

Marx, money and the modern finance capital

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Marcus Lehner offers an outline of Karl Marx's theories of money, banking and finance and shows how it can provide a compelling account of what caused the great financial crisis

Prior to the collapse of the 'real estate bubble' in the USA in 2007, it appeared to many economists and commentators that the global economy had achieved the self-regulating and steady expansion described in their textbooks. People spoke of the 'Great Moderation', meaning the elimination of the wilder excesses of the business cycle, and Gordon Brown famously proclaimed the end of 'boom and bust'.

At the root of this comforting vision, in both theory and reality, lay the phenomenon of 'cheap money'. In the past, periods of low interest rates and economic growth had always led to bouts of inflation that could only be combated by rises in interest rates which then resulted in a downturn in growth. However, in the mid years of the first decade of the new century there was no sign of this. Everybody, from the man in the street, whose home was steadily increasing in value, to the corporations, whose profits were rising, could borrow money safe in the knowledge that the repayments would be markedly lower than the profits.

Financial markets themselves were mobilising ever greater volumes of money to deliver ever greater profits; one oft-quoted statistic sums up the character of the times: in the second half of 2005, the value of credit derivatives (which can be understood as a sequence of bets on the risks of providing credit) was 18 times that of all the shares traded on the New York Stock Exchange. Little wonder, then, that the managers of the biggest investment banks and hedge funds basked in their glory and were nicknamed the 'Masters of the Universe'.

Until, that is, the whole carousel of credit-based investments and profits came to a juddering, jarring, halt in the summer of 2007. Suddenly, there was no more credit to be had 'at any interest rate. Although it started in the US 'sub-prime' real estate market, the credit crunch rapidly spread across the economy as it became clear that even major banks were going to be hit. Since nobody could be sure who was really creditworthy, no credit could be advanced.

For those directly involved, the crunch was a total surprise, a thunderbolt out of a clear blue sky. The fact that it was entirely unexpected not only by financiers themselves but also by virtually all major economic research institutes, public and private, is evidence enough of the inadequacy of the dominant economic models and theories. In particular, this article takes up the analysis of the role and nature of money in the capitalist economy and the relationship between 'finance' and what is commonly called the 'real economy?'. [1](#)

These are issues that have imposed themselves rather forcibly on mainstream economic analysts over the last two years but, prior to that, they appeared to have been long settled. The dominant view was that the function of money was analogous to that of a lubricant within a complex piece of machinery; essential, of course, but both in theory and in practice an entirely separate entity from the machinery itself.

Consequently, the source of money for the economy, the money markets, were essentially the same as any others in all respects, save one; while shortages would raise prices (that is, interest rates) and gluts would lower them, the supply of money was ultimately controlled by governments or central banks and could, therefore, be manipulated to ease any problems of supply.

In this economic model, even a serious disturbance in the money markets could be brought under control so that it had little impact on other sectors of the economy, other markets. Thus it was that, when the five leading economic institutes in Germany, on whose work the Federal Government bases its own forecasts, issued their projections for the national economy in July 2008, they predicted continued growth through to the end of that year with only minor effects from the financial problems in the USA. Within two months, with the collapse of Lehman Brothers and the onset of the deepest economic crisis since the Second World War, the same institutes were vying with each other to produce the most 'catastrophist' perspectives for Germany. One institute even suggested that it would be better to stop making any predictions at all and to admit that they did not understand what was happening.

When analysing their errors, the institutes later noted in a joint statement, 'One of the causes of our big mistakes was rooted in the fact that the interaction between financial and commodity markets, as well as the causes and the course of the financial crisis, are not understood to the extent that we could predict situations like the current one.'² This article presents a very different analysis. To the extent that any analogy can convey the functioning of an economic system, it would be more accurate to view money as the blood circulating in the capitalist 'body', supplying its cells with the necessary oxygen and carrying away the products of its metabolism. Unlike the oil in a machine, blood is an organic part of the body itself and evolved with it so its nature and functions cannot be fully understood in isolation from the body.

Equally, although the institutions of finance capital have no doubt evolved into highly specialised organs, comparable in many ways to the brain, they are not wholly independent but interconnected in millions of ways to the rest of the body. This interconnectedness in the real world was revealed dramatically by the credit crunch and shrinkage in world trade that followed immediately upon the collapse of Lehman Brothers. In the years to come it will, no doubt, be made even clearer by the attempts of governments and bosses to transfer real money from workers' wages and public services to replace that which was doled out to the banks and finance houses to prevent the complete paralysis of the global economic system. As the crisis of 2007-8 unfolded, the general direction of its progress was perceived to be 'downward'. The linkages between the highly rarefied realms of 'high finance' with their arcane acronyms and esoteric algebra and the 'real economy' became very obvious as all forms of credit dried up and first traders and then manufacturers were forced to rein in their activities. Within months of some of Wall Street's 'masters of the universe' being sent packing with their cardboard boxes of belongings, 40 million workers in the heartland of China's industrial powerhouse, the Pearl River Delta, were left penniless, and often homeless, as world trade seized up. By contrast, Marx's analysis of the role of money and finance in the capitalist system proceeds from the 'bottom', that is the most elementary feature of capitalism, the production of commodities for the market, to the 'top' where what is traded appears to have no physical presence at all. In order, therefore, to analyse developments in the world of derivatives using Marx's categories we must first, however briefly, retrace his analysis of the genesis and evolution of money.

Money and the contradictions of capital accumulation

Despite the extraordinary complexity of the terms used to describe the various financial instruments in use at the time, at the heart of the credit crunch and the ensuing financial crisis lay what appears to be a quite simple question, 'what, exactly, is money?' This was, ultimately, the issue behind the financial institutions' inability to establish whether all their various pieces of paper were actually worth anything. Since the shift away from the 'gold standard', particularly since the floating of the US dollar in 1971,

money has increasingly been seen as, in itself, worthless, simply a convenient 'token' that symbolised value or wealth but nothing more. So long as there was 'trust' in the markets, these tokens were entirely valid and, by extension, other pieces of paper could play the same role. So long as there was trust but there's the rub! As soon as some of those pieces of paper, bundles of securities based on 'sub-prime' mortgages in the US, were shown to be essentially valueless, all trust vanished.

Suddenly, the 'Masters of the Universe' were found to be both helpless and hopeless and were only saved by the emergency action of states who replaced their pieces of paper with 'money'. If the analysis of money as value-free were correct, then the sudden avalanche of new money printed by governments around the world should have restored trust in the markets and thus restored commerce to an even keel. In fact, while it quelled the panic in the short term, it then put in doubt the creditworthiness of the states themselves as the relative 'strengths' of the pound, the euro, the dollar, the yen and the yuan were tested in the bond markets. In other words, capitalist practice demanded evidence that money did indeed have a value. More recently, suspecting that the evidence is either not reliable or is not forthcoming at all, those who can have turned to a more secure measure of value and the price of gold has reached record highs.

Marx was certainly well aware of the dramatic effects of crises on capitalists as this passage from Capital shows:

'The bourgeois, drunk with prosperity and arrogantly certain of himself, has just declared that money is a purely imaginary creation. 'Commodities alone are money,' he said. But now the opposite cry resounds over the markets of the world: only money is a commodity. As the hart pants after fresh water, so pants his soul after money, the only wealth. 'the monetary famine remains whether payments have to be made in gold or in credit-money, such as bank-notes.' [3](#)

Likewise, he recognised the intellectual turmoil that crises wrought on the bourgeoisie's theoreticians, 'This sudden transformation of the credit system into a monetary system adds theoretical dismay to the actually existing panic, and the agents of the circulation process are overawed by the impenetrable mystery surrounding their own relations.' [4](#)

Nonetheless, the real strength of Marx's work results precisely from the fact that he did not limit himself to a mere description of his contemporary capitalism. His method was aimed far more at analysing and then presenting the fundamental categories of capitalist commodity production and the laws of its movement which, because they are intrinsic to its nature, hold true no matter how complex and sophisticated the forms into which it has evolved. That is why his descriptions can ring so true today, even for the apparently completely novel developments in today's financial markets. His analysis of money is a case in point. It is inextricably rooted in his analysis of the development of commodity production and commodity exchange and, as we shall see, retains its explanatory power throughout both the development of the analytical model and the actual evolution of capitalism.

A commodity, by definition, is a product that is made not to satisfy the direct needs of the producer but to be exchanged in order to obtain what the producer wants. The Labour Theory of Value explains that different commodities exchange in varying proportions dependent on the amount of 'socially necessary labour time' crystallised within them - a product requiring 4 hours of such labour would exchange with 2 other commodities requiring 2 hours each or 4 requiring 1 hour each. While such 'exchanges of equal value', that is barter, were no doubt quite haphazard and approximate when commodity production was a peripheral activity within society, the more frequent commodity exchange becomes, the more systematic the comparison of values becomes. Moreover, as exchange of commodities becomes common and more types of commodities are involved then the increasing number of potentially equal exchanges becomes cumbersome; 1 of commodity X is equal to 2 of commodity Y but only a half of commodity Z, so 1 of Y

exchanges for only a quarter of Z and so on. Worse, if some commodities have relatively low value then very large quantities need to be exchanged for high value goods and this may be physically restricting.

Clearly, in such circumstances, a convenient solution would be to use one commodity with a widely recognised value as a standard equivalent for all others and, historically, items such as iron bars, conch shells or bags of salt are known to have been used in this way. Marx described a commodity used in this way as a 'Universal Equivalent' and stressed that it could play the role only because it really did have a known value. Within the given society, the commodity producer could safely exchange their own product for a specific quantity of the Universal Equivalent (UE) because they could be sure they could then exchange it for the commodity they themselves wanted from a third party. Such exchanges are no longer direct barter, commodity for commodity, C ? C, but rather an indirect exchange C ? UE ? C.

As Marx explained, over time, usage and custom identified the precious metals, particularly gold, as the ideal materials for acting as Universal Equivalent; they were durable, quantifiable and a relatively lengthy production process meant that small physical quantities could exchange for other commodities conveniently. With the further development of exchange into regular trade, and the social changes that accompanied that, the standardisation and definition of the value of precious metals led to the introduction of coinage, money (M). With this, the exchange of commodities became C ? M ? C. This exchange is possible only because M is recognised by both parties to have a value of its own and this feature of money is crucial from the most distant times to the present day.

Yet, as soon as gold, for example, becomes currency, it is no longer quite the same as any other piece of gold, even of the same weight. What has happened is that it has acquired a new use-value, the use-value of being able to exchange with other commodities. What is now important about the gold is not its own physical properties but its ability (because it is standardised, legitimised by the state etc) to express the exchange value of other commodities, the value that is an expression not of the other commodities' physical properties, their use-values, but of the amount of socially necessary labour incorporated in them. In this way, money acts as the measure of value. As such, all commodity owners are ready to part with their own commodities in exchange for the appropriate number of gold coins.

As a measure of value, the first importance of money to its owner is that it can be exchanged for commodities. Looked at from the point of view of an economy, however, the use of money (rather than reliance on barter) allows for a much more fluid system of exchange of goods. The same gold coin, in our example, can pass from hand to hand on market day, each time allowing commodities to 'change hands'. From this point of view, money functions as the means of circulation. Theoretically, once these use values of money have become established and the particular physical properties of gold have, as it were, receded into the background, it becomes possible for the same use value to be acquired by a substitute for actual gold, a symbol or token that is recognised as playing the same role. Ultimately, that is only possible if it is guaranteed that the symbol can be turned back into the reality of a physical expression of value, can be redeemed for, in our case, actual gold.

In practice, this transition from precise weights of real precious metals to mere tokens of those weights, took place over centuries, an important factor in the transition being the debasement of coinage by governments lacking in reserves of precious metals to mint into coinage. Despite the fact that everyone knew the gold Sovereign or Mark or Escudo was not pure gold, other things being equal, such coins could still function perfectly well as money. As they passed from hand to hand, they retained their use value of expressing the exchange value of other commodities, providing always that each temporary owner of the token knew that they could, if they needed to, exchange it for actual gold.

