 boats with $100 million of constant capital and $100 million of variable capital. We assumed that half of the labour time was unpaid, or surplus-value. Because of his average organic composition, that equaled his profit. His profit per boat was 100 000 dollars. Let's now assume that this average organic composition does not result in the production of 1000 boats, but of 10 000 boats. His profit per boat now declines to only $ 10 000 but the mass of his profit remains exactly the same: $ 100 000. As long as his organic composition is average, it makes no difference whether the output is 1000, 10 000 or a zillion. "The mass of profit on the individual product decreases proportionately to the increase in the number of products. The mass of profit remains the same, but is distributed differently over the total amount of commodities" (7).

Profit has only one source, the surplus-value. For capitalism as a whole, the total mass of profit is equal to the total quantity of surplus-value and for the capitalist in our example too, because his average organic composition means he has no advantage or disadvantage over his competitors. As Marx noted time and again, "everything appears reversed in competition", so that, what occurs to individual capitalists masks what occurs to capital as a whole: the capitalist who expands his production through an increase of his organic composition makes more profit, the one who is lagging behind makes less. But they are just taking or losing surplus-value from and to each other. Therefore in the sum of all capitalists, the capitalist production as a whole, these competitive advantages and disadvantages cancel each other out and it gets exactly as much profit as there is surplus-value produced. And since surplus-value is the unpaid part of the labour used, its mass obviously is only a part of the whole, the total labour used in production, and this whole continuously declines in relation to the quantity of the whole of constant capital that needs to be replaced and expanded.

Marx spoke of "this double-edged law of a decrease in the rate of profit and a simultaneous increase in the absolute mass of profit, arising from the same causes" (8) because the same technological progress which reduces the use of labour-power in production relatively, also continuously enlarges capitalism's scale of production and thereby increases the absolute amount of labour-power in the production process. And when the total amount of labour-power in production grows, its unpaid portion (the surplus-value and hence the profit) grows too. It's therefore logical that the fall of the rate of profit goes together with a rise of the mass of profit, since they are different aspects of the same process. But rather than compensating or even tempering the fall of the rate of profit, the rise of the mass indicates that the problem has worsened. The mass of profit has increased because the mass of variable capital has increased. But its rate of increase is necessarily lower than the rate at which the constant capital has expanded. This expansion must be fed by profit, whose rate of growth continuously falls in relation to the rate of growth of the constant capital. A shortage of profit at some point is thus inevitable. Suppose this point is reached when the organic composition reaches a value-relation of 10 c (constant capital) to 1 v (variable capital). It makes no difference then, what the scale of production is at that point: a situation of 22 c + 20v, yielding 20 s (surplus-value) is just as bad as a situation of 100 c + 10 v yielding 10 s, although the mass of profit in the first is twice as large. But since it results from a rise of the organic composition, the rise of the mass of profit does not only fail to stop the fall of the rate of profit, it is also symptomatic for the latter's exacerbation.

Back to the boat-builder. We assume again that his organic composition is at all times average, so that his profit is not affected by competition. We must further ignore all other causes of increase of the mass of profit (which we will discuss further) to isolate the impact of expansion of production on the mass of profit. To speed things up, we assume that our producer can, with every new cycle, double his investment. Let's say that in the first cycle, his production costs amount to 250 (150c and 100 v), yielding 100 surplus-value. To double his investment, he must borrow 250-100-=150 (assuming, for simplicity's sake, that he can reinvest all his s). Let's say that the rise of the organic composition resulting from technological progress, requires that he invests now 70% of his capital in c and 30% in v, instead of the 60-40 ratio of the first cycle. He thus produces in his second cycle with 350 c and 150 v, obtaining 150 s. To double his investment in the third cycle, he must borrow 500-150 or 350. Because of the rise of the organic composition, he now invests 80% of his capital in c and 20% in v. He then produces with 800 c and 200 v, obtaining 200 s. To double his investment again, he then must borrow 1000-200, or 800. So, despite the growth of the mass of profit resulting from his expansion, his shortage of surplus-value grows from 150 % of his profit in the first cycle to 220 % in the second and 300 % in the third. In other words: the faster he expands, the deeper the hole he sinks into.

In the above example, the boat-builder can of course no longer serve as a stand-in for total capital, since the latter cannot borrow from an outside source of capital and therefore can't expand that fast. It can and does increase its overall debt-rate, but that affects only the way in which the surplus-value is divided between industrial and financial capital. If industrial capital raises its borrowing to invest more surplus-value than it has extracted, it will have less surplus-value available in the future, since it will have to deduct increased interest-payments from its profit. Unless the increase of debt is made possible by an accelerated printing of money, in which case all that is accomplished is a devaluation of money, the source of the borrowed capital is also surplus-value, realised in the past. Therefore, in the long run, capital can invest only as much surplus-value as it can extract.

Without the ability to borrow, the expansion of our boat-builder becomes necessarily much slower. Assuming the same rate of increase in the organic composition as in the above example, his 150 c + 100 v + 100 s in the first cycle, becomes 245 c + 105 v + 105 s in the second and 364 c + 91 v +91 s in the third. In the second cycle, his mass of profit rises while his rate of profit falls, but in the third, both the rate and the mass fall. This happens so quickly because we raised his organic composition so fast. We could temporarily solve the problem by slowing down the rate of increase of his organic composition, but that would only stretch out the same process over a longer time.

Marx noted that, the higher the organic composition becomes, the larger the investment in constant capital must become to prevent the mass of profit from falling, since "an ever larger quantity of capital is required to employ the same, let alone an increased amount of labour-power (...) If the variable capital forms just 1/6 of the total capital instead of the former 1/2, the total capital must be trebled to employ the same amount of labour-power. And if twice as much labour-power is to be employed, the total capital must increase six-fold" (9) So for the mass of profit to grow through expanding the scale of production, the total capital must not just grow, but it "must grow at a greater rate than the rate of profit falls" or, otherwise said, it must grow faster than the variable capital declines in relation to the total production costs. So, "if the variable portion of a capital equaling 100 should fall from 40 to 20, the total capital must rise higher than 200 to be able to employ a larger variable capital than 40." (9) That means that, in Marx's example, from a variable capital of 40, somehow a surplus-value of 100 must be squeezed, just to keep the mass of profit at the same level! And even more, when the organic composition increases further. How can this be done? The increase in the organic composition means both a deceleration in the growth of the variable capital and thus of surplus-value and profit, and an acceleration in the growth of the surplus-value needed to prevent the variable capital and thus also the surplus-value and profit from declining absolutely. This contradiction shows that, over time, it becomes impossible for capital to maintain an expansion that supports a continued absolute growth of variable capital and therefore of profit.

Yet reality shows otherwise. Outside of periods of crisis (which we will analyse in the last part of this text) the working class, i.e. the variable capital, has continued to grow, even if at a slowing rate. Given the rise of the organic composition, the corresponding much larger expansion of constant capital occurred therefore also, despite the declining profit-rate. How could the mass of profit grow enough to accomplish this? That this expansion was possible, points to the presence of counteracting factors which, unlike the expansion of production as such, increase both the rate and mass of profit.

If we were to continue the calculations of our last example, we would see that the boat-builder's expansion becomes weaker and weaker but also that it never stops. As long as surplus-value is added during production, there is profit and thus some investment fund, although an ever-smaller one. If our boat-builder serves as a stand-in for capital as a whole which, like him, never invests more surplus-value than it has extracted, it would appear that although the fall in the rate of profit condemns capitalism to ever-slower growth it never leads to global crisis, to a breakdown of accumulation. But for that to be true, all individual capitals would have to receive their share of the surplus-value in proportion to their size, so that they all could continue to participate in the accumulation process. In reality, individual capitals must compete ceaselessly for investment capital, which constantly moves about in a restless search for the highest return. That means that the strongest, most competitive capitals get served first from the common surplus-value fund. Since their organic composition is above average, their productivity is too, so that their competitive advantage on the market yields them a surplus profit, which attracts investment capital. But for the same reason (their above-average organic composition), they take more than their proportional share from the surplus-value fund, since their expansion requires ever more capital than the average. Since they take more than their share, there is not enough left over for the rest. Again, competition for capital, based primarily on differences in the rate of profit, determines who gets what, but a shortage of surplus-value is inevitable. The more so because the average organic composition continuously rises too, so that the average investment requires progressively more capital or, in other words, the threshold for capital formation continuously rises. Except when they find a niche in the market that can be served with production at a lower organic composition, capitals that cannot make the rising threshold lose their ability to compete and go bankrupt, become unproductive. The surplus-value they already contain is thus wasted, it cannot yield additional surplus-value, so that the global fund for accumulation is further reduced.

This shows how the fall of the rate of profit leads to a continuous expulsion of weaker capitals, which is so visible in the world economy today, and a continuous shrinkage of the pool of profit for the other, progressively more technology-based, less labour-power-using capitals. This certainly creates the conditions for crisis but it does not explain why crisis can become a global breakdown which not only impedes expansion because of a shortage of surplus-value but paralyzes the whole of capitalist production. Indeed, as long as there is some surplus-value extracted there continues to be a motivation to produce since profit can be made provided that the surplus-value can be realised (that is to say, that the commodities which contain it can be sold). Hypothetically, if a point were reached at which even the strongest capitals couldn't expand because of the lack of surplus-value, then competition would no longer coerce all capitals to accumulate through the threat of being eliminated by those who do. By itself, the fall in the rate of profit would mean stagnation and a gradual contraction but not a global collapse. So, as we shall see further on, the inevitability of capitalism's global breakdown cannot be explained by the fall of the rate of profit alone.

## THE FALL OF THE RATE OF PROFIT AND THE CHEAPENING OF THE COMPONENTS OF THE PRODUCTION PROCESS

The continuous rise of the organic composition of capital not only tends to make the rate of profit fall, but at the same time it makes all commodities ever cheaper, since their production requires ever less value. But since these commodities are also the components of the production process (the machinery etc. that form the constant capital and the consumer goods that determine the value of the variable capital, the workers' wages) it would seem that the production costs would also tend to decline. Since the rate of profit expresses the ratio of the surplus-value to the production costs, it appears then that the tendency of this rate to fall is countered, or at least tempered, by the cheapening of the components of the production process. If production increases faster (and thus if the components cheapen faster) than the variable capital declines in relation to the constant, the fall in the rate of profit would appear to be completely neutralised. This objection has been raised by non-Marxists to declare the law of the tendential fall of the rate of profit a mere chimera but Marxists too have seen this cheapening as an important counteracting factor.

Indeed, when less value is needed to produce the necessities workers buy with their wages, the paid portion of the labour day shrinks and the unpaid increases; in other words, the rate of relative surplus-value increases. And when the production of constant capital requires always less value, its expansion seems much less problematic. Rosa Luxemburg, for instance, wrote that "the increasing productivity of labour ensures that the means of production grow faster in bulk than in value, in other words: means of production become cheaper (..) This phenomenon amongst others also checks the actual decline of the rate of profit and modifies it to a mere tendency, though our example shows that the decline of the profit-rate would not only be retarded but rather completely arrested." (10) And Paul Mattick, while believing that the fall of the rate of profit is the sole cause of capitalism's tendency to collapse, nevertheless thought that the "increase in use-values at the same exchange-value" (i.e. the cheapening of commodities) "weakens the tendency to collapse." (11)

Marx himself did not solve the issue (let's not forget that volume 3 of *Capital* was only a rough draft at the time of his death). While discussing the cheapening of elements of the constant capital as a counteracting influence, he notes that "the same influences which tend to make the rate of profit fall, also moderate the effects of this tendency" (12) but he also turns this around: "the same process which brings about a cheapening of commodities in the course of the development of the capitalist mode of production, causes a change in the organic composition of the social capital invested in the production of commodities, and consequently lowers the rate of profit." (13) He emphasized that the cheapening of the components of production and the increase in the rate of relative surplus-value it implies, like the rise in the mass of profit resulting from the scale-enhancement of production, are caused by the same process that makes the profit-rate fall. On one hand, they lessen this fall, but on the other, the more they accelerate, the more the fall of profit accelerates too.

This seems to make the question only more baffling. Even more so, when we consult our boat-builder (for the last time, I promise). In our first example, we saw how, as a result of a rise in his organic composition, the value of each boat he produced, declined from 300 000 in the first cycle, to 220 000 in the second, or roughly 27 %. We saw how, after some time, he ran into trouble because of the decline of his profit-rate. But we didn't factor in the cheapening of his constant and variable capital. Since the organic composition of our boat-builder is average, we must assume that the value of this C and V have also diminished by about 27 %. When we apply that to our calculations, the decline of his rate of profit completely disappears. And since we said that the boat-builder was a stand-in for total capital because of his average organic composition, it would appear that Luxemburg was right!  We also saw why the quantity of the commodities produced has in itself no influence on the total quantity of profit. Yet now, it seems to have a very great influence, since the larger the production per worker becomes, the cheaper the components and thus the lower the production costs become.

But, as is so often the case, the problem stems from confusion between the frameworks of the individual and total capital. For the boat-builder, the cheaper the components he needs in order to produce, the better. If this cheapening means a lower rate of profit for his suppliers, that is of no concern to him. For total capital, the situation is clearly different. It is its own supplier. For total capital, the components of its production never cheapen absolutely (except in crises). Since they are (almost) identical to the total production of the previous cycle (14), their value is equal to that of the components of the previous cycle plus the surplus-value added in that cycle that is reinvested instead of consumed. That they have cheapened in bulk, means only that the same value of C, V and S, now equals more commodities, containing each less value.  That is important for society in general, but not for the rate of profit. For total capital, a cheapening of the components doesn't mean that it pays less for them. It already owns them. That the components have cheapened can only mean then that the same value-amount of C + V now yields a larger profit. How could that be the case when, with each new cycle of production, more profit-yielding variable capital is being replaced by non-profit yielding machinery?

It's important to see the distinction between the overall effect and the side-effects within it. The point here is not to deny the latter's existence, but to show that they are limited, and tied to the decline in the rate of profit itself, so that, when this decline accelerates, they do too - like the increased air resistance a car encounters when it picks up speed.  The overall effect of the rise in the organic composition is that the use of labour-power (V and S) declines relatively, so that the profit declines relatively too. The side-effect is that, within that relatively shrinking amount of labour-power, a shift occurs from paid to unpaid labour (S increases relative to V) because of the shrinking of the value of V. The limits to this side-effect are obvious:

- While the overall effect shrinks the totality of labour-power in production, the side-effect influences only part of that totality: if the totality shrinks, each part of that totality, including S, the unpaid part, "will likewise decrease, however much it may have grown compared to the paid portion." (12)

- The relative cheapening of V which makes it possible for S to grow relative to V (the increase in the rate of relative surplus-value) is itself a result of the relative decline of labour-power (V + S) and thus of profit in the production of consumer goods in the previous cycle of production.