Money and crisis

After the derivation of money from the commodity form, money has up to this point been presented in its functions as a measure of value and as a means of circulation. With the separation of exchanges over time, the exchange of goods is liberated from the need for immediate mutual exchange of money, the process $C \rightarrow M \rightarrow C$ can be separated out over time and placed into $C \rightarrow M$ and $M \rightarrow C$:

“No one can sell unless someone else purchases. But no one directly needs to purchase because he has just sold. Circulation bursts through all the temporal, spatial and personal barriers imposed by the direct exchange of products, and it does this by splitting up the direct identity present in this case between the exchange of one’s own product and the acquisition of someone else’s into the two antithetical segments of sale and purchase.”⁵

With this separation, both a new function of money and also the abstract possibility of crisis are born. Money becomes, on the one hand, an end in itself (“money as money”) in that money obtained from a sale does not have to be spent on a new purchase but serves as a “store of value” (hoarding). Equally, both $C \rightarrow M$ and $M \rightarrow C$ can themselves be extended over time; C may be handed over on the understanding that M will be forthcoming on a set date or M may be handed over on the understanding that C will be presented on a set date. In such cases, the delay in completing the exchange is clearly intended to benefit one party and, since this is the way of the world, the other party naturally charges a fee for the convenience. In other words, a business can be made out of such transactions. Finally, “money as money” also frees itself from the local limits of the sphere of circulation in that it becomes comparable with money from beyond these limits (“world money”).

Clearly such developments create a new contrast between the simple value symbol of money as the means of circulation and its “money as money” function; the saver, the creditor, the holder of foreign currency wants to see “hard cash” and not just some symbol. On the other hand, it also creates the possibility that money will fall out of circulation, whether through excessive saving, unpaid debts or transfer abroad, thereby obstructing circulation and causing a break in the transformation of commodities (stocks of commodities that cannot be sold, lack of money-backed demand). With the development of the function of “money as money”, therefore, the possibility of crisis as “a market collapse” or the overproduction of commodities is also created.

It is precisely this possibility of crisis caused by general overproduction that was denied by both the classical and the neo-classical bourgeois economists. The essential logical reason for this is precisely the lack of understanding of money in the sense it is understood in (Marx’s) value theory. The argument is based on what is called “Say’s Law” that, put simply, says that every supply creates its own demand:

“all those who have, since Adam Smith, concerned themselves with the lessons of political economy, accept that, in reality, we do not really buy what we need with the money, the means of circulation, with which we pay. We must first of all have bought the money itself through the sale of our own product. (?) because the total value that we can buy is equivalent to the value of what we can produce, so also people can buy more if they produce more. From this flows the other conclusion (?) that the reason why particular goods cannot be sold lies in the fact that others have not been produced?”⁶

Following this approach, in the debate over the possibility of a general crisis of overproduction, Ricardo argued that demand is only limited by the level of production. Certainly, there could be overproduction in particular sectors, but only as a result of incorrect distribution in the markets, which could be overcome through a process of balancing out, mediated by the movement of prices. In bourgeois economics, the possibility of a sustained lack of aggregate demand (that is, across all markets) is denied precisely on the basis of this “balancing out” and this remains the “main lesson” up to the present-day.

Marx dealt with Ricardo's arguments in Theories of Surplus Value and established once again the inability of Ricardo's value theory to understand the role of money in the capitalist economy. Ultimately, in bourgeois economics (and this is even more extreme in the neo-classical theory) capitalism is reduced to an exchange economy in which money is introduced as a supplementary, useful instrument without understanding its central role in the capitalist system: "Crises are thus reasoned out of existence here by forgetting or denying the first elements of capitalist production: the existence of the product as a commodity, the duplication of the commodity in commodity and money, the consequent separation which takes place in the exchange of commodities and finally the relation of money or commodities to wage-labour."⁷

Here it is again made clear that the functions of money derived from the analysis of the value-form can lead to the greatest separation between sale and purchase in the form $C \rightarrow M \rightarrow C$ and to the retention of money as "value in itself". More precisely: "at a particular moment, the supply of all goods can be greater than the demand for all goods in that the demand for the general commodity, money, exchange value, is greater than the demand for any particular commodity or because, at that moment, the pressure to present commodities as money, to realise their exchange value, outweighs the pressure to turn the commodities back into use values."⁸

The bourgeois (neo-) classical theorists believe they can avoid what Marx described as the "abstract form of the crisis" by extending their theory of equilibrium: assuming free markets, a declining general demand would be balanced out by extra savings as a result of falling interest rates which would then lead to an increase in investments and, therefore, demand. The problem with this is that once again the "money market" is dealt with as if it were any other commodity market and therefore its dependence on capital accumulation and its tendencies to crisis are not taken into account. Later (see Interest bearing capital), therefore, once we have established this connection, we must integrate this into the concept of the abstract possibility of crisis.

Interestingly, with regard to this question, there is one important exception in bourgeois economy: just like Marx, Keynes worked on the basis of a sharp rejection of Say's Law. For him, too, the money function in capitalism is bound up with the systematic possibility of a crisis of overproduction ("lack of effective demand?"). Keynes explicitly recognised that Marx had overcome the understanding of the bourgeois economy as simply an exchange economy: "the distinction between a cooperative and an entrepreneur economy bears some relation to a pregnant observation made by Karl Marx (?). He pointed out that the nature of production in the actual world is not, as economists often do suppose, a case of $C \rightarrow M \rightarrow C$, that is, of exchanging commodity or effort for money in order to obtain another commodity or effort. That may be the standpoint of the private consumer. But it is not the attitude of business, which is a case of $M \rightarrow C \rightarrow M+$, that is, of parting with money for commodity or effort in order to obtain more money. (?) an entrepreneur is interested, not in the amount of product, but in the amount of money which will fall to his share."⁹

This transition from exchange economy, $C \rightarrow C$, or commodity circulation, $C \rightarrow M \rightarrow C$, to the production of capital, $M \rightarrow C \rightarrow M+$, is actually decisive in order to understand the determination of value for its own sake, which is developed from the analysis of money, and the abstract possibility of crisis which flows from that, in its actual, realised movement. Although Keynes certainly shared with Marx the analysis of the possibility of crisis, nonetheless he did not share the analysis of the actual movement of capital.

Money circulation, value symbols and monetary crisis

The relationship between, on the one side, commodity value and money value and, on the other, price levels and money supply can be derived from Marx's money theory through various stages.

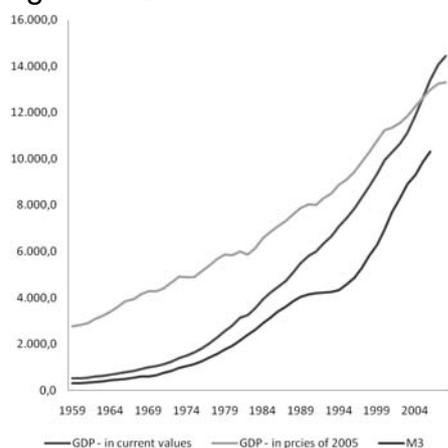
In the simplest case, where a currency based on gold is used, the latter, prices and money supply, are directly determined by the former, that is, the value of commodities and the value of money (as opposed to Hilferding's quantity theory): if V_m is the value of the monetary unit (as result of the socially necessary labour required in money production) V_i is the value of the commodity i (in which $1 \leq i \leq n$ commodities) X_i is the number of units of the commodity i involved in transactions in the period T , P_i is the price of the commodity i in monetary units, q is the velocity of circulation of money (the average number of transactions in which one and the same unit of money is applied in the period T) and S_z is the supply of monetary units, then the following equation holds:

$$qS_z = \sum (1..n) X_i P_i = \sum (1..n) V_i / V_m$$

Following this simple relationship, an increase in price results either from a reduction in the value of money or an increase in the value of commodities.

Or, the other way round, the devaluation of money can take place without any effect on prices if the value declines by the same amount (as in the current situation in which for a long time the obvious tendencies to inflation in the highly indebted dollar economy were offset by the "China" effect).

Figure 1. Growth of the mass of money M3 in comparison to GDP in current values and in real values



Source: Federal Reserve/Department of Commerce

Figure 1 shows the development of US GDP both in current money values and in 2005 dollars from 1959 to 2008 and sets them against the money supply M3, a measure which does not just represent physical dollar notes or short-term bank account money but also means of payment that just exist "on the books", on which more below. The development of GDP in current values gives the impression of smooth and permanent growth. This contrasts to the GDP growth in deflated values that shows clear slowdowns in the late 1960s, the mid-1970s, the late 70s and early 80s, the mid-90s and in 2008. It is also clear that the growth in M3 closely parallels the growth of GDP in current values until the mid-80s. This shows the, at least partially, inflationary basis of growth during the period from the late 60s to the mid-80s. After that point, the impact of the Fed's monetarist politics (the "Volcker shock") can be seen in the sharp slowdown of M3-growth, which shows the specific character of the late 80s recession in the US. It also shows the non-inflationary basis of GDP growth in the early 90s in the US. Obviously, from the mid-90s onwards, this trend goes into reverse: the growth in the money supply M3 is far ahead of the growth of real GDP.

Most spectacularly, during the financial crisis, because of the measures taken by the Fed and the US government, M3 grew by 135 per cent between the beginning of 2007 and the autumn of 2009. This can be compared to the 35 per cent increase in M3 in the Eurozone in the same period. This increase in the money supply also took place while GDP shrank as a result of the recession. This disparity points to enormous inflationary pressures. Since inflation has not yet surged, this can only mean that the money created was mainly directed into channels other than ordinary consumption; to other countries, to

international financial institutions that have been accumulating dollar debts, or else into the creation of a new speculative bubble. The relative flow of funds into these different channels can be judged from the factors that will now be examined.

In an economy using gold as a currency, the money supply is directly determined by value relationships (money, goods) and so are prices. If gold is now replaced by a value token (which is covered by the gold reserve) then it can happen that the actual money supply will be greater or lesser than that which is really needed. In that situation, the relations in the above equation can only be satisfied insofar as the value of the value tokens rises or falls in inverse relation to the money supply. Prices will then rise or fall accordingly. In this way, where money tokens are used as currency, price levels become the regulator of money supply insofar as the monetary authorities are responding to rising or falling prices and these are not a consequence of changes in the value of goods.

These relations will be substantially modified as soon as the functions of 'money as money' are introduced into the analysis. As soon as credit-relations come into play then, with their help, there can be commodity circulation without money (or with money simply as a measure of value). On the other hand, it must be able to enter into circulation as the means of payment when it falls due on the settlement date. The debtor must complete sales of commodities for money with the single aim of accumulating the necessary means of payment for his debt. Credit relations and 'hoarding' (savings) appear in a developed commodity circulation in a definite relationship: 'the development of money as means of payment makes it necessary to accumulate it in preparation for the days when the sums which are owing fall due. While hoarding, considered as an independent form of self-enrichment, vanishes with the advance of bourgeois society, it grows at the same time in the form of the accumulation of a reserved fund of the means of payment. [10](#)

In addition, all the other possible social relationships take on the form of debts that have to be serviced by the means of payment, for example, taxes and rents. By settling payment obligations by means of institutions such as banks, not all payments have to be made with 'real' money. The mutual obligations can be reconciled so that the actual volume of means of payment can be minimised. Here, with money as means of payment, a problem appears:

'There is a contradiction immanent in the function of money as means of payment. When the payments balance each other, money functions only nominally, as money of account, as a measure of value. But when actual payments have to be made, money does not come onto the scene as a circulating medium, in its merely transient form of an intermediary in the social metabolism, but as the individual incarnation of social labour, the independent presence of exchange-value, the universal commodity. This contradiction bursts forth in that aspect of an industrial and commercial crisis which is known as a monetary crisis.'[11](#)

That is, the advantage of a developed monetary system, the ability to reconcile sales and payments taking place at different times (cashless transfers) brings out the contradiction between money as a mere circulation token and money as the absolute commodity.

For the total money supply, the condition for balance is now given by:

$M = M_c + M_b + M_h$ (where M_c is the mass of circulating money, M_b is the balance of payments to be made and M_h is the mass of hoarded (saved) money (the balance on international trade is ignored for this purpose).

Now it is not just a matter of whether, with the given velocity of circulation, the sum of money tokens corresponds to the sum of values that have been exchanged but also whether, at the necessary date for settlement, enough money has been transferred from M_c to M_h to balance M_b . If not, then here is a further

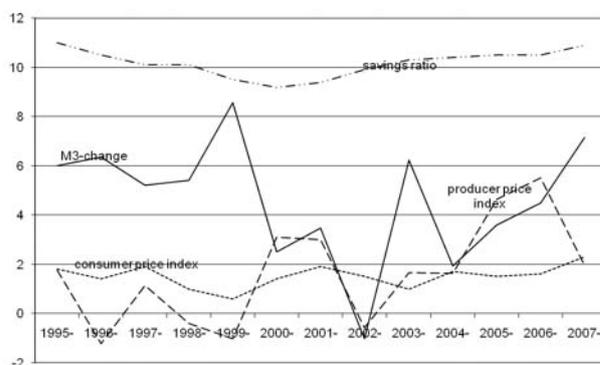
reason for the devaluation of money.

This is all the more so as the long-term settlement date of debts itself opens the possibility of using these debts as money tokens. Credit money, in its original form as bills of exchange and their discounting becomes, with the development of money circulation, the main form of appearance of money:

On the other hand, the function of money as a means of payment undergoes expansion in proportion as the system of credit itself expands. As the means of payment, money takes on its own peculiar forms of existence, in which it inhabits the sphere of large-scale commercial transactions. Gold and silver coin, on the other hand, are mostly relegated to the retail trade.¹²

Since, in Capital volume three, Marx demonstrates the development of paper money out of the exchange business of issuing banks, there is a further reason for coinage to be pushed into the sphere of retail trade by credit money. These points destroy the myth that Marx had ultimately to reduce all money to gold (or a similar metallic form) because of his concept of the 'money commodity'. With the development of credit money it will later become clear that there is another commodity which is able to play the role of money as the incarnation of social labour: that is capital itself, which becomes a commodity as soon as it takes on the form of interest-bearing capital. With this, money as credit money is only limited in its expansion by the limits on the expansion of capital accumulation itself. All the same, to demonstrate this requires further intermediate steps in the analysis. The immediate conclusion to be drawn is that it is not management of the money supply or some other monetary policy that can resolve the problems of capital accumulation, but on the contrary it is the fundamental contradictions of capital accumulation which lead to turbulence and crises in the sphere of money.

Figure 2: Components that influence inflation (propensity to save, M3-increase, producer price index) and consumer price index for Germany 1995-2007



In this figure, it is obvious that inflation, as measured by the consumer price index (CPI) did not move in parallel with changes in the money supply, M3. To some extent, this can be explained by the effect of the increase in savings which began in the year 2000, a very different scenario from that in the USA. The other important factor was the low level of producer prices; cheap prices for imported goods, for example, from Eastern Europe or China, had a long-term tendency to offset the effects of a more lax monetary policy. On the other hand, at the outbreak of the crisis in 2008, when there was a sharp increase in commodity speculation, a rapid increase in input prices immediately led to fears of inflation. In 2009, this threat receded because of the deflationary impacts of a worldwide recession. However, during the second half of 2009 there has again been a massive speculative wave in commodities. In addition, one effect of the crisis was a significant increase in the saving rate, even in the US. A lot of the liquidity that the Fed pumped into the markets was not used for any real purchases but to ensure liquidity reserves and to consolidate balance sheets. Since most of the financial institutes that have survived the crisis are now beginning to invest again, we can anticipate that the saving rate will cease playing the same role in counteracting inflation.

Money as capital

With the transformation of money into capital, (?money as capital?) money, and with it the contradiction of commodity and money, gains an independent form of movement: $M \rightarrow C \rightarrow M+$. Whilst the circulation of commodities has a purpose outside of itself (transformation of the form of use value) the circulation of capital is an end in itself: the advance of money in order to obtain more money. However, this cannot be achieved within the sphere of circulation in itself (sale above value would lead in the long-term either to redistribution of surplus value or a general raising of prices) as long as the law of the exchange of equivalents holds. Only with labour power is a commodity found in which the consumption of the use value maintains its value and moreover creates more value. Thus, the transformation of the labour process from a simple value creating process into a process of expanding the value (valorisation) of a money advance, presupposes an antagonistic social relationship in the production process: the immediate producers confront their means of labour and means of subsistence in the form of commodities in such a way that they can only make use of the means of labour, which are ultimately necessary for producing their own means of reproduction, through the sale of their labour power; that is, the owner of the means of production and the owner of nothing more than his or her own labour power confront each other and their relationship is mediated, but at the same time hidden, through commodity production. While, in the circulation process, individual commodity owners enter into a relationship, in the production process social relationships appear as the relationship of the productive ?general worker? and the surplus value appropriating ?general capital?.

From these social relationships in the capitalist production process, the fundamental value-theory determinants of the lawfulness of capital accumulation can be derived. The rate of surplus value is essentially determined by the social balance of forces between capital and labour (working day, level of wages, development of the reproduction costs of the commodity labour power in relation to labour productivity?). Equally, labour productivity and the development of the composition of capital are not only determined through technical developments but also through social conflicts, as is the scale of production (the absolute mass of productive labour time and labour power). These value determinants are the essential parameters for the development of capital accumulation (continuation of $M \rightarrow C \rightarrow M+$ over any number of periods through which a part of the realised surplus value from earlier periods is re-invested, that is, accumulated) which for its part then has an impact on them. One important consequence of repeated rounds of investment is that, as a rule, more and more machinery (often referred to, quite correctly, as ?labour-saving devices?) are used by fewer and fewer workers. In Marx?s terms this is the ?rising organic composition of capital? meaning that the proportion of the total capital invested that is devoted to machinery and raw materials (?constant capital?) rises as the amount spent on wages (?variable capital?) declines. There is also a constant tendency to pressurise the level of wages towards the minimum necessary in connection with the unavoidability of the army of unemployed. These tendencies also include the necessarily increasing concentration of capital (with the ever higher capital costs for the essential productive sectors there are ever fewer individual capitals in a position to accumulate) and also the increasing centralisation and acceleration of accumulation (takeover or merger of capitals).

Marx analysed these developmental tendencies at the level of capital in general, that is, on the basis of the value-theory analysis of the capitalist production process, without thereby having to go into the details of circulation. The analysis of the circulation process of capital in its unity with the production process in the second volume of Capital introduces only categories which allow the concrete forms of these developmental laws to be presented in volume three. Every attempt to introduce these elements of the analysis of the sphere of circulation directly (with the same value) into the Marxist theory of crisis must, therefore, as in the ?monetary value theory? or in Austro- Marxism, result in their revision. This is also true with regard to the significance of competition for individual capitals. Very far from constituting the ?essence

of capitalism? competition is much more a consequence of the self movement of capital, the valorisation of capital under its own will. The accumulation of capital at higher and higher levels necessarily means that the space within which individual capitals can expand themselves becomes narrower and narrower and they are thereby forced into a life and death struggle:

?Accumulation, therefore, presents itself on the one hand as increasing concentration of the means of production, and of the command over labour; and on the other hand as repulsion of many individual capitals from one another. This fragmentation of the total social capital into many individual capitals, or the repulsion of its fractions from each other, is counteracted by their attraction. The attraction of capitals no longer means the simple concentration of the means of production and the command over labour, which is identical with accumulation. It is concentration of capitals already formed, destruction of their individual independence, expropriation of capitalist by capitalist, transformation of many small, into few large, capitals.? [13](#)

In his writings on imperialism, Lenin correctly rooted the tendency to the formation of monopoly capital in this mutual relationship of competition and concentration of capitals in the developmental history of accumulation that Marx had already noted: ?half a century ago, when Marx wrote Capital, it appeared to the overwhelming majority of economists that free competition was a ?natural law??. today monopoly is a fact.? [14](#) Today Marx ? the economists explain ? is naturally obsolete because capitalism follows completely different laws from those in ?competitive capitalism?. As has already been established, this misunderstands that, for Marx, competition is a consequence, not the essence, of capital development. Unlike Hilferding, who saw in the new epoch of capital primarily a new organisation in the sphere of circulation, namely the formation of highly concentrated banking capital which led to an all embracing control over industrial capital, Lenin insisted ?this definition is in so far incomplete in that one of its most important moments is lacking, namely the increasing concentration of production and of capital to such a high degree that the concentration leads to monopoly and has to led to monopoly.? [15](#) Moreover, the extreme concentration into monopoly capital does not lead ultimately to the transcendence of fundamental laws, accumulation leads to growing concentration and equally to an ever more sharpened competition. This applies both to the competition between monopolies (at the international level) and equally to the sharpening of competition between the non-monopoly sectors and the spin offs of monopoly.

What is true with regard to the question of avoiding the crisis tendencies within capital accumulation that Marx discovered through the so-called rendering ineffective of competition, is also true of other elements of the analysis in the sphere of circulation. In the analysis of the circulation of capital it is not just a matter of the price struggle between capitals but essentially about the conditions under which the value produced in the capitalist production process in the form of commodities can be realised. Because the social framework of production in capitalism is only enforced subsequently, via circulation, it is only in circulation that it can be established whether the division of social labour between the different spheres of production is actually capable of reproduction. In the ?reproduction schema?, Marx demonstrates the conditions under which the division of social labour between production goods and consumer goods under expanded reproduction brings with it the increased demand for the increased production. These schemas are the ?conditions of balance? which, in the unplanned social context, are generally not met but which directly generate the offsetting movements which counteract the disproportions. Thus Marx did not have a theory of an ?ultimately limited market? which created an absolute demand limitation on capital accumulation (as Rosa Luxemburg maintained). Rather, what Marx showed with the reproduction schema was that the capitalist production process repeatedly creates the necessary demand for its products so long as the expansion of production is accompanied by an increase in surplus value production. The limitation on capital accumulation is ultimately capital itself, which, with the acceleration of accumulation, simultaneously undermines the source of the production of surplus value: human labour power.

Other elements of the analysis of the circulation of capital are the distinction between fixed and circulating capital and equally the significance of the turnaround time or storage time. Whereas, for example, raw materials, energy, and other material elements transfer their value in the production cycle, machines only give up part of their value to the product during each production cycle. The varying turnaround times for fixed capital demand the creation of big amortisation funds or the provision of huge capital advances at particular times. These turnover times are therefore bound up with the cyclical payment peaks and with the business cycle. On the other hand, an acceleration in the turnover of capital, for example, through a reduction in storage times, transport costs or speedier realisation of the finished goods, also means acceleration of accumulation and of competition and concentration.

With the transformation of surplus value into profit it appears to the individual capitalists that they have gained something independent of the individual commodities, the general social framework of the amassing of the value takes on its own fetishised form. What essentially concerns the individual capitalist is how much more money (profit) he receives by the sale of his goods than he had to pay out in the form of production materials and labour power (?cost price?). Within the cost price, the labour power that actually creates value loses its separate identity and becomes just one part of the variable costs as compared to the fixed costs. That the profit rate ($m/c+v$) continues to be determined by the real value parameters of production (rate of surplus value m/v and value composition c/v) disappears on the surface of society.

This difference becomes important as soon as individual capitals confront each other in competition within a particular branch of production or as investors in various branches. Here, the varying value composition, even where there are approximately equal rates of surplus value, leads unavoidably to different profit rates. The branches with the least technical outlay and capital investment theoretically give the better rates of profit. However, it is precisely these ?easy moneymakers? which necessarily attract more capital whereas the branches with higher organic composition will produce less supply. The resulting division of total capital creates relationships between the supply and demand of the various commodities which forces down the price of the ?easy? branches below their value while forcing those of the ?difficult? branch above their value. That is, there is a redistribution of the surplus value. This balancing out process is the formation of an ?average rate of profit? in which the price of goods (?production price?) is given by the cost price plus the average profit which is the same for all capitalists. In this context, any coincidence of value and price becomes accidental even if the value based fundamentals essentially determine the transformation of value into the production price. Only from the standpoint of total capital does there continue to be an identity in which the sum of value of all the goods produced in a particular period corresponds to the total production price.