- In reality, the relative wage costs have not declined historically to the degree that consumer goods have cheapened. This is not only due to resistance of the working class to wage reductions but also because the social concept of the necessities a worker and his family need, itself evolves when society becomes more complex and technology-based. Today, these necessities represent therefore also more in bulk (in use-values) than before, which lessens the increase of the rate of surplus-value.

The other side-effect is the relative decline in value of constant capital. For total capital, this does not result from the general rise of the organic composition: when the value content of C and V decline at the same pace, it doesn't affect their relative weight. But when the organic composition in the production of constant capital rises faster than in the production of consumer goods (as has been historically the case), then its mass (material volume) cheapens at a faster rate too, so that the increase of value of C is not as great as its increasing size would suggest. But this side-effect is also limited:

- the overall effect of the rise of the organic composition is of a continuous increase of C relative to V+ S. The counter-effect comes only from a difference in speed in the rise of the organic composition in the production of C and V. While this difference is real, most technical innovations raising the organic composition in the production of C tend to flow through to the production of V as well, reducing the difference;

- the amount of value saved by the relative cheapening of C doesn't lead to a corresponding growth of V. When invested, it would be divided according to the prevalent (i.e. further increased) organic composition, meaning that only a fraction would go to additional V;

- the relative cheapening of C is itself the result of the fact that its production is accomplished with less labour-power and thus yielding less profit.

Furthermore, the rise in the rate of relative surplus-value and the relative cheapening of constant capital, are results of the rise of the organic composition in the previous cycle of production. Since the historical trend of the organic composition is one of continuous increase, the organic composition bringing on these side-effects is always lower than the one leading to a lesser yield of surplus-value in the current cycle.

So, for total capital, the components of the production process generally do not cheapen but become more expensive. And the faster their apparent cheapening (the rise of their material volume relative to their value), the faster also the rate of profit declines. Unless... but that belongs to the next chapter.

## THE COUNTERACTING INFLUENCES

Given the vastness and complexity of the world economy, there are many factors that can have a minor effect on the average rate of profit, both negatively and positively. Marx mentions the most important moderating factors in his rather hastily drafted chapter on the counteracting influences in *Capital* volume 3, and points to others elsewhere in his work, such as the faster turnover of capital. This reduces the time during which capital cannot be used productively and thus increases its rate of profit. Improvements in transportation, communication, the reduction of inventories, and in general all improvements in the organisation of production aimed at maximizing the utilisation of productive capital, all work in that direction. But of those factors which directly increase the extraction of surplus-value without being caused by the same process that accelerates the decline of the average rate of profit, three important ones stand out:

- the reduction of the relative cost of constant capital without an increase of the organic composition;

- the rise of the rate of exploitation without an increase of the organic composition;

- the expansion of the terrain of action of world capital, which draws more production at a lower organic rate, and therefore more surplus-value, into its circuit.

Concerning the first, it is important to note that not all technological innovations are aimed at replacing human labour by machinery; not all of them imply a rise in the organic composition and a decline of the profit-rate. Some innovations serve to improve the quality or increase the diversity of commodities. This does not lower the profit-rate. Others reduce the bulk of the constant capital, notably the raw materials required for its production. Such innovations lower the production costs without reducing the relative utilisation of labour-power in the production process and therefore increase the rate of profit.

Second: the intensification of exploitation is obviously a very important counter-effect to the fall of the rate of profit. The more the latter is under pressure, the greater also the pressure on the working class. Capital can squeeze more surplus-value from the workers through a rise in absolute exploitation: the lengthening of the work day. In the US in recent years, for instance, the average work week has lengthened with several hours through the increased use of overtime. In countries such as India or China, the increase of absolute exploitation has been extreme. Exploitation is also intensified through the rise in relative exploitation: the shrinking of the paid portion of the labour-power used in production. We have seen earlier, that this occurs through the same process that decreases the quantity of labour-power in production and thus lowers the rate of profit. But over the course of capitalism's history, there was also a regular introduction and spread of new production methods which increase the extraction of surplus-value without increasing the organic composition of capital, such as all the techniques to exploit the workers more efficiently and to streamline the production flow, like the assembly-line pioneered by Ford , Taylor's techniques to separate and intensify all tasks, the generalisation of shift-work to keep the constant capital continuously in operation and various techniques to speed up the labour process introduced since the Second World War, and more recently, the Japanese methods to increase the complexity of the worker's tasks and the international division of labour within the same production process (‘the global assembly line’) made possible by the globalisation of the world economy. Everything that increases productivity without increasing the ratio of constant capital to variable capital, is a strong counter-effect to the fall in the rate of profit.

The paid portion of labour-power is of course also shrunk by directly attacking wage-levels. In this regard, Marx mentions the influence of relative overpopulation, which today exists almost everywhere in relation to the demand for labour, and which capitalism often created when it did not exist, through the importation of immigrant labour. The over-supply on the labour market, the existence of a vast reserve-army of the unemployed, is a powerful weapon to decrease wages, even below the value of labour-power. That is the case in most countries of the world today, even increasingly so in the most developed ones. Workers who receive the minimum-wage or less, usually cannot buy with their wages the most basic necessities to survive and have to be helped by family-members or others. That explains why more than a quarter of the adult male homeless population in the US are people who have full-time jobs. All these forms of intensified exploitation help capitalism quite a bit. But "the compensation of the reduced number of labourers 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."(16) These limits have also become greater because of capitalism's increasing dependence on highly skilled labour, in whose training it has invested a considerable quantity of value. This value would be wasted if they were exploited as brutally as unskilled workers can be, for it matters little to capital if the latter age prematurely because of their working conditions or die on the job, as long as the labour supply is plentiful. Also, the productivity of workers performing complex tasks is much more affected when working and living conditions deteriorate, than that of workers performing simple manual labour.

There is another powerful factor counteracting the fall of the rate of profit, which Marx briefly wrote about under the heading of 'Foreign Trade': the economic interaction between capital's centre and its periphery, the latter comprising both older, economically inferior modes of production and weaker capitals. This is a factor which is often neglected or put in an erroneous analytical framework, as in Rosa Luxemburg's economic theory in which capitalism's extra-capitalist environment is seen as the key that first opens and later closes the door to accumulation. Luxemburg believed that the extra-capitalist areas provided the markets which realized the surplus-value for accumulation of capitalism, which in her eyes was incapable of self-expansion. We will discuss this mistake later on. Here we want to analyse the role of extra-capitalist and lowly capitalist areas in counteracting the fall of the rate of profit. As we shall see in the last part of this text, each widening of developed capitalism's terrain of action, made possible by breakthroughs in transportation and communication and improvements in capitalism's political-economic structures, provided a powerful but also temporary antidote against the fall of the rate of profit.

Evidently, the extra-capitalist environment played for capitalism in its genesis as essential a role as the womb does for the foetus. Capitalism wasn't conceived in vitro. But a womb is normally left intact after the baby is born. It would be more correct then to compare capitalism's birth with that of the young spider which feeds on the host body in which its mother deposited her eggs. In order to develop, capitalism had to rip apart the fabric of its "host-society", to turn its possessions into capital and its direct producers into exploitable workers. This process (brilliantly described in the chapter on "the so-called primitive accumulation" in *Capital*, volume 1) is, as Marx noted, "written in the annals of mankind with blood and fire". No less violent was the expansion of capitalist nations to the rest of the world. Whether to pillage the accumulated wealth of extra-capitalist societies, to gain access to raw materials, or to extract surplus-value from their inhabitants through forced labour, violence was routinely used.

> "From the very beginning, the forms and laws of capitalist production aim to comprise the entire globe as a store of productive forces. Capital, impelled to appropriate productive forces for the purpose of exploitation, ransacks the whole world, it procures its means of production from all the corners of the earth, seizing them, if necessary by force, form all levels of civilisation and from all forms of society." (17)

Inevitable as it was, force was not always necessary because of capitalism's superior productivity: the cheap prices of its commodities were "the heavy artillery with which it batters down all Chinese walls" (Communist Manifesto).

Violent or not so violent, what did the expansion of capitalism mean for the tendential fall of its profit-rate? In his chapter on the counteracting influences to the fall of the rate of profit, Marx states that "foreign trade" (which he equates here with all economic exchanges with extra-capitalist and newly capitalist countries) has a dual, and contradictory effect: on the one hand, "it tends to raise the rate of profit by increasing the rate of surplus-value and lowering the value of constant capital", since it "cheapens the elements of constant capital and partly the necessities of life for which variable capital is exchanged" and it furthermore "acts in that direction by permitting an expansion of the scale of production". But this expansion of scale also "causes variable capital to shrink in relation to constant capital" and "thus hastens a fall in the rate of profit". (18) However, since this expansion of production is only 'permitted' by 'foreign trade' and not caused by it, but by "incessant revolutions in the methods of production themselves (and), by the general competitive struggle (..) as a means of self-preservation and under penalty of ruin" (19), "foreign trade", as understood here by Marx, should be seen as a genuine and important counteracting influence on the fall of the rate of profit, but also one with severe intrinsic and historical limits. How does it cheapen constant and variable capital and thus raise the profit-rate? Clearly, in so far as the expansion of European capitalism took the form of a forceful appropriation of the accumulated wealth and resources of other societies, this needs no explanation. Capital simply took whatever it could use, without paying. Very profitable. The same is true for the forceful appropriation of labour-power by capital, whether through forced labour, slavery or - more likely today - in exchange for wages below subsistence level. (20)

But normal trade with backward countries also raised the rate of profit because "there is competition with commodities produced in countries with inferior production facilities, so that the more advanced country sells its goods above their value (..) Just as a manufacturer who employs a new invention before it becomes generally used, undersells his competitors and yet sells his commodity above its individual value (..). He thus secures a surplus-profit." (21) In other words, the producer with the more advanced facilities sells his commodity at (or below) the average market value, determined by the average production costs of the producers for that market. Since his own production costs are much lower, because of the higher organic composition of his capital, his profits are much higher. These surplus profits do not realise surplus-value from his own workers (which is contained in his normal profit) but come from value that is produced and possessed locally by the buyers who are in an environment of lower organic composition; the buyers are willing to pay because what they get in exchange is of higher quality (although containing less value) than they could get for the same price from local producers. Likewise, when the capitalist from advanced countries buys from backward countries, the sellers there must compete against all other potential suppliers, including those with superior production facilities. More often than not, they can only do so by selling their commodities below their individual values and the buyer gets the un-realised value for free. So both through selling and buying, the producers of the backward countries inject value (coming from unpaid labour-power) into the capitalist circuit, thereby compensating for the shrinkage of variable capital in relation to constant capital. In this process, it is utterly unimportant whether the products thus obtained from the backward countries are the result of slavery, forced labour, normal capitalist exploitation of the work of direct producers. What only matters here, is the difference in organic composition and the resulting value-transfer.

But for the same reasons why the trade with backward countries is so beneficial for developed capitals, its impact is limited and historically declining. First, the accumulated wealth and resources of other societies that could be easily hauled away, were finite. Second, their backwardness, or lack of productivity, severely limited (and limits) their surplus product and thus their potential trade with advanced capitals. That was and is even more true in regard to extra-capitalist producers, who work primarily to meet their own needs and not those of a market. Third, the more capitalism develops, and thus the higher its organic composition and productivity becomes, the more it becomes dependent on highly skilled labour (and all the implied infrastructure) and the less it becomes possible for producers in backward areas to compensate for this productivity gap with the use of extremely cheap variable capital. Today, the productivity of an American agricultural worker is 130 times higher than that of an African agricultural worker, so the only agricultural commodities which a capitalist from a underdeveloped country can sell on the world market are of a uniquely tropical kind, such as coffee, tea, cocoa or bananas. Furthermore, many of the products which used to be grown as cash crops in these areas, such as rubber, sisal, vanilla and even sugar cane, have been replaced, partly or entirely, by chemical surrogates. As for the main remaining commercial interest for the advanced capitals in the most backward areas, the extraction of oil, copper and other minerals, this generally is done with production methods which are as capital-intensive (with the same high organic composition) as in advanced capitals, although there is still a benefit for the profit-rate, because a larger portion of the labour-power remains unpaid. This factor - the higher profit-rate made possible by the extremely low wage-levels in underdeveloped countries - has been gaining steadily in importance in recent decades, as we shall see further, because of the increased mobility of capital (due to technological as well as political causes), the decline of transportation- and communication costs and the emergence of readily available skilled and semi-skilled labour pools in many underdeveloped countries.

Surplus-value produced by direct producers and by workers in backward countries for the local market, in which advanced capitals do not participate (for whatever reason - because the market is too small or because of tariffs or other obstacles) had no bearing on the profits of advanced capitals and therefore did not enter into the calculation of the average profit-rate of advanced capitals. In general, the more markets were separated, the more the average rate of profit was constituted locally; and the more they are integrated, with free access for all capitals, the more a global average of profit dominates. The replacement of local rates of profit by a global average rate of profit is a long-term historical process that is reaching its conclusion today. We are living the moment in which the last reserves of one of the main counter-tendencies to the fall of the rate of profit are being tapped and thus inevitably, exhausted. The globalisation of the economy has made advanced capital so omnipresent that markets in which only local conditions determine the local average rate of profit, have practically disappeared. If the commodities of high tech capital are not materially present on a market, they are there in spirit, that is, as a threat to local producers who must keep their prices so low that it doesn't become profitable to import them (unless they are kept out by the state - for which the penalties have increased along with the globalisation).

How can those local producers do this? In order to survive, extreme exploitation is an absolute requirement. Workers are forced to accept wages far below the value of their labour-power, even if this means that basic needs remain unmet and their productive lives are cut short. Direct producers (small farmers, etc.) are forced to accept prices far below the value of their labour, even if they can barely survive. Local capitalists (whether private or state) are forced to accept a profit level far below the one they would obtain without the looming presence of advanced capital. (But since the price of labour-power is so much lower than in advanced countries, they get some compensation: the same income buys them more goods and services than it would in the developed countries.) The clear winner is advanced capitalism, which obtains a surplus profit in its trade with the underdeveloped countries and benefits from the low price of labour, when it directly invests in them. Their source of profit is not only the labour-power of the workers, but also the unpaid value of the producers who make the things these workers need, and who are forced to sell their commodities at such low prices that workers can survive despite their measly wages. As we noted earlier, technological as well as political developments are making the exploitation of this source of profit more feasible, even if the global demand for commodities produced at a low organic rate constantly diminishes. The current trend of moving production to low-wage countries will therefore surely continue and even accelerate when new technological and other changes make it even more cost-effective. But, by doing so, capitalism is also approaching the limits of this counter-influence. But I'm getting ahead of myself. We shall come back to this in the last part of this text.