Marx also called this balancing process of the formation of an average profit rate the ?fundamental law of competition.? And so:

?This constant equalisation of ever-renewed inequalities is accomplished more quickly, firstly the more mobile capital is, that is the more easily it can be transferred from one sphere and one place to others; secondly the more rapidly labour power can be moved from one sphere to another and from one local point of production to another. The first of these conditions implies completely free trade within the society in question and the abolition of all monopolies other than natural ones, that is those arising from the capitalist mode of production itself. It also presupposes the development of the credit system, which concentrates together the inorganic mass of available social capital vis-a-vis the individual capitalist. It further implies that the various spheres of production have been subordinated to capitalists.? [16](#)

The conditions indicated here also make clear that the equalisation process is only a tendency, a process of approximation which can be modified in many branches through the formation of monopolies or state

restrictions. Despite this, the formation of capital into a social force (including in its ideological, fetishised form) does express itself in this tendency:

?In capitalist production it is not simply a matter of extracting, in return for the mass of value thrown into circulation in the commodity form, an equal mass of value in a different form ? whether money or another commodity ? but rather of extracting for the capital advanced in production the same surplus-value or profit as any other capital of the same size, or a profit proportionate to its size, no matter in what branch of production it may be applied. The problem therefore is to sell commodities, and this is a minimum requirement, at prices which deliver the average profit, that is at prices of production. This is the form in which capital becomes conscious of itself as a social power, in which every capitalist participates in proportion to his share in the total social capital.?[17](#)

And the content of this ?social power? is naturally:

?That each individual capitalist, just like the totality of all capitalists in each particular sphere of production, participates in the exploitation of the entire working class by capital as a whole, and in the level of this exploitation; not just in terms of general class sympathy, but in a direct economic sense, since, taking all other circumstances as given, including the value of the total constant capital advanced, the average rate of profit depends on the level of exploitation of labour as a whole by capital as a whole.?[18](#)

Thus, for all the competition between themselves, the capitalists form a ?real Freemasonry? against their main rivals, the general working class that is competition grows into monopoly, into a ?wages cartel?.

?We thus have a mathematically exact demonstration of why capitalists, no matter how little love is lost among them in their mutual competition, are nevertheless united by a real Freemasonry vis-a-vis the working class as a whole.?[19](#)

The long-term tendencies of capital accumulation

The general tendencies of capitalist accumulation, which were analysed by Marx at the level of capital in general, now concretise themselves, since the concrete forms of movement have to be considered on the social surface, in the law of the tendential fall of the profit rate. This is the immediate consequence of the tendency for there to be an increase in the organic composition of capital alongside the given limits on the exploitability of the working class. ?The progressive tendency of the general profit rate to fall is thus simply the expression, unique to the capitalist mode of production, of the progressive development of the social productivity of labour.?[20](#)

That the fall in the profit rate is expressed as a tendency is a result of the operation of various ?countervailing factors? that either flow from the accumulation of capital itself or are the responses of capital to the reduction in profit rate. For example, as the organic composition rises, the value content of individual commodities falls and this applies to commodities, such as machinery, which then enter into the next round of investment in means of production. This lowering of the value content of individual components can offset or reduce the rise in the organic composition and, therefore, counter the falling rate of profit. However, since the next round of investment is, in reality, virtually bound to be on a much larger scale, the decline in the value content of each component is offset by the increase in the overall number of components. A more precise analysis of such interactions is not the theme of this article but other factors that were identified by Marx, such as foreign trade and increases in share capital, we will deal with later on.

The long-term tendency to a fall in the rate of profit does not lead immediately to crisis. On the contrary, it is at first a spur to accelerated accumulation. A growing constant capital can, despite the fall in profit rate, produce an increase in the mass of profit overall. ?Accumulation succeeds despite the fall in profit rate at a

progressively faster tempo because the scale of accumulation does not develop in relation to the height of the rate of profit but in relation to the weight/strength that the accumulated capital already possesses? [.21](#) As Grossman shows, in a standard model of accumulation, from a certain cyclical highpoint the mass of profit begins to fall and as result there is no longer enough accumulated money capital available to allow expanded capital and consumer goods production through further investment in an increase in production. Overproduction of capital never means anything but overproduction of means of production, means of labour and means of subsistence, that can function as capital, that is, can be applied to exploiting labour at a given rate of exploitation; a given level, because a fall in the level of exploitation below a certain point produces disruption and stagnation in the capitalist production process, crisis, and the destruction of capital? [.22](#) Thus the overproduction? achieved at a certain point is nothing other than over accumulation? of capital that can no longer valorise itself at the corresponding level of exploitation.

The effects of this over accumulation present themselves on one side as abandoned capital that cannot be profitably invested, or is only barely profitable, together with masses of surplus? working population. On the other side, it presents itself as a scarcity of capital?, a lack of capital that can be productively invested, alongside masses of speculatively over-invested or hoarded monetary wealth. The disruption of the chain of payment obligations, which has already been analysed, is unavoidably bound up with this and with it the culmination of the crisis into a money crisis. All these moments lead to the transition to the phase of the devaluation of capital? whether in the monetary form (financial crisis) the commodity form (collapse of prices) or the physical destruction of the means of production.

Thus, the tendency to the breakdown of capital accumulation, revealed by the analysis of the tendency to over accumulation, becomes a theory of crisis that shows the normal? cyclical crisis to be the expression of a fundamental tendency to crisis.

??In this way, the fundamental tendency?of the capitalist system breaks down into a series of apparently separate and independent cycles, where the tendency to breakdown periodically, time and again, begins anew..... the Marxian theory of breakdown is therefore the necessary basis and precondition of his theory of crisis because, according to Marx, the crisis is simply a momentarily interrupted and incompletely successful tendency to breakdown, that is, a temporary deviation from the trend line of capitalism.?.?23

With their devaluation processes and the acceleration of accumulation through the deployment of particular countervailing factors against the falling rate of profit, the cyclical crises constitute a necessary element in the avoidance of capitalist collapse. Every crisis results in a modernised capital that can break through the limits of the previous period and reach a higher stage of accelerated capital valorisation. The counter tendencies, which each time lead to a new round of accumulation, are also each time the accelerators for the next crisis. However, despite all the periodical interruptions and attenuations of the tendency to collapse, with the advance of capital accumulation, the general mechanism approaches ever closer to its end because, with the absolute growth of capital accumulation, the valorisation of this increased capital becomes increasingly difficult. Once the counter tendencies are themselves weakened or brought to a halt, then the tendency to collapse gains the upper hand and imposes itself absolutely as the last crisis?.?24

The cyclical sequence of accelerated accumulation, crisis, devaluation, implementation of counter tendencies thus has limits imposed on it, it cannot continue indefinitely. At particular points, a crisis sets in which puts in question the continued existence of capitalism altogether.

The long-term tendencies of capital accumulation and imperialism

With his inclusion of increase in share capital and foreign trade among the factors that counteract the fall in the rate of profit, Marx had already established the essential elements of the theory of imperialism. The appearance of share capital made possible a tremendous expansion in the scale of production, and

enterprises which would be impossible for individual capitals. At the same time, enterprises that were previously government ones become social.²⁵ Because, in joint stock companies, the immediate owner of capital is content with a share in the profits close to the interest rate (dividends) this has the effect of raising the equalisation of the profit rate to a higher level, since these enterprises, where the constant capital stands in such a tremendous ratio to the variable, do not necessarily go into the equalisation of the general rate of profit.²⁶

As Hilferding later showed, this moderation, the limitation of dividends with regard to profit, is only apparent and temporary. The difference is brought back in by the big finance capitals who mediate the provision of capital in the form of underwriting profits. This extra profit formed, and forms, an important source of the speedy enrichment of finance capital (see the chapter on finance and monopoly capital). In fact, this countervailing tendency is, above all, a means to the acceleration of the concentration of capital, the formation of monopoly and ever stronger control of social production by a small number of big capitals. The modification to the equalisation of the general profit rate thus becomes systematised: the monopolised sectors abide by the other laws regarding capital inflows and outflows, barriers to entry investment, price competition and the negotiating position in respect of the working class. The monopoly profit rate thus distinguishes itself from the general profit rate. Equally, the tendential fall in the rate of profit and the tendency to crisis also modify themselves.

However, although monopolies can organise a much steadier process of accumulation, they cannot free themselves from the lawfulness of the underlying tendencies. Their consolidation is bought at the cost of increasing the tendencies to crisis in the non-monopoly sectors. This is particularly true in countries in which the formation of monopoly and finance capital lags behind the capitalist Great Powers. These become a central source of monopoly extra profits which can offset the disadvantages of a higher organic composition of capital in the equalisation of the profit rates of the metropolises. This means that over accumulated capital can find a profitable outlet through capital export.

The fundamental tendencies of capitalist accumulation, its crisis ridden nature and the resulting attempts to reduce these through monopoly, therefore, lead, necessarily, to imperialism: the violent division of the world between groups of monopoly capitalists whose political business is carried out through the corresponding Great Power politics. Imperialism is capitalism in that stage of development in which the dominance of monopolies and finance capital has established itself; in which the export of capital has acquired pronounced importance; in which the division of the world among the international trusts has begun; in which the division of all territories of the globe among the biggest capitalist powers has been completed.²⁷ This stage embraces an already achieved high level of socialisation in particular in monopoly production. On the other hand, the scale of the capital to be valorised also raises the tendencies to crisis, just as monopoly capital also drives forward the 'deceleration' of accumulation, the limitation of the raising of the productive forces (capital intensification) and parasitism. Therefore, the general tendency of the imperialist epoch is one of stagnation interrupted by powerful phases of accumulation and equally sharp crisis cycles.

The modification of the average rate of profit in the circulation of capital

The pressure of competition around the price of production, which pushes the profit rate of industrial capital towards the average profit rate, is not the end of the matter. Continuous accumulation of capital demands the realisation of the produced goods and as a result an efficient capitalist organisation of the sphere of circulation. In a developed capitalist division of labour, industrial capital does not generally concern itself with the sale of its goods to the 'final consumer' but delegates this task to commercial capital. This means that labour in the sphere of circulation, even if it does not itself create any value, can be organised as commercial wage labour. The higher the rate of exploitation of this wage labour, the higher the share of

industrial profit which can be appropriated by the commercial capitalists, only the remainder of the industrial profit remains for the wages of the commercial employees. Thus, the circulation costs of capital can now enter into the equalisation process in the formation of the profit rate while the sale price is now the result of the price of production (with reduced average profit) and the 'commercial costs'.

From a definite point in the development of capitalism, the costs of 'money handling capital' appear as a particular cost in the circulation process. Operations such as receiving cash, disbursing cash, administering reserve funds, money changing, offsetting short-term liabilities, discounting, payment by instalments etc are necessary parts of the efficient organisation of the capitalist circulation process. These activities can also be organised by independent capitals which later become the starting point for bank capital. In this way, purely money handling activities enter into the equalisation of the average rate of profit and, in the same way as commercial capital, contribute to the determination of the form of appearance of prices in the total circulation process of capital. Even if prices or payments here carry additions which look like interest, the interest in this case is to be understood only in the simple sense appropriate to commodity circulation. Interest achieves its own independent form only in the case of interest-bearing capital, which forms the main function of bank and finance capital.