Through most of capitalism's history, local and global rates of profit existed side by side. Those varying degrees of separation and integration made it all but impossible to calculate the underlying average rate of profit in trade between countries. Marx explored some of the different situations that arise when he explained the law of the equalisation of the rate of profit (*Capital*, volume 3, chapter 10). We shall come back to this later. But in general, as we have seen, trade between capitals of different countries is based on the constitution of an average rate of profit that rewards the more productive and punishes the more backward producers. On top of that, the exchange could be even more beneficial for advanced capitals. If an advanced capital is the sole supplier of a commodity on the market of a backward country, because that commodity is not produced locally and other advanced capitals have no access to that market (as was the case in the colonies), then this advanced capital occupies a monopoly position, so that local purchasing power will be the only limit to its surplus profit.

This is one of the main reasons why some (not all) colonial trade was so beneficial for capitalism during its ascendant period. Most of all for British capital, investment in colonial trade in North America and India yielded fabulous profits. This phenomenon inspired Lenin to his theory on *Imperialism, the Highest Stage of Capitalism* according to which monopoly-capitalism of the advanced countries have become dependent on the export of capital to their colonial possessions where, shielded from competition, they could reap surplus profits. This is not the place for a thorough critique of Lenin's theory, which did not really give an analysis of the root-causes of capitalism's crisis. But if he had been right, the decolonisation following World War Two would have plunged capitalism into deep crisis. But reality has clearly demonstrated the falsehood of Lenin's theory as well as the intrinsic and historical limitations of the trade with backward countries as a check on the fall of the rate of profit. Intrinsic, because the backward, labour-intensive production that yields higher rates of profit also limits productivity, surplus production and thus potential trade. Historical, because the development of capitalism inevitably knocks down the barriers to the integration of the world market so that the average rate of profit everywhere is increasingly determined not by local but by global conditions of production. During capitalism's ascendant period, other nations could catch up with England's formidable lead in productivity, precisely because the relative separation of national markets created differences in the national average rates of profits, so that capitals with a lower organic composition could use their higher profit-rates to fuel their own industrialisation process. In decadent capitalism, this has become impossible, not only because of the ever higher threshold for capital-formation but also because of the global equalisation of the general rate of profit. As we shall see further, in the rare success stories of the 20th Century, the use of tariffs played at most a minor role. Another illustration of this phenomenon was the spectacular rise in the rate of profit in areas such as Latin America during world wars, when they were by and large cut off from imports from the advanced capitals and the market value of their exports were largely regulated by the local production conditions. Today, the separation between rates of profit is disappearing. Furthermore, the more technology-intensive the world becomes, the less can production processes with backward methods fit into the global production-chain. All that these countries have left to offer is their extreme rate of exploitation.

To summarize the point on ‘foreign trade’, we can conclude that every outward expansion of capitalism that leads to a greater inclusion of ‘free’ value (22) in the global production circuit, either through the appropriation of material elements for the constant capital, the use of free or very cheap variable capital, or the incorporation of production at a lower organic composition, counteracts the fall of the rate of profit.

Logically, we can extend this point to the inward expansion of capitalism as well. While capitalism expanded outward, even within the most developed countries, substantial parts of the economy (especially agriculture) remained non-capitalist and dominated by direct producers. Also, because of the intrinsic nature of their production methods, in many sectors of ‘Department II’ (the production of consumer goods) the organic composition increased much slower than average and often there too, the input of petty commodity producers remained important (such as furniture, shoe- and clothing-repair, bakery and all sorts of food preparation). For the reasons we mentioned earlier, trade with these petty commodity-producers and labour-intensive enterprises boosted the average profit-rate for advanced capitals, not because of the non-capitalist nature of some of the production, as Luxemburgists would have it, but because of its lower than average organic composition.

Again, on the surface this is hard to see because of the mediation of competition. Capital with a higher organic composition obtains a surplus profit in trade with producers with a lower organic composition. Furthermore, the capitalisation of agriculture and food-preparation leads to cheaper food prices and therefore lowers the cost of variable capital. Thus, a country where this capitalisation occurs faster than elsewhere obtains a competitive advantage. A lower degree of capitalisation and non-capitalised production are therefore a competitive disadvantage for a particular capital or country. Yet for capital as a whole, it is an advantage because the same amount of capital yields more surplus-value.

Marx called the process, by which a country is transformed from an economy based on capitalist production at a low organic composition supplemented by non-capitalist production, to one based on capitalist production with a high organic composition, which has invaded every nook and cranny of economic activity and in which, consequently, every aspect of society's superstructure is permeated by capital as a social relation, "the transition from formal domination of capital to real domination." Evidently, this transition goes hand in hand with an aggravation of the fall of the general rate of profit. Today, this transition is more or less completed in the most developed countries. But not elsewhere. Yet even in the most backward economies, value produced under "formal domination", at a low organic composition, tends to enter in smaller rather than greater quantities in the global production cycle. The productivity gap is now so wide that the global economy, while tightening international integration, tends to expel rather than incorporate production at a low organic composition, almost regardless how cheap the wages are there. As a result, many workers and others in the so-called "third world" are forced to return to subsistence-farming to survive. Because of this, the number of people living from extra-capitalist production is increasing, rather than vanishing. As the Communist Workers Oorganisation (CWO) correctly pointed out in an article on Africa, this illustrates that "the historic crisis cannot be caused by exhaustion of pre-capitalist areas, on the contrary, this crisis is the reason why they cannot be exhausted." (23)

## THE PROFIT-RATE AND THE STOCK MARKET

To return to Marx’s exposition on the counteracting influences, his final point - merely a paragraph (that "cannot be more fully treated for the present") - concerns "the increase of stock capital" which in his view can amortize the fall of the profit-rate somewhat "in the sense that these capitals, although invested in large productive enterprises, yield only large or small amounts of interest, so-called dividends, after all costs have been deducted. In railways for instance. These do not therefore go into leveling the general rate of profit, because they yield a lower than average rate of profit. If they did enter into it, the general rate of profit would fall much lower." (23) He adds: "Theoretically, they may be included in the calculation, and the result would then be a lower rate of profit than the seemingly existing rate."

But, in fact, there is no reason not to include them like any other capital invested in production. The rather curious distinction Marx makes here, may be due to the still relatively modest role of stock capital in his time, when industrial, financial and commercial capital were still separate categories and most companies were owned by bourgeois families, who by now play only a minor role in the management of capital. If an industrial capitalist of his time succeeded in obtaining capital to expand his production from outside the realm of industrial capital, through the stock issues, and paying dividends much below the average rate of profit, naturally this was a good deal for him and beneficial for the average rate of profit of industrial capital. But such an arrangement is only possible if those investors have nowhere else to go, so that they must be content with a low return. Today, ownership of stocks in a variety of companies and sectors and even countries is much more typical for the capitalist class than direct ownership of an entire company. The development of capitalism has led to an increasing concentration of capital, resulting in companies much too big to be individually owned. Much larger capitals are required to compete in today's world. The mobility of capital increased hand in hand with its concentration. Today, if stocks in, say, railroads yield low dividends the stock prices will decline meaning that capital will leave that railroad company in search of a higher return elsewhere. In short, because of the transformations wrought by the growing concentration and mobility of capital, "the increase of stock capital" is no longer a counteracting influence at all. Sometimes, it has the opposite effect.

The more the average organic composition increases, the rate of profit declines and the threshold of capital-formation increases, the more companies (and countries) become dependent on outside investment. The more their demand for capital increases, the more companies are forced to offer high yields to attract the necessary funds. This results in the opposite of what Marx described: instead of profits being helped by low dividends on stocks, the need to pay out high dividends and other form of interest is an increasingly crushing weight on the profit-rate. But this coin has another side. These high dividends fuel speculation, as more and more capital moves to the stock market to get a piece of this rich pie. This in turn creates an increasing gap between ‘the real economy’ and the stock market, between the profitability of companies and their stock prices. In recent decades, we have seen repeatedly how stock markets feverishly rose while the 'real economy' was sharply contracting. Inevitably, such bubbles must burst. The inflated stocks take a tumble and their owners lose billions of dollars in a single day. If such a crash is contained, it can be rather healthy for capital as a whole, though painful for the investors who are wiped out. Anything that cheapens existing capital (even, and especially, recession and war, as we shall see further on) has at least as a side-effect that it helps check the decline of the profit-rate. But beneficial crashes are the corrective exceptions; as a rule, the increase of stock capital, indispensable as it has become, is today indirectly more harmful than helpful for the general rate of profit and increasingly so as its decline accelerates and a rapid accumulation of debt is used to keep the accumulation of production going.

Marx couldn't foresee everything. If he had had the time to treat this subject more fully, as he intended, he probably would have come to the conclusion that there is no difference in this regard between stocks and other forms of interest-bearing capital, whose rate of return he did not see as counteracting the fall of the rate of profit because "the division into those particular categories (of capital are) immaterial to it (the general rate of profit)." (24).

However, his observation about stocks remains valid when applied to stock purchases made with the small but numerable sums of money that go into saving accounts, pension plans, life insurance, mutual funds etc. On this money which comes not only from capitalists but also from middle layers and members of the working class who put aside a portion of their wages for their old age etc, the net rate of return is normally modest, sometimes hardly above the level of inflation because small investors don't have the competitive leverage of large investors. Most of the yield stays in the hands of banks and other financial firms, which today are mostly merged or intertwined with industrial capital. Therefore, in this way, larger capital appropriates value from smaller ones and from the savings of the working class, which helps to compensate the decline of the profit-rate somewhat.

While the total amount of these small investments is impressive, it still represents only a modest fraction of the total capital in circulation and can therefore only have a modest impact on the rate of profit. It can make a difference for the competitive position of a particular country, however. For example, the high rate of personal savings in Japan has "traditionally provided banks and insurance companies with masses of capital, then lent at low rates to Japanese manufacturers, giving them a cost advantage over foreign rivals." (26)

A very different view is developed by the group Kamunist Kranti, which thinks that "the increase of stock capital" effectively neutralizes the fall of the rate of profit. According to Kamunist Kranti, the law of the fall of the rate of profit applies only to small capitalists The concentration and centralisation of capital is hastened, so that the capital needed to launch new companies or to expand production, becomes progressively larger. Consequently, "individual capitalists, constrained by their own limited existence, find it extremely difficult to organize sufficient wealth to expand production." (27) For big capitals, however, there is no problem because "the growth of the mass of profit more than compensates for the falling rate of profit" because the scale of their production always grows, so that they always exploit more labour-power. While Marx pointed to stock-ownership as a counter-effect to the fall of the rate of profit, according to Kamunist Kranti (KK) he failed to see how this counter-effect would develop to such a scale that it would neutralize the fall of the rate of profit. Because in Marx's time, stock-ownership was still the exception rather than the rule, he didn't consider the possibility that joint-stock and state-owned enterprises would become the dominant forms of capitalist production. Stock-ownership solves the problem of new capital formation, in KK's eyes, because it eliminates the dependency of the capitalist from his own, individual wealth. By pooling the funds of investors, he can keep up with the rising threshold of capital formation. Because he did not foresee this, KK thinks "it is not surprising to find Marx writing in *Capital*, volume 3:

> "The rate of profit, i.e. the relative increment of capital, is above all important to all new offshoots of capital searching to find an independent place for themselves. And as soon as formation of capital were to fall into the hands of a few established big capitals, for which mass of profits compensates for the falling rate of profit, the vital flame of production would be altogether extinguished. It would die out."

This is a passage rich in meaning, which Marx would have probably elabourated if he would have had the chance. Kamunist Kranti seems to think that what Marx meant was that accumulation would stop because those few big capitals, obtaining already a huge mass of profit, would lack the incentive to expand. Why he thought that this would "extinguish the flame of production altogether" despite the supposedly healthy profits of those big capitals, KK fails to explain. The problem - it seems to me - is that KK has misunderstood the reason why, for the bigger capitals, the mass of profit can compensate for the falling rate of profit, and had therefore also misunderstood Marx's quote.

The mass of profit grows for bigger capitals, in part because they tend to employ an ever larger absolute amount of labour-power, even if labour-power declines relatively in their production process. But that does not compensate for the falling rate of profit, because the absolute amount of profit that is required for accumulation increases likewise. But what does compensate for the falling rate of profit is the mass of profit they obtain through competition with smaller capitals. The lower organic composition of the latter raises the average rate of profit and makes it possible for the bigger capitals to obtain a surplus profit because their production costs are lower than the average. Surplus-value extracted by those smaller capitals flows, because of competition, into the pockets of the big capitals. But if all the small capitals are driven from the market, and if no new small capitals can emerge because the rise in the average organic composition has raised the threshold for capital formation to unscaleable heights, then the source of this transfer of surplus-value has dried up for the big capitals, and the flame of production - finding less fuel (surplus-value) - begins to flicker.

Kamunist Kranti fails to see to what extent the situation Marx describes as a theoretical extreme has in the meantime already become a reality. Big capitals have indeed gobbled up the whole world market, expelled countless small capitals from it, and raised the threshold for capital formation out of reach for almost "all-new offshoots of capital, searching to find an independent place for themselves". This is not difficult to see, especially in KK's own country, or in the rest of the so-called Third World. Take agriculture. There is plenty of land and labour-power available, in India as elsewhere, that could be employed for capitalist agriculture. Yet these means of production can't be mobilised because a few big agribusiness-capitals firmly dominate the market and have raised the threshold for capital formation so high that no new capitals can compete with them. So fertile land is wasted, rural population is unemployed and starving or forced to subsistence farming with very little productivity, while the agribusiness itself must be propped up with huge subsidies. In other words, the flame of production is waning indeed.

If big capitals were not be subject to the fall of the rate of profit, this quote from Marx would be absolutely incomprehensible. If they were able by themselves to generate enough mass of profit to compensate for the falling rate, there would be no reason whatsoever for the flame of production to die out. In KK's view, the emergence of the stock market as the primary conduit for capital-formation, allows the smaller capitals to get around the problem of the falling rate of profit, because, "for stock capital the rate of profit does not have that crucial significance that it has for individual owners (..) Investment continues as long as the absolute amount of profit remains an attraction to the investors. The production process is impaired only when sufficient returns are not realised even to reproduce the faction at its previous scale. At most, the stimulating principle of capitalist commodity production becomes absolute profit, whatever the rate of profit be." (p6) There is some truth in this. If faced with the choice between a very small profit or no profit at all, a capital-owner will of course choose the first. If a capitalist (or global capital) has no longer enough money to continue accumulating at the pace dictated by the rising organic composition, his accumulation will slow down, but not disappear. Unless we take into account the contradiction which capital creates between its productive forces and its market, there is no reason for "the flame of production to extinguish all together", despite Marx's broad-brushed statement. If no realisation problem occurs, investment in productive forces with an organic composition lower than that technically possible can create profit too, especially when it goes hand in hand with extreme forms of exploitation, as we saw earlier. Yet competition sharply limits accumulation in capital with a lower than average organic composition, because it transfers surplus-value extracted by this capital to those with a higher organic composition.

That's why KK's position quoted above is also mistaken. KK assumes that the dynamic of the stock market counteracts the concentration of capital. That it creates a movement of capital to the smaller capitalists, enabling them to overcome the threshold of capital-formation. Where does this flow of capital stock come from? As we have seen, to some extent from workers and middle layers, but mostly from capitalists, small and large. But the stock market does exactly the opposite of what KK assumes: it creams off the savings of workers, middle layers and small capitalists and transfers them to big capitals.

The deregulation of financial markets has only reinforced this flow. With the globalisation of stock-trading, the competition between industrial capitals for investment capital has intensified all over the world. Who wins this competition? Generally, those with the highest rates of profit and with the best prospects for a future high rate of profit. Amongst those, there are some small new companies at the cutting edge. But most of these are financed privately or with bank loans and when they go "public", they are usually quickly gobbled up by larger ones. By and large, the bigger capitals, with the highest organic rate, attract the most stock-capital because of their competitive advantage. The stock market facilitates the concentration of capital, not the opposite. Its deregulation since the 1980's led to a rapid increase of take-oversee and mergers, i.e.., more and more capital goes into fewer and fewer hands. That is true for every economic sector and it's true too for the management of stock capital itself. While in 1965, big institutional investors held only 16 percent of corporate stock in the US, today they hold more than 50 percent. These big Wall Street funds have no loyalty to companies, only to the highest rate of return. While they are always on the lookout for the underestimated little stock, they steer the bulk of their capital to the big companies. The more the gap between developed capitals and backward capitals widens, the more they organise a flight of capital from the second to the first. That's why the New York stock exchange is booming as never before, while at the same time the Mexican stock exchange has collapsed, so that industrial capital in Mexico shrivels, because of lack of capital to continue its accumulation.

KK seems to think this poses no fundamental problem, because even if there is not enough surplus-value realised "to expand at a point of time", you just wait a while and "over a period of time, over several turnovers, the produced and realised surplus-value would be sufficient to expand production. Accumulation, then, would be decelerated or delayed but not stopped or truncated" (p.7). Such a delay might be possible in a pre-or post-capitalist society, where the only absolute requirement would be that enough means of production and sustenance are produced so that society can continue to exist. But for capitalism, accumulation is not a luxury which it can chose to forego "for several turnovers". Why? Because it is organised on the base of competition. If, for instance, Mexican capital were to skip a few cycles of accumulation, its relative backwardness would proportionally increase, so that, instead of solving its problems by building up a fund for future expansion, it would accelerate the flight of capital to the US and other developed capitals, where the relative high rate of profit creates the illusion that the fall of the rate of profit doesn't really exist.

The supposedly theoretical situation KK describes - of a shortage of surplus-value impeding accumulation - is a growing reality for an ever larger part of the world. KK is mistaken when it thinks that this creates only a delay which prepares for the resumption of healthy accumulation. On the contrary, it accelerates capitalism's unequal development and thereby both undercuts the extraction of surplus-value and exacerbates capitalism's market-contradiction. KK is mistaken when it thinks that the growing importance of the stock market counteracts this trend. On the contrary, it facilitates it.

KK is right, however, when it insists that the fall of the rate of profit in itself cannot fully explain capitalism's tendency to global collapse. To understand the mechanisms of capitalism's breakdown, we must analyze the dynamic interaction between the progression of the fall of the rate of profit and capitalism's market-contradiction.

## MATTICK VERSUS MARX

Yet that is precisely what the influential Marxist writer Paul Mattick maintains we should not do. He brushes off Marx's repeated insistence on the fundamental importance of the market contradiction as confused or "unclear writing". We shall analyze his mistakes on this subject, as well as his blindness for the contradiction between capital in its money-form and its commodity-form, later on. Here we aim to show that the very basis of his crisis theory (and of that of Henryck Grossmann, in whose writings Mattick's position is anchored), his concept of the law of the tendential fall of the rate of profit, is itself mistaken.

Mattick may see himself as the true defender of Marx’s crisis theory - insisting that Marx had "not two crisis theories but one" (the fall of the rate of profit), as if there were some law that says that every process, no matter how complex, must be reduced to a single cause - but his view on the fall of the rate of profit is quite different from Marx's. We saw earlier, when we discussed the relation between the rate and mass of profit, that Marx shows that for the profitability of capital as a whole it is irrelevant how many commodities are produced. When the volume of production increases and all other conditions remain unchanged, "the mass of profit remains the same", it is only "distributed differently over the total amount of commodities". (29) Yet Mattick thinks that it's precisely "the increase in the quantity of commodities" which maintains "the profitability of capital" (30). As with so many others, he confuses the frameworks of the individual capitalist (for whom the above is true, because the relative growth of his productivity, his greater output per capital advanced, gives him a competitive advantage and thus increases his profit) and capital as a whole (for whom competition does not exist and which therefore obtains as much profit as there is surplus-value extracted, regardless of the quantity of production).

The difference is crucial. One cannot understand the dynamic of capitalism and its tendency to collapse without realising this: in general terms, for total capital, greater productivity means a decrease of the rate of profit, and for the individual capitalist, greater productivity means an increase of his rate of profit. This paradoxical truth says it all in a nutshell: why capitalism's development must turn into its breakdown, why its disease is deadly, why there is no cure, since the apparent cure and the disease are one and the same, why the only real cure - production of use-value instead of exchange-value - requires the destruction of capitalism. Without understanding this, one's analysis remains imprisoned in a vicious circle, as in this statement of the CWO, a staunch follower of Mattick: "the tendency for the rate of profit to fall is offset by the greater productivity of the workers who produce a greater mass of profit" (31) The greater productivity is the result of the rise of capital's organic composition, which causes the rate of profit to fall. Yet this fall is compensated... by greater productivity! Luxemburgists, as we shall see, escape from this vicious circle with the deus ex machina of the extra-capitalist market, but what escape is there for Mattick and his followers, after eliminating capitalism's market contradiction?

There is not really one. But before we come to that, let's first see how Mattick explains the beneficial effect of increased productivity on capital's profitability in value-terms. He is, after all, a Marxist and therefore cannot pretend that commodities have an intrinsic exchange-value, regardless of the amount of labour-power they contain. Somehow, he must find a way to argue that labour which sets in motion more constant capital, not only produces more use-values, but yields also more surplus-value. To explain the mystery, Mattick has no other recourse but to fall back on the rise of the rate of surplus-value. "The rate of profit can remain unchanged despite a higher organic composition of capital only if the rate of surplus-value rises rapidly. With a quick enough increase in the rate of surplus-value, the rate of profit can even rise." (32) Mattick (and he's not the only one) seems to be under the illusion that the rate of surplus-value can rise without limits. That would indeed explain why greater productivity would equal a greater mass or profit. Thus, for him, the fact that "the product of a day's work in a developed nation is exchanged for the product of more than a day's work in an underdeveloped country" (..) means only that "relative surplus-value is not the same as absolute surplus-value, since it permits the production of a greater surplus-value with less direct labour time." (33)

"Greater surplus-value" with "less labour time"? (It's not clear what Mattick means here with "direct" labour time. Is "indirect" labour time - for instance education - no cost to capital?) Greater surplus-value means only that a greater portion of the working day is unpaid, chiefly because the means of subsistence become cheaper, which reduces the value of labour-power and thus the cost of variable capital. It does not mean, as Mattick seems to assume, a greater output per worker (although, again, that does increase the profit of the individual capitalist). We have seen that the means of subsistence are generally much cheaper in underdeveloped countries than in developed ones. There are, as we've seen, other factors that increase the rate of relative surplus-value, such as the intensification of labour. But overall, both the rates of relative and absolute exploitation are clearly higher in underdeveloped countries. These rates can therefore not explain the above-mentioned unequal exchange. The reason it's unequal, is the respective position of the value of "a day's work in a developed nation" and of the value of "a day's work in an underdeveloped country" to the world market value: the first is under the market value, the second above. The first gets a surplus profit, which is invisibly fed by the value that the second cannot realize on the market.

We have seen earlier, when we discussed the cheapening of the components of production, why the increase of the rate of relative surplus-value does not compensate the fall of the rate of profit, contrary to what Mattick believes. The reader must wonder by now, how a fall in the rate of profit, which is counterbalanced by an incessantly rising rate of surplus-value, and in the absence of any realisation problem, can ever lead to the breakdown of capitalism. Here is how Mattick sees it:

> "On the assumption of an irresistibly continuous accumulation of capital, the mutually compensating but contradictory movements of the rate of surplus-value and the rate of profit must eventually create a situation excluding further accumulation. While the rate of surplus-value must be increased enormously if the fall in the rate of profit is to be halted, the variable capital still continues to decline relative to the constant, and the number of producers of surplus-value declines in comparison with the quantity of valorizing capital. Ever fewer workers must create an ever greater surplus-value in order to produce the profits required by the capital already in existence if it is to continue to expand. Inevitably, a point will be reached at which the greatest quantity of surplus-value that can be possibly extorted from the diminishing working class is no longer sufficient to augment the value of the accumulated capital." (34)

This passage evokes images of old-fashioned futurism, of the machinist-modernism of the thirties, the same period in which Grossmann formulated this theory. The constant capital becomes so humogeneous that even "the greatest quantity of surplus-value" squeezed from the diminishing working class, cannot finance another Metropolis-like giant monster-factory, so that accumulation grinds to a halt. In reality, the rising organic composition expresses itself more in the expulsion of human labour than in an ever growing size of the constant capital. There is always less labour-power needed to produce the goods and services which the paying customers of the world can afford, which doesn't necessarily mean that the investment in constant capital needed to make a certain commodity, grows proportionally. You might say that this boils down to the same, that these are just two sides of the same coin. This is true but it is important to realize that the present is not like the future imagined in the thirties. While the concentration of capital is higher than ever and the threshold of capital-formation in many sectors, especially the most profitable ones, has become very high, we have also witnessed a decentralisation of production, so that not every investment requires a huge amount of capital. The point is, the way the fall of the rate of profit progresses, is not by reaching a certain point '*x*' at which all accumulation stops. The point Mattick says will be reached, at which there is not enough surplus-value to expand all "the capital already in existence", was reached a long time ago, and was reached at several times in capitalism's history. When this occurs, competition decides which capital gets the surplus-value necessary to accumulate and which falls off the boat. The weakest competitors are eliminated and their market share goes to the stronger capitals. But Mattick's theory doesn't explain why the latter, who do obtain surplus-value for expansion, should suffer too; why the crisis must be total and lead to a breakdown of capitalism, when the lack of surplus-value to expand affects not total capital but only its weakest parts. There is no explanation, unless we understand the interaction between the fall in the rate of profit and capitalism's market contradiction.

The fall in the rate of profit is a structural problem that worsens over time, making the collapse of production, the wholesome devaluation of capital, ever more an objective necessity. But this necessity becomes reality because of a breakdown in the sphere of the realisation of capital, in the conversion of commodity-capital into money-capital. Mattick cannot understand this. At best, his theory can only explain a partial crisis, not a total one. But with his belief in the counter-balancing effect of the rising rate of surplus-value, there isn't even a reason why the fall of the rate profit is itself inevitable. If the rate of surplus-value rises fast enough, so he thinks, the rate of profit goes up, not down. (32) He seems to imagine a race between rising productivity (which he equates with a rising rate of relative surplus-value) and the growing size of the constant capital needed to expand, which is eventually won by the latter. But that doesn't seem unavoidable, as long as the first increased faster than the second. Whether the rate of profit goes up or down, would then solely depend on the progress and nature of technology, determining which rises faster: productivity or the relative size of the constant capital. So Mattick, trying to follow Marx's footprints, stumbled into the trap of technological determinism, without even realising it.

## NOTES FOR PART ONE

1. Already, in smog-polluted cities like Tokyo and Toronto, you can visit an "oxygen bar" and buy yourself a lungfull of pure air (*New York Times* magazine, June 30, 1996)
2. Marx, *Capital*, volume 3: The process of capitalist production as a whole, (New World Paperbacks) p. 212.
3. Marx, ibid.,p.230
4. *International Review* 76 (ICC), p.24
5. Paul Mattick, *Economic Crisis and Crisis Theory* (Ed. Sharpe, White Plains, 1981) p.49
6. See Marx, *Capital* volume 3, p.223-231, which begins: "Political economy, which had until now been unable to explain the law of the tendency of the rate of profit to fall, pointed self-consolingly to the increasing mass of profit, i.e., to the growth of the absolute magnitude of profit (...) but this was also based on mere platitude and speculation."
7. Marx, ibid. p.229
8. Marx, ibid. p. 220
9. Marx, ibid.,p 223
10. Rosa Luxemburg, *The Accumulation of Capital* (Modern Reader Paberbacks) p.337-338
11. Mattick, Henryk Grossmann's ‘The Permanent Crisis’, in: *Communist Review* (IBRP) no 5 (1987), p.13
12. Marx, op.cit. p.236
13. Marx, ibid. p.239
14. To avoid needless complication, we ignore here all production that is unproductively consumed, or that finds no buyer or that is traded with extra-capitalist producers. We will discuss these factors in Part Two.
15. Marx, ibid., p.226
16. Marx, ibid p 247
17. Luxemburg, op. cit. p. 358
18. Marx, *Capital* volume 3 p. 237
19. Marx, ibid p 244 - 245
20. Some of the best descriptions of the use of forced labour by expanding European capitalism can be found in the third section of Luxemburg's "Accumulation". They do not support her claim that the extra-capitalist areas served as a market for capitalism's otherwise unsaleable surplus of consumer goods, but illustrate powerfully how capitalism's rape of the world bolstered its profits.
21. Marx, op. cit, p.238
22. We use here the term ‘free value’ rather than surplus-value because the extra-capitalist producer evidently does not produce surplus-value (he does not receive a wage below the value of his labour-power), yet through the mediation of competition, a portion of the value he produced goes to the advanced capital, which obtains it "for free".
23. *Revolutionary Perspectives* # 6, p.38
24. Marx, op. cit, p. 240
25. One of the causes of the stock market boom of the nineties, especially in the US, is the heightened insecurity caused by gloomy eceonomic perspectives, deep cuts in social programs such as Medicare (health insurance for the elderly) and doubts over the survival of social security. Says one small investor: "For many, as for me, the stock market is now a calculated risk in an ever riskier society, a last boat out of a post-post war economy that is no longer creating jobs people can live on." (Harper's Magazine, oct. 1995, p.58)
26. Paul Kennedy: Preparing for the twenty-first century, (Random House, New York 1993) p. 140
27. Kamunist Kranti: *The problem of extended reproduction and the significance of the tendency of the role of profit to fall*, (Faridabad, jan. '95) p.5
28. Marx, *Capital*, v3 p 259
29. Marx, ibid, p 229
30. Mattick, *Economic Crisis and Crisis Theory*, op cit, p 140.
31. *Revolutionary Perspectives* no 17 (April 1980) p 8.
32. Mattick, ibid, p. 49
33. Mattick, ibid, p 189.
34. Mattick, ibid, p 54.