The formation of finance capital

Interest-bearing capital

With the formation of an average rate of profit, money, as a purely quantitatively determined sum of value (the embodiment of the quantity of abstract labour) approaches its ideal, independent form. A sum of money can be thrown into different concrete processes of valorisation in order at the end of the process to throw off the same average profit in relation to the initial sum. Money gains the additional function of acting as capital and can, in this function, become itself a commodity. That is, the owner of a sum of money can sell it to another capitalist who can then invest it in productive capital and increase the original sum of money with profit. The original owner can then equally receive back the initial sum as well as a portion of the profit: the interest.

In this movement of money as interest-bearing capital ($M \rightarrow M+$) all of the preconceptions of the capitalist production of commodities appear to be annulled and hidden but, in reality, the transaction presupposes the entire process of capitalist production: that is, the genesis of the commodity and money form; the transformation of all the conditions of production into commodity capital which is valorised through wage labour; the transformation of money into money capital; the unity of the production and circulation process as the accumulation process of capital; the formation of a society-wide average rate of profit. Conversely, it now appears as if it is a property of 'money as capital' that it produces interest from itself. Capital as a commodity appears as a 'thing' that has the use value of expanding value, generating surplus value. Correspondingly, interest appears to be the exchange value of this special commodity. In this way, the fetishised form of capital is brought to completion. Whereas in the process of the circulation of capital, money and commodity capital are simply forms of capital through which the commodity can be turned into money and vice versa, in the total process, capital only becomes itself in the process of production, in the process of the exploitation of labour power. It is otherwise with interest-bearing capital:

'The owner of money, who wants to valorise this as interest-bearing capital, parts with it to someone else, puts it into circulation, makes it into a commodity as capital; as capital not only for himself but also for others. It is not simply capital for the person who alienates it, it is made over to the other person as capital right from the start, as value that possesses the use-value of creating surplus-value or profit; as a value that continues its movement after it has functioned and returns to the person who originally spent it, in this case the money's owner. That is, it is removed from him only for a certain interval, only temporarily

stepping from the possession of its proprietor into the possession of the functioning capitalist. It is neither paid out nor sold, but simply lent; alienated only on condition that it is, first, returned to its starting-point after a definite period of time, and second, is returned as realised capital, so that it has realised its use value of producing surplus-value. [28](#)

Thus, the form of movement of interest-bearing capital, of money functioning as the commodity capital, can be derived from the process of capital circulation $M \rightarrow C \rightarrow M+$ to give: $M \rightarrow M \rightarrow C \rightarrow M+ \rightarrow M+$. Taking these steps in turn:

$M \rightarrow M$: the process does not begin with the sale or purchase of a commodity. The issuing of 'money as capital' in $M \rightarrow M$ is absolutely not an element in the metamorphosis of commodities or the reproduction of capital; it is simply a temporary transfer of ownership of a particular sum of money, the loaning of money as capital. A fictional duplication takes place: the money exists now, on the one side, in the credit note of the original owner with a claim on punctual payment; on the other side, it is now at the disposal as 'real money' of the functioning capitalist.

$M \rightarrow C \rightarrow M+$: as money capital it can now be valorised in order to generate ('throw off') at least the average profit ($M+$)

$M+ \rightarrow M+$: the duplicated issuing of money as capital corresponds to the duplicated return. As well as the original sum of capital that was handed over, the functioning capitalist must now hand over to the capital owner a slice of the profit, the interest, 'since he has given the money to him only as capital, that is, as value that is not just maintained in the course of its movement, but creates a surplus-value for its owner.' [29](#) Here then we have, on the one hand, the duplication of capitalists: on one side as owner of money as capital and on the other the investing capitalist (irrespective of whether they invest in productive or commercial capital). From the point of view of total capital, there is in this the same mass of profit which is to be divided: interest can only be appropriated as a part of total profit, as the 'price' for the handing over of money as capital to the functioning capitalist. In this, anyone who tries to apply the simple determination of the value form to the commodity capital gets into a contradiction:

'If interest is spoken of as the price of money capital, this is an irrational form of price, in complete contradiction with the concept of the price of a commodity? Here a commodity has a double value, firstly a value, and then a price that is different from this value, although price is the money expression of value. Money capital is at first nothing more than the sum of money, or the value of a certain quantity of commodities assessed as a sum of money? How then is a sum of value to have a price beside its own price, besides the price that is expressed in its own money form??' [30](#)

The analogy of sale and purchase in the relationship of creditor and debtor of money capital thus does not take us very far in the understanding of interest. Interest, as a component of profit, is a measure of the valorisation of capital, and as such has the appearance of a price because the capital was indeed offered on the market for valorisation. In its form of appearance as price, interest obscures its real derivation from profit. This is all the more so because it is only in the total process that the total interest payments result from the valorisation of socially productive capital through a corresponding process of equalisation. In individual cases, it is all the same to the lender of money where the debtor obtains his interest payments, that is, via how many intermediate steps it is nibbled away from total profit (for example, state credits which are financed through taxes). For him, the entire movement is reduced to the abstract form $M \rightarrow M+$. He himself appears as someone offering money capital on a market. The interest appears to him to be the price of his goods entirely determined by the relationship of supply and demand in the money market. Correspondingly, in bourgeois economics, especially in the neo-classicists (for example, Marshall) interest-bearing capital is understood as the real meaning of the word 'capital' and interest as the price for

?deferred consumption?. In this theory it is not only the difference between commodity and money markets that is blurred. What is also obscured is that interest-bearing capital is a particular derived type of capital which can only be understood on the basis of productive capital. Keynes did the same thing when he derived interest from the relationship between ?liquidity preference? (possession of the means of payment) as against the rate of valorisation of ?real wealth?. Even if there is here a recognition of the dependence of interest on productive capital, every capital is assumed to have its own inherent interest rate. By contrast, for Marx, interest is a specific characteristic of a definite sort of capital usage, the valorisation (that is the self expansion of value) of the mere ownership of capital in contrast to the valorisation process of functioning capital.

Nevertheless, it is clear from this why Marx and Keynes could reject the central role of the interest rate for the foundation of Say?s Law by the neo-classical school. Whereas, in the neoclassical school, the money market is a commodity market just like any other and, therefore, a flow of money from the other markets into the money market via a lowering of interest (oversupply) re-establishes equilibrium, for Marx, just as much as for Keynes, this reflux tendency can be turned into its opposite by an even less healthy development in the profit rate. Precisely at the end of the cycle, an overabundance of capital, rising demand for credit and sinking profit rates, can be associated with rising interest rates just as much as with an accelerated decline in employers? profits caused by that. That is, the development of the interest rate can even act as the catalyst to the recession, in direct contradiction to liberal dogma.

Marx observed in Theories of Surplus Value that there had been a notable change in bourgeois economics with regard to this issue: Adam Smith had characterised profit as the ?yield? of capital; in contrast to this, in ?vulgar economy? it had become normal to use the formula ?Land ? Rent, Capital ? Interest, Labour ? Wage?. Thus, in the classical school, the relationship of capital with profit is expressed: ?The concept of profit still contains the inconvenient connection with the production process, and the real nature of surplus value and of capitalist production, in contradistinction to their appearance, is still more or less recognisable. This connection is severed when interest is presented as the intrinsic product of capital and the other part of surplus value, industrial profit, consequently disappears entirely and is relegated to the category of wages.³¹ This is also how it appears to the functioning capitalist who declares the necessity to generate ?capital value? (that is, interest) while the entrepreneur?s profit and the manager?s salary appear to be a form of wage cost.

In $M \rightarrow M+$, the capitalist law of appropriation ? ownership and reproduction of objectified alienated labour of others as the basis for the appropriation of still more alienated labour on an ever-growing scale ? achieves its last and most extreme form. The mere entitlement to value itself becomes capital, that is, the means to the appropriation of the surplus labour of others, without the capital owner having to go through the tedious process of industrial or commercial generation of profits. This, however, takes place without this derived form of surplus value appropriation becoming independent of its foundations, the reproduction of capital through living productive labour.³² The disappearance of the mediation, the only indirect relationship to its real source, profit, also leads to consequences for the determination of interest itself. Naturally there is not a single gram of labour involved in the appropriation of surplus value through the transfer of an entitlement to capital; nonetheless, it appears as if it is a kind of sale of a commodity. However, this is a sale and purchase that in its substance has nothing to do with any traded value (only with the entitlement to ownership of a value). But, formally, it does follow the law of the market with regard to competition and price formation. Whereas, in the formation of the market price of a commodity, supply and demand result in a fluctuation of the price around the value so that when they are balanced they produce precisely the value, interest is determined by nothing more than supply and demand: ?Here competition does not determine divergences from the law, for there is no law of distribution other than that dictated by competition.³⁴

Thus the interest rate becomes an expression of the balance of power between functioning and financing capitals in which this relationship is determined by the formation and laws of motion of the general average profit rate. There is, therefore, no autonomous law controlling the movement of the interest rate. The upper limit is determined by the average rate of profit. The nearer the interest rate moves towards the general profit rate, so the less room for manoeuvre functioning capital has for the expansion of accumulation and the demand for interest bearing capital sinks. Conversely, when the interest rate moves towards zero (or indeed beyond that) the boost to acceleration of accumulation rises together with the demand for interest bearing capital. Between these two extremes there is every possible room for daily variations and fortuitous movements. Where, as here, it is competition as such that decides, the determination is inherently accidental, purely empirical, and only pedantry or fantasy can seek to present this accident as something necessary.³⁴ From this it is clear that anything like a 'natural rate of interest' on capital is a theoretical nonsense for Marx.

It is also important to note that the interest rate is based on the average profit and not on particular, temporarily possible, profit rates (or super profits) of particular individual capitals. This is because the ability of the mere title to ownership of capital to expand its value, as the expression of the use value of capital for self expansion, exists absolutely irrespective of the specific application of capital:

On the money market it is only lenders and borrowers who face one another. The commodity has the same form, money. All particular forms of capital, arising from its investment in particular spheres of production or circulation, are obliterated here. It exists in the undifferentiated, self-identical form of independent value, of money. Competition between particular spheres now ceases; they are all thrown together as borrowers of money, and capital confronts them all in a form still indifferent to the specific manner and mode of its application. Here, capital really does emerge, in the pressure of its demand and supply, as the common capital of the class, whereas industrial capital appears like this only in the movement and competition between particular spheres. Money capital on the money market, moreover, really does possess the form in which it is distributed as a common element among these various spheres, among the capitalist class, quite irrespective of its particular application, according to the production requirements of each particular sphere. On top of this, with the development of large-scale industry, money capital emerges more and more, in so far as it appears on the market, as not represented by the individual capitalist, the property of this or that fraction of the mass of capital on the market, but rather as a concentrated and organised mass, placed under the control of the bankers as representatives of the social capital in a quite different manner to real production.³⁵

Thus, while in the process of real capital circulation total capital only appears in the total process, interest bearing capital appears not as 'total capital' but only as a particular form of capital but now, conversely, in a concentrated social form! Whereas, on the surface of society, the average profit rate hides itself behind a variety of conditions of individual spheres of investment enforcing itself through competition and equalisation only cyclically and behind the backs of the producers, in the determination of the rate of interest, the social character of capital reflects itself directly through this movement, expressed in hard numbers, in the price levels on the money market. Average profit does not appear as a directly given fact, but rather as the end-product of an equalisation of opposing tendencies that can only be established by investigation. With the interest rate it is different. Where it is a universal governing rule, which occurs at least locally, it is a fact fixed every day, a fact that even serves industrial and commercial capital as a presupposition and postulate in their operating calculations.³⁶

With this the relationship is completely turned around and the interest rate appears on the surface as the representative of the average rate of profit. Precisely because the average rate of profit moves more slowly than the quarterly variations in profit into particular spheres of investment, so the rate of interest also

appears to be a more permanent figure, that is, in a contrary manner to be the constant around which profit rates vacillate. The general rate of profit, in fact, reappears in the average rate of interest as an empirical, given fact, even though the latter is not a pure or reliable expression of the former.³⁷

The many forms of interest

The apparent concreteness of the interest rate as a negotiated title to ownership of surplus value is qualified by the differentiation of types of interest and the types of money capital corresponding to them. At the lower end are the operations of money handling capital and commercial credit.