# Part Two

## The immanent barrier to market expansion

In Part One of this text we saw how, in the capitalist process of production, the creation of surplus-value tends to grow slower than is required for its accumulation. That is the first root-cause of capitalism's historic crisis. The substitution of human labour by machines, which inevitably sets the profit-rate on a downward course, implies a continuous expansion of the scale of production. We have seen that this expansion does not neutralize the falling rate of profit. But that doesn't diminish the pressure on every capital to pursue it, if it wants to survive. The expansion of the scale of production implies a need for the market to expand accordingly. But the more it does, the more it comes into conflict with the other root cause of capitalism's crisis: the immanent barrier to its market expansion, imposed by its own relations of production.

> "The production of surplus-value completes but the first act of the capitalist process of production -the direct production process. (..) Now comes the second act of the process. The entire mass of commodities, i.e., the total product, including the portion which replaces the constant and variable capital, and that representing surplus-value, must be sold. If this is not done, or done only in part, or only at prices below the prices of production, the labourer has indeed been exploited, but his exploitation is not realised as such for the capitalist. (..) The conditions of direct exploitation, and those of realising it, are not identical. They diverge not only in place and time, but also logically. The first are only limited by the productive power of society, the latter by the proportional relation of the various branches of production and the consumer power of society. But this last-named is not determined either by the absolute productive power, or by the absolute consumer power, but by the consumer power based on antagonistic conditions of distribution, which reduce the consumption of the bulk of society to a minimum varying within more or less narrow limits. It is furthermore restricted by the tendency to accumulate, the drive to expand capital and produce surplus-value on an extended scale. This is law for capitalist production, imposed by incessant revolutions in the methods of production themselves, by the depreciation of existing capital always bound up with them, by the general competitive struggle and the need to improve production and expand its scale, merely as a means of self-preservation and under penalty of ruin. The market must, therefore, be continuously extended (..) But the more productivity develops, the more it finds itself at variance with the narrow basis on which the conditions of consumption rest." (1)

This narrow basis is shaped by the income structure resulting from the relations of production. Yet this contradiction becomes manifest, not in the direct production-process, but in the process of circulation, which Marx defined as "the reproduction process of capital as a whole." The circulation-process must assure that capital obtains the necessary machinery, materials and labour-power for the next cycle of expanded production. The contradiction is thus related to, but distinct from, the other root-cause of capitalist crisis, the fall of the profit-rate, which is situated in the direct production-process. The fall of the profit-rate leads itself directly to problems in the sphere of realisation: if capitalists have not enough profit to make the necessary investments, obviously, their demand contracts and other capitalists will be unable to sell to them, and therefore unable to realise all the value contained in their own commodities, so that their own profits and thus their demand, decline too. But, as we've seen in the first part, this in itself should not impede the realisation of the bulk of the value produced, and should therefore not lead to a global crisis.

But capitalism faces another obstacle to the conversion of its commodities into new productive capital: the immanent barrier that its system imposes on consumption. The fall of the rate of profit and this barrier on consumption result from the same conditions: the capitalist relations of production and the rise of the organic composition of capital. But these lead, on one hand, to a widening gap between the quantity of surplus-value produced and the quantity of surplus-value needed for accumulation, and, on the other, a widening gap between the ever larger quantity of commodities produced and the quantity of the demand for them.

> "Since the aim of capital is not to minister to certain wants, but to produce profit, and since it accomplishes this purpose by methods which

> adapt the mass of production to the scale of production, not vice versa, a rift must continually ensue between the limited dimensions of consumption under capitalism and a production which forever tends to exceed this immanent barrier." (2)

Marxist theory must do what Marx himself intended to do but couldn't (3): integrate both fundamental contradictions in a coherent crisis-theory that gives adequate weight to both factors and explains their interaction. Insofar as there is real debate on crisis-theory amongst revolutionary Marxists (alas, very little, despite the fact that it is the linchpin of their message) each side tends to see only one contradiction and ignore the other, while both confusing the frameworks of individual capitals and capital as a whole, with inevitably disastrous results for their overall understanding of the unfolding of capitalism's historic crisis. When Marx states "production determines the market, as well as the market determines production" (4), each camp in this debate hears only half of what he's saying. One side, the Luxemburgists and others focusing exclusively on realisation-problems, can't accept the first half: that production determines the market and that, therefore, an expansion of the scale of production also brings about an expansion of the market. Contrary to what they think the immanent barrier to market expansion is not static and can't be understood without grasping the dynamics of the production process. The other side, of which Paul Mattick has been the best-known theoretician, believes that the fall of the profit-rate is the only barrier to capital accumulation, and can't therefore accept the implications of the second half of Marx's statement, that the market determines production, and that therefore the narrow basis on which this market rests, can become an insurmountable obstacle for the accumulation of capital, which is forced by the tendential fall of the profit-rate to expand continuously.

## THE LIMITS ON THE EXPANSION OF PRODUCTIVE CONSUMPTION

According to Mattick, "so long as capitalist accumulation meets no obstacle, there exists no realization problem." (5) This seems tautological, if you believe, with Marx, that realisation problems are themselves an obstacle to accumulation. Marx emphasized numerous times that the high rate of accumulation to which capitalism is forced must come into conflict with the relative decline of the demand for the necessities of life, which results not only from exploitation, but also from the relative decline of variable capital in the production process. But when Mattick speaks of an obstacle to accumulation, he refers only to the fall in the rate of profit. Of course he recognizes the growing rift between production and consumption in general but, to him, this rift does not cause realisation problems because the movement of capital between the different sectors of production maintains a proportionality between them so that, when overproduction lowers the profit-rate on the production of consumer goods, capital moves away from his sector to the production of constant capital, and restores the balance. The market for consumer goods shrinks relatively, but this corresponds to the faster growth rate of constant capital (and thus of the market for it) because of the rising organic composition (we will discuss this question of proportionality later). The divergence between production and consumption is for Mattick thus only a cause of crisis in the very broad sense that it shows that capitalism "is a social order antagonistic to the satisfaction of actual and potential social needs" but it does not impede accumulation. As long as there is enough surplus-value extracted, capitalism can continue to expand its constant capital and the market for consumer goods will follow pace.

Although he denies it, this puts him squarely against Marx, for whom the barrier to the expansion of demand for the necessities of life, inevitably implies a barrier to the expansion of demand for constant capital, and thus a barrier for accumulation. So where Marx writes "constant capital is never produced for its own sake but solely because more of it is needed in spheres of production whose products go into individual consumption" (Cap, volume 3), Mattick comments that this is "either an error of judgment or unclear writing", since that would make Marx and "underconsumptionist".(6) There is, however, nothing unclear in this statement. Capitalism may behave as if the production of exchange-value is independent from use-values and it may even prosper for decades because of it, but eventually the dependence reasserts itself. If that is an "error of judgment", Marx made it many times. Such as in this famous passage:

> "The real barrier of capitalist production is capital itself. It is that capital and its self-expansion appear as the starting and the closing point, the motive and the purpose of production; that production is only production for capital and not vice versa; the means of production are not mere means for a constant expansion of the living process of the society of producers. The limits within which the preservation and self-expansion of the value of capital, resting on the expropriation and pauperisation of the great mass of producers, can also move - these limits come continually into conflict with the methods of

> production employed by capital for its purposes, which drive towards unlimited extension of production, towards production as an end in itself, towards unconditional development of the social productivity of labour. The means - unconditional development of the productive forces of society - comes continually into conflict with the limited purpose, the self-expansion of the existing capital." (7)

So was Marx an "under-consumptionist"? Yes and no. Yes, in the sense that he believed that:

> "the ultimate reason for all real crises always remains the poverty and restricted consumption of the masses, in face of the drive of capitalist production to develop the productive forces as though only the absolute consuming power of society constituted their limit." (8)

No, because he understood that the cause of under-consumption lies in the very heart of the capitalist mode of production, in the basic mechanism of its production and circulation-process, and therefore cannot be remedied without destroying capitalism. On those who believed otherwise, and their leftists descendants who continue to hype the demagogic myth that the crisis could be solved through a transfer of purchasing power from the rich to the poor, he heaped scorn:

> "It is pure tautology to say that the crises are provoked by a lack of effective demand or effective consumption. The capitalist system does not recognize any forms of consumer other than those who can pay, if we exclude the consumption of paupers and swindlers. The fact that commodities are unsaleable means no more than that no effective buyers have been found for them, i.e. no consumers. If the attempt is made to give this tautology the semblance of greater profundity, by the statement that the working class receives too small a portion of its own product, and that the evil would remedied if it received a bigger share, i.e. if its wages rose, we need only note that crises are always prepared by a period in which wages generally rise, and the working class actually does receive a greater share in the part of the annual product destined for consumption. From the standpoint of these advocates of sound and 'simple' (!) common sense, such periods should rather avert the crises. It does appear that capitalist production involves certain conditions independent of people's good or bad intentions, which permit the relative prosperity of the working class only temporarily, and moreover always as a harbinger of crisis." (9)

Marx paints with a broad brush here; his statement could be nuanced by pointing to moments when low wage-levels worsened and prolonged crises. But in general he is absolutely right. There are several reasons why crises cannot be avoided by raising the purchasing power of the working class.

First, the relative decline of human labour in the production process, and therefore the relative decline of consumer demand of the working class (its share in the total output) is synonymous with the capitalist accumulation process itself and thus beyond the reach of policy-makers.

Second: as we have seen, the cost of restoring and maintaining labour-power determines its value and price (the wage) and thus also the consumer power of the working class. The value of the labour-power above the wage-costs is the surplus-value, the source of the capitalist's profit. Giving a part of that to the working class to increase its effective demand, can therefore only reinforce the tendency of the profit-rate to fall, reduce productive investment and accelerate the crisis rather than avoid it.

Third: the working class spends more or less the totality of its wages on necessities of life (10) since the need of these determine the value of its labour-power. If it were to receive a substantial amount above that, it would spend it not on necessities but on luxury-items. That would be fine for the capitalists producing these commodities, eliminating for them all realisation-problems. But for capitalism as a whole, this increased spending would have on balance a detrimental impact on its accumulation process.

> "If accumulation is to take place, part of the surplus product must be transformed into capital. But short of a miracle, only those things can be transformed into capital which are utilisable in the labour process (i.e. the means of production), and in addition such articles which are suitable for the maintenance of the worker (i.e. the means of subsistence). Consequently, part of the annual surplus labour must be applied to the production of supplementary means of subsistence, over and above the quantity that was requisite for the replacement of the capital advanced. In a word, surplus-value is only convertible into capital because the surplus product whose value it is already contains the material constituents of new capital." (11)

The smaller the share of the surplus product that consists of luxury-products and other commodities (such as military hardware) that cannot be transformed into new capital, the greater the share that goes to accumulation. Conversely, the larger the share of luxury-commodities and other "sterile" production, the less of the total surplus product can consist of new means of production and means of subsistence to hire more labourers, hence, the slower the rate of accumulation and the more pronounced the fall of the rate of profit.

The fact that an increased level of consumption of the working class cannot solve the crisis and can even aggravate it, does in no way invalidate the workers' struggle to raise the wage-level. Apart from the fact that this struggle is usually defensive (i.e. against the lowering of their income) from a communist point of view, its ultimate significance lies not in its immediate results but in the fact that the class consciousness and organisation needed to destroy capitalism, can only develop in a movement that has the economic struggle as its starting point. But precisely because its only real gain is the development of class consciousness, communists must resolutely refuse to sell the demagogic illusion that the economic struggle can in itself halt the crisis and its resulting decline in the living standard of the working class, short of a revolution.

If the increase of consumption by the workers can bring no relief, what about increased consumption by the capitalist class? The question is more realistic, since it is the capitalist class that obtains the surplus-value, not the workers, and which therefore has the choice on how to spend it. One group who seems to think that increased consumption of the capitalist class would provide a solution, if only this class had the physical capacity to consume more, is the ICC. In its American publication *Internationalism*, it responds to a reader's question on the possibility of capitalist market-expansion, first by pointing out that, if wages were raised above their value, profits would decline.

> "Hence, the workers as a class cannot buy the full output of their labour. Then, who will buy the fruit of capitalist production equivalent to the surplus-value? How can the capitalist class realize its profits by turning the surplus-value into money on the market? Capitalists can't do it themselves globally. They are too small as a sector of society to consume the huge supply of surplus-value congealed in the commodities produced by modern industry. Even if a capitalist buys millions of cans of soup, the soup is not consumed. It remains capital available to be resold should market conditions make this favorable. The capitalist and his children cannot eat enough soup to overcome the market glut." (12)

This may win a prize for the most original explanation of the explosive growth in the number of soup kitchens in recent decades. But as an explanation of the causes of capitalism's crisis, this soup is just hot water. Suppose that the capitalist class were suddenly afflicted by a strange disease which makes them consume enormous quantities of soup, does the ICC really think that this would lessen its economic crisis? It would be beneficial for soup-producers, of course, but for capitalism as a whole, this sudden increase of the demand for soup would inevitably imply a decrease of demand for other commodities. The capitalist class uses part of the surplus-value to accumulate (to invest in the expansion of constant and variable capital) and part for its personal use. As for the latter, how it is spend (apart from the necessities of life since the capitalist class must also maintain itself) really doesn't matter, since this surplus-value does not return as new capital in the next cycle of production and is therefore, from the point of view of capitalist accumulation, wasted. Whether spent on luxury-items or soup, it is unproductively consumed and in that sense no different from any other form of surplus-value that is "sterilized", such as armaments, and can only lessen the amount of surplus-value available for accumulation.

## THE REQUIREMENTS FOR PROPORTIONALITY IN THE REPRODUCTION PROCESS

From the above it is clear that terms such as 'overproduction' and 'lack of demand' must be clearly defined for a Marxist analysis. Obviously, to understand capitalist crisis, it makes no sense to use them in relation to absolute consumer demand, or actual human needs. What Marx wrote more than a century ago - "There are not too many necessities of life produced, in proportion to the existing population. Quite the reverse. Too little is produced to decently and humanely satisfy the wants of the great mass" (13) - is even more true today. But as we've seen, neither should overproduction be defined in relation to "effective demand", as Keynes or the ICC do. Since capitalist production equals production for profit, economic growth equals capitalist accumulation. For growth to occur, enough surplus-value must not only be produced and realised, but must also be consumed productively. That means not only that the whole mass of commodities must find buyers but also that the surplus product, which embodies the surplus-value, can not be wasted on sterile consumption, however effective the demand for it may be. For growth to occur, a sufficient part of it must be transformed into additional constant and variable capital. The accumulation of capital is the capitalisation of surplus-value; its transformation, first into profit and then into additional capital, leading to an ever-larger scale of production.