These are accompanied by short-term credit issued with a simple form of interest and tight limits as far as securities and the extent of credit are concerned. This kind of credit is tightly bound up with the immediate reproduction and circulation process and therefore the interest also takes the form of a constant return on the sum of money lent, rather than a compound interest. That is, on current accounts and similar forms of credit, the interest payment for the period x is not incorporated into the total capital on which interest is paid in the next period.

Thus, if n is the number of days until repayment, z is the interest rate period (for example 360 days) and i is the rate of interest then, on an initial debt of K , there is a final debt of K_n , given by:

$$K_n = K (1 + i n/z)$$

This linear form of interest payment is also mostly used for short-term (less than a year) money deposits. This is where the difference between deposit and loan rates from the banks is generally at its greatest, that is, for short-term deposits the interest rate tends towards zero.

For longer-term money deposits, over several years, the connection with an autonomous form of appropriation of a portion of profit in the form of accumulation becomes clearer. That is, the money capital that is returned in the process $M \rightarrow M+$ is understood to have been delivered entirely by the next cycle; it increases by compound interest and the depositor expects a distinctly higher rate of interest than for a short-term deposit. If n is the number of years for a deposit of an initial capital K with an interest rate i , the depositor expects as the final value:

$$K_n = K (1 + i)^n$$

In this, the depositor may not wait until the end date for repayment by the debtor. As with the valorisation of fixed capital, it is also possible that lending can become a source of constant revenue in the form of a rental payment. Here, the sum to be paid, for example as an annual rent, for a capital deposit of K over a period of n years is calculated from the following equation: (let $Q = 1+i$)

$$R_n = Kq^n = R(q^n - 1) / (q - 1)$$

Thus the size of the rental payments is dependent on the length of the deposit period and the interest rate agreed at the beginning. R_n gives the definitive value of the rent. Conversely, with an annuity credit, the final value is given in advance but the annual payment (or amortisation instalment) R is given precisely by the length of the deposit and the rate of interest.

In the case of the formula for compound interest or rent, the whole mystification of interest bearing capital is expressed: capital comes to be seen without regard to the conditions of reproduction and labour, as a mere number that increases by itself.³⁸ Its growth is limitless because it appears to be exponential. Nothing better expresses the drive of capital to unlimited growth. At the same time, this limitlessness must come into a collision with the actually limited nature of the conditions of reproduction. This is because it is

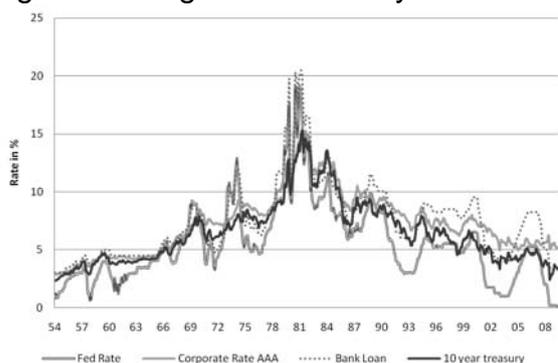
abstracted from the fact that the real capital to be reproduced must periodically necessarily undergo devaluations (not only in crises but also on the basis of progress in productivity) and along with the rate of profit, the rate of interest must necessarily sink:

?The identity of surplus-value and surplus labour sets a qualitative limit to the accumulation of capital: the total working day, the present development of the productive forces and population, which limits the number of working days that can be simultaneously exploited. But if surplus value is conceived in the irrational form of interest, the limit is only quantitative, and beggars all fantasy? The product of past labour, and past labour itself, is seen as pregnant in and of itself with a portion of present or future living surplus labour. We know however that in actual fact the preservation and thus also the reproduction of the value of products of past labour is only the result of their contact with living labour.?39

The story of the farthing which was invested at 5 per cent at the time of Christ?s birth and now embraces all the wealth of the world leaves out of account the limited productive basis for finance accumulation. Nonetheless, the same fairy tales, for example, the lauding of ?private pension schemes? through capital investments, are still being sold.

While the market for short-term money capital (that is, the ?money market?) is determined by the turnover time of circulating capital (short-term payment obligations) the real capital market is determined above all by the turnover time of fixed capital. Therefore it is the varying time scales for the reproduction of reproductive functioning capital that are reproduced in the form of purely quantitative differences (time scales) on the money capital market. Both sectors of the market possess their own particular interest rates which continuously fan out across a range. What is decisive, however, is that out of this a hierarchy of interest rates is formed: leaving aside cyclical movements, interest rates in the capital market determine the interest rate in the money market. It therefore makes sense to concentrate on the ?average interest rate? as Marx concluded: ?In order to find the average rate of interest, we have to calculate 1, the average interest rate as it varies over the major industrial cycles; 2, the rate of interest in those investments where capital is lent for longer periods.?40

Figure 3: Long-term tendency of different types of interest rates in the USA 1954-2009



Source: Federal reserve Bank of the USA

From Figure 3 it is apparent that the Fed-rate (that is the rate for short-term lending by the Fed to the US commercial banks) is not ?the interest rate?. It obviously has a determining impact on short-term primary bank loans (that tend to be 3 ? 4 per cent above the Fed rate, with some time-lag). On the other hand, the corporate bond rate, which measures the interest rates corporations have to pay to lenders if they go to the money markets, remained stable above the 5 per cent level even when the Fed was pursuing a low interest policy. The graph also makes clear the time-lag in the movement of long-term bonds, such as 10-year US Treasury bonds, in relation to changes in the Fed-rate. Nonetheless, there are clear turning points in the movement of interest rates that are marked by the Fed-rate decisions. In the crisis of the early 70s and again around 1980 (the Volker shock) one can see the dramatic increases in the Fed-rate that were

introduced to counter the inflationary tendencies at those times. Around 1990, there was a phase of monetary relaxation which was followed by moderately high rates in the mid-nineties. The drop in interest rates around 2000 is now widely recognised as an important factor in creating the speculative bubble and, around 2005, it was followed by the rebound that led to the bursting of the bubble. The dramatic slashing of the Fed rate to near-zero during the crisis of September 2008 did not bring down interest rates for company loans, but it did keep them stable at 5 per cent after they tended to go beyond the 6 per cent level in the autumn of 2008. At the same time, the graph only shows interest rates for triple-A rated corporations, companies with lower credit ratings could expect interest rates 3-4 percent higher if they were not forced out of business altogether as victims of the 'credit crunch'.

Capital value and employer's profit

Even if interest is actually a claim, via an ownership title, to a portion of the profit and the employer's gain is the rest of the profit, in developed capitalist relationships the latter appears, conversely, as an independent mass. Whereas interest payments are seen as the 'normal' yield on invested capital, any yield beyond that is seen as a result of the special performance of entrepreneurial capitalists. Their ability to take advantage of market opportunities, healthy profit conditions, particular possibilities for exploitation and so on are seen as the basis for a special 'payment'. What is actually a simple quantitative division of profits thereby becomes established as a qualitative distinction between interest and employer's profit.

Individual capitalists themselves include the interest rate in their reckoning even when they have borrowed absolutely no capital. The established distinction becomes normal practice: a profit greater than the interest rate becomes for the capitalist the real motivation for investment. Otherwise, so the calculation goes, they could just invest capital with the normal interest rate instead of putting themselves to all the trouble of organising production. Thus, in the normal calculation of investment for a business, the capital value K of investment I which produces a yield Y over a number of years n , is calculated on the basis of a return of $q (=1+i)$:

$$K = Y(q^n - 1) / (q - 1) - Iq^n$$

That is, an investment is compared with the yield of a deposit at the standard interest rate. Only if there is a positive 'capital value', that is, a higher yield than would be given by annuities, is the investment seen as 'worthwhile'. What is seen by the individual capitalist as meaningful grounds for rejection is naturally a complete nonsense as a general explanation:

'Concealed in this idea, moreover, is the still greater nonsense that capital could yield interest on the basis of the capitalist mode of production without functioning as productive capital, that is without creating surplus-value, of which interest is simply one part; that the capitalist mode of production could proceed on its course without capitalist production. If an inappropriately large number of capitalists sought to transform their capital into money capital, the result would be a tremendous devaluation of money capital and a tremendous fall in the rate of interest; many people would immediately find themselves in the position of being unable to live on the interest and thus compelled to turn themselves back into industrial capitalists.'

[41](#)

Once the qualitative distinction between 'standard interest' and the performance of the entrepreneur has become established, the contrast between capital and wage labour transforms itself ideologically into the contrast between capital ownership and productive activity. Thereby, the entrepreneur themselves now appears as the 'labourer' or even the 'exploited'. 'The exploitation of productive labour takes effort, whether he does this himself or has it done in his name by others. In opposition to interest, therefore, his profit on enterprise presents itself to him as independent of his property in capital and rather as the result of his functions as a non-owner, as a worker.'[42](#)

This is the basis for the ideological confusions over 'productive', 'creative' industrial capitalists in contrast to the 'unproductive', 'greedy' finance capitalists in the way these terms are used not only in fascist-inclined 'critiques of capitalism'. In reality, the analysis clearly shows that we are dealing here only with two different appearances of the same exploitative relationship. Since the function of finance capital is clearly derived from the needs of reproduction of total capital, the question whether one of these types of capital is morally better or worse does not arise in the capitalist mode of production:

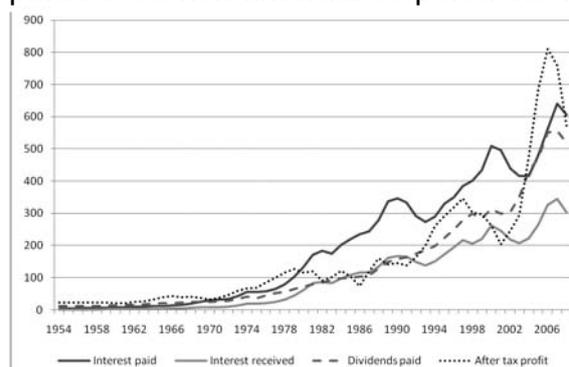
'The justice of transactions between agents of production consists in the fact that these transactions arise from the relations of production as a natural consequence. The legal forms in which these economic transactions appear as voluntary actions of the participants, as the expressions of their common will and as contracts that can be enforced on the parties concerned by the power of the state, are mere forms that cannot themselves determine this content.'⁴³

Therefore, corporate profits must necessarily also be broken down into various forms. On the one side, the activities of immediate leadership of productive capital increasingly take on the form of wage labour itself, for example, 'administration salaries', 'managerial salaries' etc. On the other, the functions of the supervisory bodies of the owner are also supported (for example, supervisory board bonuses). Even if a part of managerial activity does have a productive element in terms of coordination, this of course only accounts for a part of their actual substantial participation in corporate profits. The actual corporate profit, however, now appears (after the withdrawal of these 'salaries' for the post holders) only as the 'annual surplus' which is, for example, revealed in dividends or is reinvested in the capital stock. As Marx put it:

'Since, on the one hand, the functioning capitalist confronts the mere owner of capital, the money-capitalist, and with the development of credit this money capital itself assumes a social character, being concentrated in banks and loaned out by these, no longer by its direct proprietors; and since, on the other hand, the mere manager, who does not possess capital under any title, neither by loan nor in any other way, takes care of all real functions that fall to the functioning capitalist as such, there remains only the functionary, and the capitalist vanishes from the production process as someone superfluous.'⁴⁴

Clearly, the Marx of 140 years ago was very clear sighted with regard to the developmental tendencies within capitalism. All the same, it is as daft to suggest that Marx had an understanding of capitalism as a competitive capitalism of 'cigar smoking' private capitalists as to suggest that the emergence of a 'finance market-driven capitalism', in which financial markets dominate, is something totally new in capitalism.