It is this spiral of growth which is the object of study in the second volume of *Capital*. With monk-like precision, Marx analyses this process, following the transformation process of capital, from the sphere of production to circulation and back, from money capital to productive capital to commodity capital and back; from the point of view of the individual capitalist and finally, for capital as a whole. The aim of volume 2 is not to provide an analysis of capitalist crisis. Before you can explain crisis, you must be able to explain prosperity. Before you can account for stagnation, you must know how growth occurs. Before you can analyse devalorisation, you must understand valorisation. That's why volume 1 unveiled the basic mechanisms of capitalist production while volume 2 reveals how the circulation of capital makes accumulation possible. This is, after all, not obvious. How can a system, in which economic decision-making dispersed over millions of players (capitalists) who each can see only part of the global picture, assure the presence of the necessary material elements for further production and growth?

According to classic bourgeois economists (‘Say's law’), the ‘magic of the free market’ solves this problem spontaneously. Production "automatically" creates the markets that correspond exactly to the needs of its own reproduction and expansion. Marx rejected this facile pseudo-solution and set out to unveil the conditions that are required from the relations between production and consumption, for accumulation to be possible. In the third part of volume 2 he did this with the help of illustrative schema's that show how the exchange of value between the sector which produces the means of production (‘Department I’) and the sector which produces consumer goods (‘Department II’) can assure the reproduction and expansion of both, provided that certain conditions are respected. These conditions are essentially these: First, the exchange-value of goods sold by Department I to Department II must be equal to the value of goods sold by Department II to Department I, otherwise there is an unsaleable surplus. Second, the use-value of the commodities brought to the market must correspond to the mutual needs (of reproduction and expansion) of both departments. The production process, therefore, must generate a structure of demand that corresponds to the structure of commodity-value created in the production process and that creates a proportional division of the surplus product into the use-values required for its expansion. The latter condition is essential but easily overlooked. For, as Marx explained, when you're analyzing individual capitals, the particular use-value of the commodities produced is irrelevant, as long as you assume that there exists an effective demand for it.

> "But this purely formal manner of presentation is no longer sufficient once we consider the total social capital and the value of its product. The transformation of one portion of the product's value back into capital, the entry of another part into the individual consumption of the capitalist and working classes, forms a movement within the value of the product in which the total capital has resulted; and this movement is not only a replacement of values, but a replacement of materials, and is therefore conditioned not just by the mutual relations of the value components of the social product but equally by their use-values, their material shape." (14)

Such a set of precarious balances is not automatically achieved by market forces. Obviously, they tend towards it, otherwise accumulation would not be possible. But "the proportionality of the individual branches of production springs as a continual process from disproportionality, because the cohesion of the aggregate production imposes itself as a blind law upon the agents of production" (15) This ‘blind law’, (which we'll discuss further) must over time, through shocks and crises, lead to the mutual cancellation of imbalances. But there is no guarantee, since a number of factors can turn "conditions for the normal course of reproduction (..) into an equal number of conditions for an abnormal course, possibilities of crisis, since, on the basis of the spontaneous pattern of this production, this balance is itself an accident." (16)

The next question is: if the proportionality between the sectors of production is only tendential, achieved ‘by accident’, how does this process play out over time with the growth of accumulation? Do the distortions produce only temporary imbalances, corrected over time or do they lead to a structural imbalance, impeding accumulation? This question fell beyond the scope of volume 2. To answer it, Marx had to explain first how capitalism's ‘laws of motion’ impacted capital as a whole, which was the subject of the third volume of *Capital*. In volume 2 he consciously ignored the rising organic composition of capital and rate of exploitation, competition, the tendency of equalisation of the rate of profit and the tendential fall of the profit-rate, in order to isolate and thereby reveal fundamental mechanisms of capital's circulation.

The reproduction schemas were therefore not intended as a portrayal of reality. They were only a conceptual tool, an extreme simplification. The choice of the two departments was itself somewhat artificial.

Quite a few commodities, such as building materials, diamonds, motors, gasoline, electricity, etc, are produced both as means of production and for individual consumption, and in today's decentralised workplace, a single commodity like a computer can have a foot in both departments. In theory, Marx could have made any other division in the total production, for instance calling Department I the production of shoes and Department II all the rest. Although that would not have been very handy to build a schema upon, and less clarifying since almost all exchanges would take place within the same department, the same conditions of proportionality would apply. In other words, the exchange-value of the output of the shoe-department has to be equal to the exchange-value of the machinery, raw materials and consumer goods for the shoe-capitalists and shoe-workers, that it obtains from the rest of the economy. Also, in use-value, the output of the shoe-department must correspond to the needs of the expanding number of producers and their families in the rest of the economy, while from the rest of the economy it must receive enough to replace its machinery and raw materials, sustain its workforce and expand at the level that is required by the overall growth of the economy. This example makes clear that there is not just one proportionality that must be achieved (between the expanding departments of consumers and production goods) but a whole series. The recycling and growth of value is dependent on a complex network of precarious balances, in which only so much can be wasted or distorted without upsetting the whole.

Marx could also have used more than two departments (in "Grundrisse" he used four, splitting Department I into raw materials and machinery and Department II into necessities of life and luxury-goods), possibly even thousands. That would have made his schemas closer to reality, if still a simplification, but also unnecessarily complicated. When using more than two departments, the conditions of proportionality between them no longer apply but remain imperative for the total sum of proportions between them. The choice he made of the two departments is the most logical, because it makes his schemas simple enough to bring out the underlying requirements of the circulation process, and because it is realistic in the sense that it corresponds to the components in the capitalist production process (constant and variable capital) and to production in general, which always requires tools and means of subsistence. In that sense, the division is not arbitrary at all. It allowed Marx to show how capital, through the exchange of value between its branches of production could grow, "creating its own market by conquering it with its commodities." "The limits of consumption are extended by the exertions of the reproduction process itself. On the one hand, this increases the consumption of revenue on the part of labourers and capitalists, on the other hand, it is identical with an exertion of productive consumption." (17) But in no way did he intend his schemas to be understood as a description of accumulation in real life.

## ROSA LUXEMBURG'S FALSE SOLUTION

But that's exactly how it was understood by the likes of Tugan-Baranovsky and Hilferding, who set out to attack revolutionary Marxism with its own theoretical weapons. While Marx had explicitly excluded elements fundamental for the analysis of capitalist crisis from his analysis of the circulation process, because he esteemed it necessary to clarify the fundamental conditions of circulation before explaining capitalism's laws of motion (volume 3), Tugan-Baranovsky took the schemas of volume 2 as a "proof" of the possibility of limitless expansion of capital, as long as the conditions of proportionality are respected. That this conclusion totally contradicted volume 1 and especially volume 3 of "Capital", was explained by Tugan-Baranovsky by the fact that Marx supposedly worked last on the manuscripts for volume 2 and that in this final labour, the "mature Marx" had discovered that his earlier analyses were mistaken. This nonsense fitted perfectly with the evolution of social-democracy around the turn of the century, which, while still officially "Marxist", was quickly degenerating into a party of and for capital and which proclaimed, in the words of its leader, Eduard Bernstein, that the era of crisis-free capitalism had arrived. Against this trend, and against the impotent reaction to it of Kautsky's ‘orthodox Marxism’, Rosa Luxemburg was one of the most fierce and coherent defenders of Marxism's revolutionary core. "If one admits with Bernstein," she wrote in "Social reform or Revolution", "that capitalist development does not move in the direction of its own ruin, than socialism ceases to be objectively necessary."

So she set out to answer the distorters of Marxism, to prove that capitalism's economic breakdown, and therefore its replacement by a new social order, is an objective necessity. Unfortunately, she accepted Tugan-Baranovsky's claim that the implications of volume 2 contradicted volume 3 and made only limited use of the crisis-analysis in volume 3 to respond to TuganBaranovsky and his kind. For her, sufficient production of surplus-value occurred automatically, just like for her critics the conversion of surplus-value into profit happens automatically. She accepted the terrain on which Tugan & Co had pulled the debate on capitalism's crisis: the sphere of realisation, exclusively. So to come up with an alternative theory to what the schemas of volume 2 supposedly proved, the automatic self-expansion of capital, allowing for limitless growth, she had to embark on a misguided critique of these schemas, reproducing Tugan-Baranovsky's misunderstanding of their purpose. This critique contained several points. These are the main ones:

- In his schema Marx had, to simplify things, equated the value of the total capital advanced for production (C + V) with the total value of money in circulation. But since the value of the commodities produced is greater than the value of the capital advanced (because it contains the surplus-value) the total amount of money must become greater too. What is the source of this additional money? In the framework of his abstract analysis, Marx had responded to this question with a corresponding increase of the production of gold. That answer seemed to Luxemburg 'absurd', a 'deus ex machina'. But behind the question of the source of additional money, there was in her view another one: what is the source of the additional demand that makes the realisation of the surplus-value possible? According to her, Marx's schema made it impossible to answer that question, because it was based on the assumption of a society consisting only of workers and capitalists, in stark contrast to the reality of the day. Most of mankind still lived in a pre-capitalist economy; and according to Luxemburg, it was precisely the metabolism between the capitalist and the extra-capitalist world that made it possible for the former to realise that part of the surplus product which it did not use for individual consumption but for investment in the expansion of production.

- Marx's schema was also unrealistic in that it did not take into account the continuous rise of productivity, or, the increasing organic composition. The continuous relative decline of variable capital and corresponding rise of constant capital is bound to affect the proportions between the departments of production. By offering her own schema of expanded reproduction in which the organic composition increased with each cycle of production, Luxemburg 'proved' that, instead of limitless harmonious growth, accumulation leads to overproduction in Department II (consumer goods) and a corresponding underproduction in Department I (means of production). For this problem again, the extra-capitalist market provides the solution.

In the framework of this text, it seems best not waste to much space on this schema business. They can be valuable tools to illustrate a limited point, as Marx used them. But they are all based to various degrees on arbitrary assumptions and quantities and can in no way be considered as proofs that accumulation evolves in this or that way. What the schemas of Luxemburg, of her critics Bauer and Grossmann, and of numerous academic Marxists after them have in common is that they all 'prove' what their authors believed in the first place. The thesis of Rosa Luxemburg stands or falls very well without it. It is quite simple. The workers cannot buy the surplus product containing their own surplus-value, or they wouldn't be exploited and there would be no profit. But the capitalist class can't either - or it would be buying its own commodities with its own money and "then the heaping up of profits which is accumulation must be impossible for the class of capitalists as a whole." (Anti-Critique) In Marx's schema, of course, the capitalist class is doing exactly that - buying its own commodities with its own money - and it can do so and make a profit which it can reinvest in accumulation, because capitalism doesn't enrich itself in the circulation process (although individual capitalists do) but in production through the extraction of surplus-value. As for the source of additional demand, it flows from the accumulation process itself, the need to expand production. But then, "we're clearly running in circles", responds Luxemburg. Department I expands its production, and who needs the additional means of production? According to Marx's schema, Department II, to produce more consumer goods. Who needs those additional consumer goods? Department I, because it now employs more workers. And so on. This "empty merry-go-round " makes no sense, according to Luxemburg. It would mean that "commodities are produced for the pleasure of producing, which from a capitalist point of view is a pure absurdity." That the means and the goal are the same: production is expanded for no other reason than to expand production. There must be a motivating force, an inducement to accumulate, which can only come from demand from outside this closed circle.

> "Internal capitalist trade can at best realise only certain quantities of value contained in the social product: the constant capital that has been used up, the variable capital, and the consumed part of the surplus-value. That part of the surplus-value, however, which is earmarked for capitalisation, must be realised elsewhere." (18)

Hence the crucial role of the extra-capitalist market. But

> "although this non-capitalist milieu is indispensable for accumulation, capital proceeds at the cost of this medium nevertheless, by

> eating it up. Historically, the accumulation of capital is a kind of metabolism between capitalist economy and those pre-capitalist methods of production without which it cannot go on and which, in this light, it corrodes and assimilates. Thus, capital cannot accumulate without the aid of non-capitalist organisations, nor can it tolerate their continued existence side by side with itself." (19)

The outcome is inevitable: the scarcer the non-capitalist territories become, the more bitter the inter-imperialist struggle over them. Wars, crises and revolution break out, even before the disappearance of extra-capitalist demand has brought accumulation to a complete and irreversible halt.

She illustrates her thesis with an excellent analysis of capitalism's penetration of the pre-capitalist world. This historic overview, which takes most of the third section of "The Accumulation of Capital", is quite valuable in itself. In fact it's so well done, that the reader tends not to notice that most of her historical examples do not support her thesis. She describes land robbery and other theft of resources in India, North Africa, South Africa. She shows how American farmers, through taxation, were separated from their soil (20). She explains the use of slavery in the southern US, forced labour in Peruvian rubber plantations, extreme exploitation in South African mines, forced labour of Egyptian and Turkish serfs and so on. It is not difficult to see how the first cheapened elements of the constant capital and how the latter provided extremely cheap variable capital for capitalism; thereby counter-acting the fall of the profit-rate, as we argued in the first part of this text. But it is difficult to see how they solve the riddle of realisation.

For Rosa Luxemburg, the fall in the profit-rate was not a factor impeding accumulation. As we have seen in the first part , she mistakenly thought that the fall in the rate of profit is arrested by the cheapening of the components of production so that "the sun would burn out" before the fall of the profit-rate threatened accumulation. Not a shortage of surplus-value, but the difficulty of realising it was in her view the crucial problem. But most of her examples show how capitalism grabbed more surplus-value, rather than selling the surplus product produced at home (though there are examples of that too, of course). For the capitalist, it makes no fundamental difference whether he steals labour-power from "free" workers, serfs of slaves. They all yield surplus labour, hence surplus-value. Luxemburg conceded as much:

> "There is no a priori reason why rubber plantations, say, run on capitalist lines, such as have been laid out in India, might not serve the ends of capitalist production just as well. (But) primitive conditions allow of a greater drive and of far more ruthless measures than could be tolerated under purely capitalist social conditions. It is quite different with the realisation of the surplus-value. Here, outside consumers qua other-than-capitalist are really essential." (21)

The first part of this quote is certainly true, although the qualification that the exploitation of slaves and forced labourers yields more surplus-value no longer holds. As for the last part, she simply hasn't demonstrated her case. And even if shehad, that wouldn't have solved her problem. She stops her reasoning halfway. She sees an excess of production appear in Department II that can't go back into Department I and gets rid of it with her “outside consumers qua other-than-capitalist". But that is just a detour leading back to the same problem. The extra-capitalist buyer is also a seller, otherwise the excess might as well have been unproductively consumed. Luxemburg fails to show what happens in the cycle of expanded reproduction with the commodities supplied by the extra-capitalist producers. Why should these restore the proportionality between the departments of production, rather than creating a new excess?