Figure 4: Comparison of profit after tax and interest payments with interest paid/received and dividends paid for US non-financial corporations 1954 - 2008 (in billions of dollars)



Source: BOC

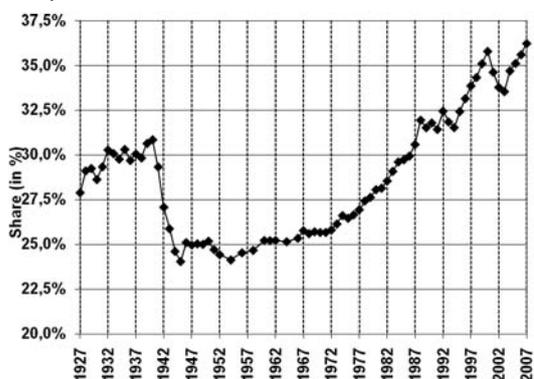
Figure 4 shows the relation of interest payments made by non-financial corporations to their net profits. It is obvious that, after the late 1970s, profits lagged behind interest obligations although this was partially

compensated for by interest received by the corporations themselves. The burden of interest payments during the 1980s is clear, as is the reduction of this problem during the early 1990s. The problem then reappeared until it appeared to be resolved by the steep increase in corporate profits from around 2004. The sharp decline in the profit curve after 2006 makes clear the bubble-related character of this 'solution'.

Figure 4 also makes clear that the constant shareholder expectation of a continuously growing volume of dividend payments produced a squeeze on corporate profits. This is related to the fact that there is less and less basis for the self-financing of new investment by US non-financial corporations, a quite different situation from, for example, non-financial corporations in Germany.

Figure 5 shows that the actual profit appropriated by the bourgeoisie is considerably higher than is shown in the balance sheets: the proportion of the top earners among the 'waged' category has increased enormously, especially since the 1990s. The top 10 per cent of these 'wage earners', averaging some \$250,000 a year, work in management, supervisory or financial positions. To a large extent, these reward their activities as 'functionaries of capital' by means of bonuses, share options or other profit-sharing deals. The increase in the proportion of total 'wage income' going to these people does not only mean that the absolute rate of surplus value has increased much more since the early 1990s than is indicated by the decline of the wage share (just about 3 per cent). It also means that these members of the bourgeoisie and the dependent middle layers are gaining more and more influence, not only because they occupy commanding positions but because of the increase in their own financial investment power. This includes, no doubt, 'investment' in political influence.

Figure 5: Share of the top 10 per cent wage earners in regard to the total wage income in the US (1927-2007)



Source: Piketty, T and Saez, E, IRS-based Series, www.nakedcapitalism.com/2007/03

Recent data also show that the 'rewards' flowing to these representatives of capital have not decreased significantly in the aftermath of the financial crisis. Just one year after the crash, Goldman Sachs is planning to pay out no less than \$17 billion in bonuses and top salaries and the balance sheets of the rest of the investment banking and fund management corporations show that they will pay more than \$100 billion in 2009 to these masters of disaster.

The accumulation of interest-bearing capital and the formation of fictitious capital

The transformation of capital into a commodity through interest bearing capital and the accumulation of interest bearing capital as it is expressed in the rent formula, logically leads to the next step: the transformation of credit and investment into commodities that are traded through 'securities'.

The earliest form of this transformation is to be found in transactions involving bills of exchange, the sale of a commodity without equivalent, with an agreement on later payment. This agreement can be securitised as 'commercial paper' (drawing bills of exchange). This commercial paper can be traded further as a

money equivalent, or changed into money (higher liquidity) in advance of the payment date (discounting of bills of exchange). With this, a future payment becomes a source of money capital (a loan) that itself takes on the form of money. ?Drawing bills of exchange is transforming commodities into a form of credit money, just as discounting bills is transforming this credit money into a different money, that is, banknotes.? [45](#)

Especially in crisis situations, the tendency to change bills of exchange into money in advance of their expiry date increases because of the fear that it will be impossible to sell the commodity. The discounting of paper is the first example in which an actually unreal ?fictitious? income becomes comparable to the interest on fictitious capital in order to establish a ?price? for the sale of this source of income. ?The formation of fictitious capital is known as capitalisation. Any regular periodic income can be capitalised by reckoning it up, on the basis of the average rate of interest, as the sum that a capital lent out at this interest rate would yield.? [46](#)

Thus it is normal banking practice for the value of discounted paper to be calculated by reference to the capital that, with the discount rate, would give the same exchange value by the time the paper expires.

If K is the exchange value (the price of the original commodity) i is the discount rate and n the number of days in advance of the expiry date that the paper is to be honoured, then the bank reckons a discount value D as follows:

$$D = K(1 - i n/365)$$

If, for example, commercial paper of €8,000 is to be honoured two months in advance of its expiry date at a discount of 9 per cent then the bank pays €7,880, that is it takes €120 as interest.

This becomes still clearer with regard to the capitalisation of long-term commercial paper, for example, bond trading. The price of commercial paper to a particular date is generally calculated through the cash value of the still outstanding interest payments to be made on it before its expiry date (based on market interest rates). In contrast to the trade in bills of exchange, this is calculated on compound interest because of the long-term nature of the investment. Then, for example, fixed interest securities (such as government bonds) that bring an annual ?coupon payment? (this is what it is called even when no more coupons can be cut from the security) of R and a repayment of C when it falls due will have a price C_t at a date t (in advance of the due date) with a given market interest rate of i, calculated by:

$$C_t = R((1 + i)^t - 1)/i + C/(1 + i)^t$$

So, if, for example, a bond with a nominal value of 100 that is issued with a price of 98.5 with an annual interest payment of 7.8 over 15 years, is sold 10 years early at a market interest rate of 8.2 per cent, then its ? fair price? would be 97.34. With a higher interest rate, the price of securities is correspondingly lower, for example, at 12 per cent the price would be 76.27 (a corresponding capital invested at this higher interest rate would generate the same bonus as the security) by contrast, the price would rise with a falling interest rate: for example, at 5 per cent it would actually go up to 121.62. The above price formula clearly demonstrates the old ?stock exchange truism?:

Rising interest rate ? falling price

Falling interest rate ? rising price

This becomes clearer if the pension R or the yield of securities is capitalised as ?perpetuity?. Here, the ?capital value? is so calculated that the purchase price of the paper corresponds to a ?perpetual?, for example, annual, pension payment that can be invested at the current interest rate, i. Then the capitalisation of the money investment is given by:

$$C = R/i$$

Thus, a joint stock company that pays out annually at least €1 million in dividends on the basis of its profitability or reserves would be capitalised as having a 'capital value' of €20 million if the prevailing interest rate is 5 per cent ($i = 0.05$). This would be the anticipated sale price of shares in the undertaking. Brokers regard a 'price-earnings ratio' (PER) as appropriate if it corresponds approximately to the ratio $1/i$ (that is the inverse of the interest rate). 'Perpetual' for share speculators is ultimately a horizon of a couple of years on the stock exchange.

Obviously, the fiction of a 'correct' price for securities goes round in a circle like a cat chasing its tail. As with the fiction of capital value, for individual capitalists there may be a real content to the calculation. Viewed from the overall perspective, the alternative of transferring to investment at the normal interest rate would continuously influence the market interest rate and so the criterion for valuation is ruined.

Clearly, trading in securities is not trading in real values but in claims to a portion of the surplus value. However, the paper actually appears to represent an independent value, apparently duplicating the underlying payment obligation itself and the tradable, capitalised title to it.

'Even when the promissory note ' the security ' does not represent a purely illusory capital, as it does in the case of national debts, the capital value of the security is still pure illusion? Shares in railway, mining, shipping companies, etc represent real capital, that is capital invested and functioning in these enterprises, or the sum of money that was advanced by the shareholders to be spent in these enterprises as capital? but the capital does not exist twice over, once as the capital value of the ownership titles, the shares, and then again as the capital actually invested or to be invested in the enterprises in question, it exists only in the latter form, and the share is nothing but the ownership title, pro rata, to surplus-value which this capital is to realise. A may sell this title to B, and B to C?.. A or B has then transformed his title into capital, but C has transformed his capital into a mere ownership title to the surplus-value expected from the share capital.' [47](#)

That means that, for the trader in securities, the yield or losses, taken as a whole, add up to a zero sum game; the gains of one speculator are the losses of another, until it reaches the last in the trading chain who must realise the original advance. With him it becomes evident whether the expected total yield, already capitalised in advance, actually corresponds to expectations. Even if these papers are, ultimately, dependent on the long-term yield of the underlying capital, there are short-term vacillations in the price which are related to other factors. 'In times of pressure on the money market, therefore, these securities fall in price for two reasons: first, because the interest rate rises, and second, because they are put up for sale in massive quantities, to be converted into money. This fall in price occurs irrespective of whether the yield these securities ensure for their owner is constant, as in the case of government bonds, or whether the valorisation of the real capital that they represent may be affected by the disturbance in the reproduction process, as in the case of industrial undertakings.' [48](#)

The fall in the price on the exchanges does not necessarily imply actual problems in the process of reproduction. However, it can very well be an indicator of that. On the one hand, it constitutes a destruction of fictitious capital while, on the other, it may or may not correspond to the destruction of actual capital. In any event, by means of the redistribution effect of the zero sum game of fictitious capital, financial crises act as a 'powerful means for the centralisation of money capital'. [49](#)

The yields from the temporary independence of capital value (that is the price) from the underlying payment obligations or those achieved from the need for early capitalisation, may be marginal for small sums of money and characterised by high risk. For large-scale, centralised money capital they are a

constant source of growing accumulation of claims on surplus value. In all the countries of capitalist production, there is a tremendous amount of so-called interest-bearing capital or 'moneyed capital' in this form. And then accumulation of money capital means for the most part nothing more than an accumulation of these claims to production, and then accumulation of the market price of these claims, of their illusory capital value. [50](#)

Marx correctly observes in this connection that the greater part of the reserves in the banks have this character: 'The greater part of bankers' capital is therefore purely fictitious and consists of claims (bills of exchange) and shares (drafts on future revenues).' [51](#)

The fictitious character of this capital does not result from the fact that it has no connection to real yields but from the apparently independent, autonomous regulation of its price which can hugely inflate its value.

Derivatives

Unlike in Marx's day, bills of exchange play only a very subordinate role in the modern system of credit. At times when bills of exchange still served as the most important means of mediating payments between undertakings of varying dates in circulation of commodities, C - M - C, crises expressed themselves in combined payment and discounting problems in respect of the bills of exchange. The breakdown of the circulation C - M - C was expressed above all in the lack of the means of circulation in the form of bills of exchange or the inability to turn bills of exchange into acceptable means of circulation on demand.

With the developed banking system of the imperialist epoch, these functions of commercial credit have generally been overtaken by bank credit. As far as short-term balancing of payments is concerned, this function has been replaced through the overdraft agreements of the relevant accounts or the function of bills of exchange as credit money by the securitisation of debts or the simple book money of the banks in their mutual discounting of payments.

A secondary function of the bills of exchange business has, however, taken on a very different form from bank credit. Even in the traditional business of bills of exchange it was normal for payment to be based on a price related not to that precise time but to the date when the payment was due. At the time of production, C - M may be subject to the risk of unforeseeable changes in price. Because of this, in order to minimise the risk for capital, the price of the goods at the time of sale is already settled at the time when money is invested in production. This way of securing the price is called a 'forward transaction'. This may take the form of 'futures', a firm agreement on the sale or purchase of goods at a future date, or the form of an 'option' to buy or sell. Today, such forward transactions are highly concentrated on a small number of very specialised exchanges (for example, the CBOT in Chicago or the EUREX in Zurich). Precisely because of the increased risk of variations in the price of currencies or raw materials, such forward transactions gain an ever more important role in worldwide capital reproduction.

Like bills of exchange, these options and futures can themselves now turn into tradeable goods. Accurate speculation on developments in prices, interest rates or currencies can achieve big differences between sale and purchase prices for relatively small sums of money.