The idea that extra-capitalist buyers realised the surplus-value needed for accumulation had a certain plausibility in Luxemburg's time, when most of the world still lived under the formal domination of capital and the economic interactions between capitalist and non-capitalist production still played a vital role. As Marx said:

> "as long as capital is weak, it seeks to support itself on the crutches of a disappeared or disappearing mode of production; as soon as it feels strong, it gets rid of these crutches and moves comfortably according to its own laws."

The theory of Luxemburg is very much imprinted by the conditions of the phase of formal domination of capital. Under the conditions of real domination, it loses all credibility. Not just because of the awesome growth of the mass of surplus-value that would have to be realised on the extra-capitalist market but also because of the growing gap in the technical methods of production (and therefore in the material form of commodities) between pre-capitalist production and capitalist production which, under real domination, operates with a specifically capitalist technology. As the review *Communisme ou Civilisation* remarks:

> "It is hard to imagine how, in the phase of real domination, a growing portion of the social product (the surplus-value) can take a material form appropriate for consumption by pre-

> capitalist forms of production, while these pre-capitalist forms of production would have to form the material elements of a capitalist accumulation based on an advanced technology." (22)

Imagine, if you can, that the lost continent of Atlantis suddenly re-emerges from the ocean, inhabited by a pre-capitalist society not unlike India at the onset of colonisation. Could anybody even for a moment entertain the idea that such a miracle would solve capitalism's accumulation problems? What could it possibly have to exchange for the surplus product of the capitalist world? It may have a population ready to be exploited, but there's no shortage of that. It may have minerals and arable land, but sub-Saharan Africa has both in great quantities (in fact it has the largest reserves of arable land in the world) and yet its participation in world trade amounts to less than 3 % (in money, that is). Only tourism might profit from this miracle.

By situating the cause of capitalist crisis outside the production process, Luxemburg came up with a theory that is incapable of explaining the cycle of valorisation-devalorisation. Regardless of the phase of production, according to her theory, there could be no crisis as long as there are enough extra-capitalist buyers (despite the severe crises of the 19th century) and there could be no way out of the crisis, once the extra-capitalist market is gone. Despite her claims to the contrary, that makes her theory contradict the dialectical process of history. And it created for her thesis an acid, fool-proof test: As soon as capital would have established "the exclusive and universal domination of capitalist production in all countries and for all branches of industry" (she believed this would never actually happen, although it now clearly has) "accumulation must come to a stop. The realisation and capitalisation of surplus-value becomes impossible to accomplish. Just as soon as reality begins to conform to Marx’s diagram of enlarged reproduction, the end of accumulation is in sight, it has reached its limits, and capitalist production is in extremis. For capital, the standstill of accumulation means that the development of the productive forces is arrested, and the collapse of capitalism follows inevitably, as an objective historical necessity." (23)

Of course, capitalism can always find or create ‘third buyers’ within its own system. But Luxemburg herself discarded this subterfuge, since these third buyers (state functionaries etc) are unproductive consumers, whose source of income is derived from the surplus-value or the workers' wages (24). She left herself one escape-route, in the form of armaments production but she should have rejected this on the same grounds.

The test of history was not about to come soon, in her eyes. In 1913 she wrote, in her *Introduction to Political Economy*, that "capitalist development had still a long road in front of it, because capitalist production as such represents only a very small fraction of the world's production." She pointed to the fact that even in industrialized Europe, most of agricultural production remained non-capitalist, and a lot of production had an artisan character, while in other European countries, not to mention the rest of the world, artisan- and peasant-production still dominated. Nevertheless, according to most of her contemporary followers, such as the ICC, only one year later (in 1914) capitalist decadence began, because of the lack of extra-capitalist markets. Eighty years later, the mass of surplus-value that goes into accumulation has grown tremendously. If Rosa Luxemburg's theory held any truth, the extra-capitalist market should have grown accordingly, to make this possible. Manifestly it hasn't and, understandably, today's Luxemburgians can't come up with a credible explanation for this strange phenomenon. They point to the market provided by reconstruction after the world wars but forget that in Luxemburg's theory, the need for extra-capitalist consumers is independent of the scale of production. Smaller capitals need to accumulate just like bigger ones and since the surplus-value for this purpose can only be realised outside capitalism, it doesn't matter if a war reduces the scale of production from 100 to 10 once the extra-capitalist market is gone.

They further point to the expanded use of credit to keep the production cycle going, precisely the kind of argument that Luxemburg's critics such as Bukharin used against her. But credit, like money, doesn't create anything. Its expansion is bound by the expansion of the extracted and realised surplus-value. In other words, it can only expand without causing a financial crisis, if the surplus-value is realised and accumulation proceeds at a sufficient rate. If the realisation of surplus-value keeps pace with the expansion of credit, the expansion of demand must have kept pace with it too which, in Luxemburg's view, would mean that the extra-capitalist market has expanded proportionally. Since it has - to the contrary - enormously shrunk, the extra-demand generated with credit must have its source in the surplus-value produced within capitalism . The credit argument should therefore be rejected on the same grounds as those on which Luxemburg rejected the false solution of the demand of third buyers within the system. In contrast to those epigones, Luxemburg at least understood that, if capital cannot realize the surplus-value, it cannot continue to exist. It cannot choose whether to accumulate or not, and the incontestable fact that accumulation occurs, and at times at a fast rate, proves that surplus-value is being realised and that therefore, its realisation is not dependent on an extra-capitalist market.

But that's too hard to understand for the ICC. Faced with the question how to explain the enormous expansion of capitalism since World War II, it has nothing better to say than that "any minimally serious Marxist has to reject this 'fabulous growth' as a bluff and conclude that it is a question of doped and fraudulent growth", masking "the paralysis and mortal illness of accumulation throughout capitalist decadence", because it consists, in the ICC's view, mainly of "unproductive expenditures". (25) While it is true that unproductive consumption has grown tremendously in the last century, the ICC doesn't realise that its "solution" makes the question only more difficult to answer. If capitalism has no longer access to (extra-capitalist) markets to realise the surplus-value needed for accumulation, how can it realise the surplus-value needed to finance all this unproductive consumption? It's one thing to claim that the awesome growth of capitalist production in this century (26) is merely "doped growth", value that is wasted without creating any new surplus-value, but "any minimally serious Marxist" would still have to explain where this wasted value comes from. Its only possible source is surplus-value but where is this surplus-value realised? The ICC claims this "doped growth" is financed with debt and inflation, but as we explained in regard to credit, this offers not even a temporary solution, if the possibility to realise surplus-value no longer exists.

There can be no doubt that Luxemburg's theory has failed the test of history. In a non-dogmatic revolutionary movement, the discussion on her theory should focus on where she went wrong and what remained valid in the questions she posed, even if her answers are not adequate. That this isn't the case, that groups in this movement still defend her thesis as if nothing had happened to disprove it, shows that their dogmas are dearer to them than the truth. But a revolutionary group that has lost the capacity to question, to seek theoretical clarity, has no reason to exist, unless for its own sake. Undoubtedly, those groups will go on spouting inanities about the mythical extra-capitalist market, ignoring all facts and critiques (this one included) because of this theory's (unintended) demagogic strength: you can't dream up a simpler formula to explain capitalism's crisis. But that doesn't make it true. We were once convinced by it too, which is one reason why we devote so much space to it. But not the only one. The social upheavals which can open the way to a new society, will have an economic breakdown as their starting point. When the conditions are right for their message to be heard, economic questions will be among the first which revolutionaries will have to answer convincingly: why and how does this happen, can capitalism overcome it, etc. Hopefully, we will have something more profound to say than that the extra-capitalist market has disappeared so that the capitalist market is saturated.

## THE SOURCE OF MONEY

So far, we have shown the inadequacy of Luxemburg's theory mainly with empirical arguments. We now have to investigate on a more theoretical level where her mistakes originated.

First, let's deal with the money-question. It isn't the core of the matter but it's leading towards it. And there is a lot of confusion about this aspect. There are not only Luxemburg's confusions on the matter, but also her critics' confusions about what her confusions were; and their own confusions on top of that. The debate is bewildering. In the framework of this text, it seems neither necessary nor possible to try to disentangle it all. Let's focus on the main point.

As we have noted earlier, Luxemburg criticized the way Marx had answered the question where the additional money comes from to realise the surplus-value that is earmarked for accumulation. If a given amount of money circulates (at a given velocity) a given quantity of value, then naturally this amount must increase when the quantity of value increases, when the social product swells with surplus-value. Where does this additional amount of money come from? In his analysis of expanded reproduction of total capital, Marx made gold production the sole source of new money. This solution didn't satisfy Luxemburg. Actually, Marx wasn't too happy with it either:

> "If the circulation process(..) were conceived as rectilinear - which would be incorrect, since, with few exceptions, it always consists of mutually opposing movements - then we would have to begin with the gold (or silver) producer, who buys without selling, and assume that all others sell to him. The total social surplus product (the repository of the entire surplus-value) would therefore be transferred to him (..) The surplus-value of the gold producer, produced in gold, would then be the only fund from which all the other capitalist drew the material with which to realize their surplus product." (27)

Marx called this assumption "absurd" but added that the difficulty is only apparent. The absurdity results primarily from the limitations which he had imposed on his analytical framework. He consciously ignored money capital (investment capital) outside the sphere of production, equated money circulation with "metallic circulation in its simplest, most primitive form", and further assumed that all income, generated in the production process, is spent on the commodities produced. These assumptions were necessary to investigate the conditions of proportionality, the recycling and growth of value in its most simple form. But they also implied that he could not investigate simultaneously the role of financial capital, commercial capital and credit. So in this schema, the only source of additional money to realise the surplus-value, had to be additional gold production, plus money that had been previously set aside (hoarded) by industrial capital and later thrown back into circulation. Within the limits of his abstract schema, for the purpose that it served, that sufficed.

Earlier in volume 2 he had posed the same question, in dealing with the circulation of surplus-value. Where does the additional money come from to realise the surplus-value? After investigating the issue from various angles, Marx concludes that the problem does not exist, or at least not for the surplus-value specifically. As he further summarizes:

> "The only assumption required here is that there should be always sufficient money to convert the various elements of the commodity mass (..) This is in no way affected by the fact that a part of the commodity value consists of surplus-value." (28)

Nor does it matter "whether the mass of commodities is produced under capitalist conditions or not", he adds elsewhere (29). Whether the commodities contain a lot of surplus-value or none at all, the money-problem is the same: there must be enough of it to make their circulation possible. So the question is not: where does the money to realise the surplus-value come from, but where does all the money come from? Or, formulated differently, what is the value of money? Is the total value of money equal to the total value that goes into the production of its material form?

In earlier times, the value of money was indeed based on the value of its commodity-form: mainly gold and silver. But it's obvious that this can't be true for developed capitalism: its accumulation would be sharply curtailed. There would be growth or depression, according to the amount of precious metals produced. And indeed, because of money's historical origins in the commodity-value of precious metals, the transfer of a sufficient quantity of them by the Spanish conquistadors from America to Europe, was a precondition for capitalist accumulation. "Hence, the increased supply of precious metals from the sixteen century onwards was a decisive moment in the historical development of capitalist production." (30) But it's also worth noting that it gave Europe its first wave of inflation, thereby revealing that the real value of money is not determined by the intrinsic value of gold itself (for which the demand is, in principle, unlimited) but by the relation of its quantity to the quantity of the value of the total mass of commodities of a country, which it circulates. And by something more:

> "The capitalist mode of production (..) can develop on a large scale and penetrate deeply only when there is a quantity of money in the country in question sufficient for circulation and for the hoard formation (reserve fund, etc) conditioned by this circulation." (30)

What does the latter mean for the size of that hoard formation? How big can it be, and, consequently, how big can the amount of money be? Its growth-rate is determined by the level of profit and the rate of accumulation of the country in question. In other words, by the amount of surplus-value that is being produced and realised on an ongoing basis. If that amount grows fast, so too must the amount of money; if it grows slowly, the money-supply must too. If the money supply grows faster than the surplus-value (31), the penalty is inflation; if it grows too slow, a deflationary contraction will result.

The more capitalism develops, the more money capital develops too. The dialectical interaction between it and productive capital, between money and commodities in general, is analysed extensively in volume 2. Marx emphasizes that capitalist reproduction requires the prior existence of money capital in the hands of the capitalist class over and above the value of the total production (32), that "besides the sum of money required for direct circulation, there is always a certain quantity in a latent and non-producing {i.e. non-producing - Sander}state, which can come out and function on a given impulse." (33)

Only a part of the total social capital is continuously engaged in production. This implies also a relative autonomy of money capital from the sphere of production. While capital in the form of commodities must transform into money (in other words: its value must be realized on the market) or become worthless, money capital is not under the same absolute obligation to transform into commodities, i.e. to be invested in production. That is an essential factor in the realisation problem and in the crisis mechanism, completely neglected by Mattick et al. We shall come back to it later. Here we want to emphasize that, besides the conditions of proportionality that Marx brought out in his schemas, there is another set of proportionalities that is equally vital: between the quantity of money and the quantity of value in circulation, between circulating money capital and circulating income from the production process, between circulating money and hoarded money and within the latter category, between money that can be directly invested in production and the rest. These must be taken into account, to understand how the accumulation of capital can proceed, as well as how it is disrupted. As we said, we come back to this later.

How is this money capital outside the sphere of production formed? Apart from the capital formation in primitive accumulation, which begin with commercial and banking capital in the Middle Ages (there was capital before there was capitalism) there is a continuous flight, so to speak, of capital from the production process. This occurs particularly, in the sphere of circulation: "When one commodity replaces another, the money commodity always sticks to the hands of some third person. Circulation sweats money from every pore." (33) (The source of this "sweat", like of all capital, is real sweat, surplus-value from the sphere of production. Profits are made, but no value is created in circulation). Money capital comes also out of the sphere of production directly. Industrial capitalists must for example maintain a reserve fund for long-term investments, such as the replacement of their plant-infrastructure, which require large amounts of money, but only after a considerable period of time. In the meantime, they don't keep this money under the mattress, but make it available for banking capital which use it for loans, etc. Furthermore, money capital will tend to leave the productive sphere all together, when the rate of profit becomes too low (see further).

Money capital, and in particular the banking system with the central banks at the top of the pyramid, regulates the money quantity and assures that there are enough technical means of exchange for the realisation of all the value in circulation, the ever-swelling mass of surplus-value included. So the source of the additional money to realise surplus-value is, like that of all capital, nothing but surplus-value, that is already in possession of the capitalist class. There is no specific problem. But it's a problem that can't be solved without considering the role of money capital outside the direct sphere of production, because it is the veritable motor of accumulation. "Money capital is the original form and final purpose of the whole devilish undertaking." (35) Today more than ever. Every day, hundreds of billions of dollars move around, in a never ending search for a higher yield. Industrial capital must compete for this capital - company against company, country against country, but also against non-productive forms of capital-employment, which may yield a higher return than the average profit-rate. Remember that all non-productive forms of capital, too, originated as surplus-value in the sphere of production. Some are absolutely necessary within the context of capitalist society, while others can be considered as a hoard, from which capital can flow back into the sphere of production, like capital from the sphere of production can flow back into it, depending on the rate of profit compared with other capital-yields. In this way, money capital is constantly pushing industrial capital to provide higher profits, by lowering its production costs under the social average or by marketing new products; forcing it therefore, to accumulate.

So after establishing that it comes from surplus-value "already in the hands of the capitalist class" and that accumulation just means that is employed differently, Marx' final answer to the vexing question on the source of the additional money to realise the surplus-value is, for Rosa Luxemburg, disappointingly technical:

> "The additional money required for the circulation of this increased commodity mass of a greater value must be created either by a more economic use of the quantity of money in circulation (..) or alternatively by the transformation of money from the hoard form into the circulation form (..) To the extent that all these means together are not enough, there must be additional production of gold." (36)

For Luxemburg, that just means that

> "this increasing amount of money must be found somehow or other. All this is, no doubt, plausible and correct as far as it goes, but our problem is not solved, it is merely wished away." (37)

For her, the distinction between surplus-value and merely recycled value gets lost, if the problem is reduced to the observation that an increased bulk of value requires an increased quantity of money. Then it's easy to answer the question of the source of money with "Marx's recipe: from the gold mines." (38) Marx can't find a satisfying answer to his question, Luxemburg continues, because it has been the wrong question all along.

> "No intelligent purpose can be served by asking for the source of the money needed to realise the surplus-value. The question is rather where the demand can arise - to find an effective demand for the surplus-value."

But it is she who poses the wrong question. Her question makes no sense, at least not in the way she puts it:

"On the basis of simple reproduction (39), the matter is easy enough: since all surplus-value is consumed by the capitalists, they themselves are the buyers and provide the full demand for the social surplus-value, and by the same token they must also have the requisite cash in hand for circulation of the surplus-value. But on this showing it is quite evident that under conditions of accumulation, i.e. of capitalisation of part of the surplus-value, it cannot, ex hypothesis, be the capitalists themselves who buy the entire surplus-value, that they cannot possibly realise it. True, if the capitalised surplus-value is to be realised at all, money must be forthcoming in adequate quantities for its realisation. But is quite impossible that this money should come from the purse of the capitalist class itself. Just because accumulation is postulated, the capitalist class cannot buy their surplus-value themselves, even though they might, in abstract, have the money to do so. But who else could provide the demand for the commodities incorporating the capitalized surplus-value?" (40)

Why, the extra-capitalist market of course**.**

## INDIVIDUAL AND TOTAL CAPITAL

Here we are at the heart of Luxemburg's argument -and at the heart of her mistake. Compared to the capitalist in simple reproduction, she reasons, the capitalist in expanded reproduction must consume less, in order to accumulate. But the accumulating capitalist is not consuming less. He is only consuming differently. Instead of consuming all his surplus-value unproductively, he is now consuming it in part productively. In both cases, the capitalist has surplus-value from past production in his hands - and spends it. "It is simply its application that differs", as Marx explained (41). In terms of how this affects the proportions of demand, accumulation makes the demand for Department I (means of production) increase and the demand for Department II (consumer goods) decrease, as is required for the development of capitalist society, but it doesn't diminish the overall demand. Therefore, no additional source of demand is needed and no additional source of income, since:

"the surplus product in which the surplus-value is represented costs the capitalist class nothing. As a class, it possesses it and enjoys it free of charge, and the monetary circulation cannot alter this in any way. The change that this brings about simply consists in the fact that each capitalist, instead of consuming his own surplus product in kind, for which in most cases it would not be suitable, withdraws commodities of all kinds from the total stock to the total amount of the surplus-value he appropriated, and appropriates these." (42)

Of course when he "appropriates these", the individual capitalist pays, for machines etc. under expanded reproduction, as well as for consumer goods under simple reproduction. It is the same circuit: the capitalist transforms his commodities into money and thus his surplus-value into profit, and with this profit he buys other commodities. Because he pays every time, the cost-free nature of the surplus product he appropriates is not apparent. But the surplus-value is not embodied by a specific part of the total social production; it does not come to the market as "the surplus product", that must be realised after the commodities containing the transferred value of constant and variable capital are sold. Every single commodity contains a part of the advanced and transferred capital and a part of the surplus-value. They are realised (or not realised) together. The surplus product is free of charge for the capitalist in the sense that his surplus-value (his profit) gives him the cost-free means to buy with it either consumer goods or means of production.

So when Rosa Luxemburg incredulously mocks the notion that the capitalist class "buys its own surplus product with its own money", she hits the nail on its head. For the individual capitalist such a thing would be an absurdity. He couldn't accumulate if he did. He must find an outside buyer, not just to realise his surplus-value but to recoup his production costs. But if you analyse the matter from the standpoint of the total capital, it is different. The need for an outside buyer disappears and the distinction between the free surplus product and the production replacing the constant and variable capital, lost in the transactions of the individual capitalist, becomes clear. That is Luxemburg's fundamental mistake: she has confused the analytical frameworks of the individual capitalist and of total capital; and has transposed the need to find an outside buyer from the former to the latter, for whom it does not exist (43).

So there doesn't have to be a demonstrable pre-existing additional demand out there to set the accumulation process in motion. With money capital in the driver's seat, accumulation is forced upon the industrial capitalists. Every capital must join the process or go under and all these strivings combined produce the growth of the total capital, as Luxemburg was well aware of:

"Capitalist methods of production do more than awaken in the capitalist this thirst for surplus-

> value whereby he is impelled to ceaseless expansion of reproduction. Expansion becomes in truth a coercive law, an economic condition of existence for the individual capitalist (..) as soon as a few capitalist enterprises have been enlarged, competition itself forces all others to expand likewise. Expansion becomes a condition of existence. A growing tendency towards reproduction at a progressively increasing scale thus ensues, which spreads automatically like a tidal wave over ever larger surfaces of reproduction." (44)

Whether this tidal wave results in overproduction or not, can only be observed after the fact. But if an excessive rate of accumulation creates overproduction, it is not the fastest accumulating capitalists who suffer first, but those who can't keep up the pace of investment. So the incentive to accumulate remains in place, even in the face of overproduction. The accumulation of capital goes hand in hand with the destruction of capital with a lower organic composition.

This ‘coercive law’ to accumulate means that accumulation is a blind, unplanned process which even in the best times inevitably leads to some degree of overproduction. The quantity of value realised is virtually always smaller than the quantity of value produced (as Marx said, a complete balance is only achieved "by accident"). In highly developed capitalism this becomes increasingly apparent because the overproduced segment of total production grows in bulk, even when it does not in value. The question is whether this tendency leads to marginal overproduction, temporary imbalances restored through the movements of capital between sectors and the elimination of less productive capital, or to structural, chronic overproduction, preventing the conversion of the value contained in commodities into money-capital, thereby blocking their return into the productive process, causing the latter to collapse.

To investigate this, we must first establish how the movement of capital affects the rate of accumulation, the organic composition, the rate of profit and therefore also the ‘effective demand’ of the different sectors of capitalist production. For this purpose, the analytical framework of total capital that Luxemburg adopted (following Marx) isn't adequate. This framework is absolutely necessary to analyse the underlying dynamics of the sphere of production and the organic relations between the sphere of production and the sphere of circulation, because it removes the surface-distortions created by competition. Competition turns reality on its head but it does not forge the laws of capital. It, however, realises them. Therefore, to take the investigation further into the mechanisms of realisation, to understand how capitalism's market-contradiction takes shape and interacts with the decline of the rate of profit, we have to integrate the framework of the total capital, where there is no competition, with that of ‘many capitals’, where there is. Luxemburg never did so.

Sander

(to be continued)

**NOTES FOR PART TWO**

1. Marx, *Capital* volume III, op.cit., p. 244-245
2. Ibid, p. 256
3. In his original plan, Marx intended to devote a final volume of *Capital* to a full treatment of the world market and crisis.
4. Marx, op. cit. p 191
5. Paul Mattick, *Economic Crisis and Crisis Theory* (Ed. Sharpe, White Plains 1981) p 63.
6. Ibid. p. 67
7. Marx, op. cit. p. 250
8. Ibid. p. 484
9. Marx, *Capital*, Vol. II, (Penguin ed.) p. 486-487.
10. What these are of, course, can vary a great deal with the development and complexity of capitalist society, which greatly affect the living conditions and therefore the needs of the working class. Furthermore, there is the impact of the stupendous productivity of capitalist production. One of its consequences is the cheapening, diversifying and improving of all commodities. So what a worker's wage can buy has, over time, substantially increased even if the exploitation-rate (the ratio of unpaid/paid labour-power) has increased too. The price of labour is naturally also subject to fluctuations in demand and supply. In periods of rapid accumulation, when the demand for labour is high and the penalty for a shortage of labour (because of strikes or whatever reason) is severe, the price of labour-power tends to rise too. In periods of stagnation and crisis, the opposite occurs. Today, the vast majority of workers obtain fewer necessities for their wages than 10 years ago and many earn less than the subsistence-level. Increasingly, workers' households need two incomes, or three incomes (with one of the family-members holding two jobs, or with the help of child-labour) to get by. For a small minority of the working class (in certain high-tech sectors) the opposite is true: their skills are so much in demand that they can command very high wages, clearly above what normally determines the value of a wage. The fact that they receive a fraction of the surplus-value however, does not make them capitalists. First, this benefit can quickly disappear when the shortage of labourers with their skills diminishes. Second, they still are, like other workers, dependent of the sale of their labour-power to survive. Only if they earn so much (which occurs in rare instances) that they become able to transform a significant part of their income into capital, can they no longer be considered part of the working class. But as we said, these are rare occurrences. For the bulk of the working class, the elasticity of the social concept of 'the necessity of life' has meant in the last quarter of the century, a steadily decreasing living standard.
11. Marx, *Capital*, volume 1 (Ed. Everyman) p. 638.
12. Internationalism 64, may 1989, p. 12.
13. Marx, *Capital* volume 3 p. 257
14. Marx, *Capital* volume 2, p. 470.
15. Marx, *Capital* volume 3 p. 257
16. *Capital*, volume 2, p. 571
17. *Capital* volume 3, p. 482
18. Rosa Luxemburg, *The Accumulation of Capital*, op. cit. p 366
19. Ibid, p. 416
20. Marx also talks about this in the last chapter of *Capital*, volume 1. In the US, Australia etc, the abundance of the land actually transformed proletarians, imported from England etc, into extra-capitalist producers. Rather than working for a boss, most immigrants soon choose to farm for themselves. This created a shortage in the labour-market, driving up wage-costs. Therefore, subsistence-farmers had to be separated from their soil to make them proletarians again, while the massive size of new waves of immigrants acted in the same direction.
21. Luxemburg, op. cit., p. 365
22. *Communisme ou Civilisation* (BP 88, 75722 Paris Cedex 15), # 14, Oct. 1983, p. 48
23. Luxemburg, op. cit. p .417
24. Ibid, p 134-135
25. 'Theories of Capitalism's Historic Crisis', in *International Review* # 83, p. 22
26. According to P. Barioch, industrial production grew from 1900 = 100 to 3041.6 in 1980 (*Journal of European Economic History* 11, 1982, p. 273).

27. Marx, *Capital* volume 2, p. 567
28. Ibid, p. 549
29. Ibid, p. 407
30. Ibid. p. 418
31. Excluding here, international transactions from the analysis.
32. Ibid. p. 548-54932
33. Ibid. p. 553
34. Ibid. p. 416
35. Mandel: Introduction to *Capital* volume 2, Penguin ed. p 18.
36. Marx, *Capital* volume 2, p. 419-420
37. Luxemburg, op. cit. p 164
38. Idem. It is worth noting that Marx, despite the crucial role he gave to the gold producer in his reproduction schemas, held no illusions on the dependency of money from the value of its commodity-form. After concluding his answer on the source of additional money to realise surplus-value, he continues:

    "The sum of labour-power and social means of production that is spent in the production of gold and silver as instruments of circulation, forms a heavy overhead for the capitalist mode of production(...) It withdraws from social use a corresponding sum of possible additional means of production and consumption, i.e. of real wealth. To the extent that the costs of this expensive machinery of circulation are reduced (...) the productive forces of social labour are correspondingly heightened. Thus, in as much as the auxiliary means that develop with credit have this effect, they directly increase capitalist wealth, whether this is because a greater part of the social production and labour process is thereby accomplished without the intervention of real money {i.e. commodity-money - Sander}, or because the capacity of the actually functioning quantity of money to fulfil its function is thereby increased.

    "This also disposes of the pointless question of whether capitalist production on its present scale would be possible without credit (even considered from this standpoint alone), i.e. with a merely metallic circulation. It would clearly not be possible. It would come up against the scale of precious-metal production. On the other hand, we should not get any mystical ideas about the productive power of the credit system, just because this makes money capital available or fluid.  But the further development of this point does not belong here."  {Marx analyses it in *Capital* volume 3 - Sander} (*Capital*, volume 2, p. 420)

    The gold-standard was probably historically inevitable but that doesn't make it necessary. Given its limitations and expense, capitalism had to get rid of it. With the development of banking and credit hand in hand with the development of industrial capital, commodity-money was gradually marginalised by symbolic monetary instruments. Today, huge amounts of money never even take on a material form, except as figures on computer screens.
39. Reproduction without accumulation, i.e. after a cycle of production, the capitalist replaces his constant capital on the same scale as before, hires then also the same amount of workers as before and keeps all his profit for his personal use.
40. Luxemburg, op. cit. p 165
41. Marx *Capital* vol. 2, op. cit. p 418
42. Ibid. p. 550
43. *Communisme ou Civilisation* arrives at the same conclusion following a somewhat different route. "The fundamental error of Rosa Luxemburg is not to have seen well the qualitative jump that occurs in the circuit of capital, when you leave the point of view of the individual capitalist for that of the total capital." Comparing the circuits of individual and total capital, Communisme ou Civilisation shows that the circuit of total capital does not follow like individual capital the sequence M-C-C'-M' (money capital (M) is transformed into the commodities constituting the productive capital (C) which, in production increases in value (C') -and is again transformed -provided outside buyers are found- into M' which is greater than M, the money invested) but "a succession of cycles M-C, in which money is always the motor of the movement, and in which the goal remains the surplus-value, the search for exchange-value for the exchange-value. Also, if it's possible for total capital to accomplish the movement C'-M' {the transformation of the produced commodities in an increased quantity of money - Sander}, it is because the capitalist class accomplishes the movement M'-C'. The realisation of value takes place because there is a conversion of money in productive capital and labour-power." (See *Communisme ou Civilisation*, op. cit. p. 34-37).
44. Luxemburg, op. cit. p. 40-41