If, for example, a German firm must make a payment in the USA of \$4 million in three months' time, they can secure themselves against the risk of a change in the exchange rate through a forward contract with a hedge fund which offers a three-month rate of \$1.6 to the euro. That means that, in three months, the firm must pay the fund €2.5 million in order to receive \$4 million. If, in reality, the dollar falls to \$1.7 to the euro then, actually, only €2.35 million would have been needed. In this way, the hedge fund makes a profit of some €160,000 for almost no outlay. On the other hand, if the exchange rate for the dollar rose to \$1.5 to the euro it would make a loss on a similar scale. Of course, in advance of this, if it suspected an unhealthy

development in the exchange rate, it could sell the forward contract on to another fund which is still expecting a healthier exchange rate. In this way, it would realise a price which corresponded to expectations of future profits at the time of sale.

In fact, with both futures and options, their transformation into commodities is bound up with the illusion of a 'capital value'. Here, too, a 'fair' option or future price can be calculated by reference to the anticipated profit (a sum based on probability theory) and the yield on capital invested at the given market interest rate. Thus, for example, the Black-Scholes Option Valuation Model uses the expected value and the variation of a normally distributed price-function of the commodity on which the option is based to calculate a 'fair option price'.

What gives pause for thought in all this is that Melvyn Scholes, who won the Nobel prize for this model, was, several years later, the chief adviser to the hedge fund LCTM that, in 1998, during the Russian crisis, almost brought about the collapse of the entire international financial system with its options transactions. The threat of a Russian state bankruptcy made all value calculations on the basis of the assumed movements in the interest rate obsolete. This illustrates the basic problem that no mathematical finance model can overcome: calculations of the value of fictitious capital can only retain their limited meaningfulness (that is to be the means by which redistribution takes place within money capital) so long as the underlying debts can, in general, be repaid by the due date. If this is not the case, then that does not only mean that the creditor loses out but also that all the fictitious capital based on the debts is devalued. As with the trade in bills of exchange, what must generally happen is that the capitalists who trade in derivatives (sales/purchase options, futures or combinations of the two) do not really buy or sell by the due date. The futures markets act much more as clearinghouses which balance out the credit notes one against another (as once the banks did with bills of exchange). For example, a sales-future (put) can be coupled with a purchase-future (call) so that the seller and the purchaser of the commodity can be brought together at a predetermined date, naturally for an appropriate fee to the broker.

In this way, commodity futures markets fulfil several purposes. On the one hand, they are important agencies of the global circulation of goods. As far as wholesaling is concerned, particular raw materials and agricultural products are principally traded on these markets while the spot markets deal with distribution at a lower level. In this respect, a small part of the profits from the trading derivatives can be traced back to commercial profit. However, derivatives based on real commodities form only a small part of the derivatives market (in single figures in percentage terms). Because the main function is the negotiation and securing of trade with money capital (interest, currencies, securities) we are dealing here with a function that is analogous to commercial profit lowering the average profit rate and here again the average interest rate is lowered. That is, interest-bearing capital is prepared, in advance, to accept a lower interest rate in order not to be taken by surprise by a still lower interest rate in the future. It is very much the same as futures trading with real goods: there is a relationship between the movement of the price of the goods and the equalising process of the average profit rate. Capital is prepared to accept a price which corresponds to a lower average rate of profit in order to guarantee at least this rate.

So far we have developed an overview of the differing forms of appearance of interest-bearing capital. We have seen that, in a society of generalised commodity production, such as characterises capitalism, every good takes on the form of a commodity and ultimately also receives a value form, whether or not any value is actually 'embodied' in it. Ultimately, value is only embodied in the total product of productive capital that must, however, first take on the social expression of abstract labour, that is, the money form. Because this process is mediated through capital reproduction, value is distributed in such a way across the products that every capital receives a proportionate part of the average profit, that is, prices and values of goods systematically deviate from the norm.

It is not only the different valorisation conditions of productive capital that contribute to this price formation but also the specific 'costs' for trade and commercial transactions. The average profit that is so formed becomes the source of interest-bearing capital that receives a portion of the average profit in the form of interest income. Within this is expressed the duplication of capital as capital-property and as functioning capital. However, both capital credit and also commercial credit can equally well take on the form of a commodity, that is, they can become tradeable titles to the payments of the debtor and, mediated in this form, share out the surplus value claimed by the original creditors across the money capital, bringing it into an unlimited form in which it can be accumulated. In this form the difference between commercial credit and capital credit is finally resolved and appears only as the quantitative difference between short-term money market interest and long-term capital market interest.

In neo-classical theory, the identification of the two types of interest leads to the 'Law of equilibrium' as the basis of Say's theorem: markets characterised by overproduction will be cleared by rising interest rates while too great a tendency towards saving will be stopped by falling interest rates. However, because interest rates on the money markets follow completely different laws of motion as compared to interest rates on the capital market it is entirely possible that the combination of low rates for commercial operations (with no countervailing effect against overproduction) can occur with high interest rates on the capital market (slowing down long-term investment). The difference between these two forms of credit and their laws of movement will be developed in the following passage in order to then present the operation of the credit system within the total reproduction process of capital, in the industrial cycle and finally in the crisis of over accumulation.

Commercial credit

The original form of commercial credit was the combination described earlier as 'postponed payment' with the transformation of the creditor into an interest-bearing capitalist. That is, there is agreement not simply for later payment for the delivered goods but also a rate of interest on the money advanced: 'loan capital and industrial capital are identical here; the capitals loaned are commodity capitals designed either for final individual consumption or to replace constant elements of productive capital.'⁵² This form of credit corresponds directly to the necessity for the quickest possible realisation of value (C → M) precisely because money is needed as quickly as possible in order to make a further purchase (M → C). In other words, it corresponds to the necessity of commodity metamorphosis under the conditions of accelerated accumulation.

The 'naturalness' of commercial interest can be seen in the way in which it is included within the normal price which takes account of a precise monetary payment with its own interest rate, discount. From this also flows the necessity for capital to always include a certain reserve (for example in the balance sheets) in order to be able to balance out payments that fall due or overdraft interest in the course of its regular circulation. It is clearly also the origin of the need for bills of exchange and their discounting. Trading in bills of exchange demands still higher reserves of cash by the operating capitalists themselves. Lastly, from this flows the need for forms of trading credit and futures transactions without the use of money via banks and exchanges. The instruments of credit-based payments already discussed allow capital a largely moneyless trade in commodities which mediates both their own liquidity and the risks of variations in price with the need for permanently accelerated reproduction of capital. In this way, the financial system makes an important contribution to the expanded reproduction of capital:

'Acceleration, through credit, of the individual phases of circulation or commodity metamorphosis, then an acceleration of the metamorphosis of capital and hence an acceleration of the reproduction process in general?' Contraction of the reserve fund, which can be viewed in two ways: on the one hand is a reduction in the circulating medium; on the other hand is a restriction of the part of capital that must always be in

existence in the money form.⁵³

In this way, the financial system removes from capital reproduction the burden of needing ever-greater volumes of cash for the development of its business. On the other hand, capital can also minimise phases during which money capital lies dormant without any opportunity for investment. Nonetheless, this is paid for by the transformation of the greater part of circulating money into credit money. That is, it becomes credit notes which can be circulated but have fixed life spans and interest rates. With this, the need for frictionless money transactions and for growing reproduction together form the basis for an ever more developed system of credit that increasingly becomes an independent interest-bearing capital: A reciprocal effect takes place here. The development of the production process expands credit, while credit in turn leads to an expansion of industrial and commercial operations.⁵⁴

The expansion of credit-money based circulation expresses nothing other than the fundamental need of capital for expanded reproduction independent of all inconvenient limitations. In particular this comes to expression in the way that reproductive accumulation on the basis of credit becomes autonomous, ultimately independent even of such limitations as the final demand in the sphere of consumption. A violent assertion of the opposed independent forms of the circulation process of the total capital of society is thereby simply postponed, however the clash is not in principle prevented.⁵⁵ The clash must first find expression in the independent forms of the finance system in order that the previously hidden problems within the actual process of reproduction can come all the more strongly to the fore.

The bases of commercial and trading credit are the needs of the constant circulation of commodities, in particular the reproduction of circulating capital. Ultimately, therefore, this credit feeds on the reserves formed from the sales of goods during a turnover period. The laws governing its movement, particularly movement of the interest rate, are therefore determined by the short-term sale/purchase problems within the trading period of circulating capital. When it comes to dealing with anything more than short-term problems, this form of credit reaches its own limitations.

Bank capital and capital credit

The development of commercial credit already tends towards a concentration of reserve funds in the banks to deal with current payments. In addition to this, money, including that which is not immediately needed for current payments, can be deposited in banks in order to earn interest. This can be the source of income for the non-productive classes or it can be the small savings of the working class. This allows an expansion of the reserve funds that the banks use for their loans. What is decisive, however, is that the really big operations of productive capital, the longer term necessary investments in the renewal of constant capital and also the expansion of the capital stock, require money capital on a huge scale and, with expanded reproduction, also bring rising volumes of interest payments for investment capital.

Here, of course, the money accumulation funds of productive capital itself are the decisive source of additional loan capital. This concerns both the reserve capital for future replacement investment, formed from the depreciation of existing assets, and the formation of profit reserves for the financing of future new investments. In this way, investments can also be brought forward so that capital credit in effect mobilises the otherwise dormant reserve capital of other capitalists for investment. Then the recovery of the loaned capital is guaranteed through the recovery of the said investment itself, through the recovery of earlier credit or in other cases through the reserve capital of the bank. Without a credit system, the expanded reproduction of any particular capital has limits set to it by the scale of its own accumulated cash fund available for additional investment. These limits result from the portion of profit available for accumulation as well as the scale necessary for investment to be meaningful.

Through the concentration of accumulated funds, a mass of capital that overcomes these limits is made

available to society. The timescale for big investments can be substantially decreased just as the mobility of capital between different spheres of investment can be increased. It is precisely in this function as capital credit, freed from the immediate links to commodity capital of trading credit, that capital can appear as a commodity that can be bought via the securities and interest rates of the capital dealer. Capital credit gives the 'individual capitalists', within certain limits, an absolute command over the capital and property of others and, through this, command over other people's labour. Control over social capital, rather than his own, gives him control over social labour.[56](#)

The bank functions first of all as the agent between the owners of money and functioning capitalists. The bank's profit results from the difference between the rate of interest on deposits and that on loans. Ultimately, as soon as it has accumulated or concentrated sufficient money capital, bank capital itself appears as the owner of capital. Finally, in a developed credit system it takes shape in the form of social capital, just like productive capital. Marx summarised the role of credit in capitalist production as follows:

- ? Mediating the equalisation of profit rates to produce the average profit rate, also the basis of the average rate of interest;
- ? Reduction in circulation costs (saving on coinage, acceleration of turnover, increase of the means of circulation through 'money symbols');
- ? Acceleration and centralisation of accumulating capital; ultimately the formation of social capital (for example, share capital) and with that the expansion of production; socialisation of functioning capital by maintaining the privacy of capital ownership; transformation of functioning capitalists into capitals separate from function.[57](#)

On the basis of its mediation of credit banking, capital can appropriate a considerable part of total profit. This takes place in the sphere of circulation and is achieved through the mechanism of 'leverage'. In essence, the business of banking is similar to short selling: banks borrow money (that is, receive deposits) on a short-term basis with low interest rates in order to make loans on a longer term basis with higher interest rates. Because of the volume of such deals, and their distribution over time, there is normally enough money flowing into the bank to fulfil its short-term liabilities. Thus, a relatively small equity capital, in comparison to the volume of loans, is used as security to guarantee the liquidity of the bank in respect of depositors. So the formula for the circulation of banking capital is:

Here, G represents the money invested by depositors in the bank while g represents the equity capital of the bank itself. The operation of the bank consists in combining the normal processing of interest-bearing capital ($G \rightarrow G'$) with a valorisation of its own equity capital [$g \rightarrow (G' \rightarrow g')$]. This 'valorisation' is made possible by the important role of capital credit in the acceleration of accumulation, already described. That is, the amount of credit (G plus g) to be lent for capital-valorisation achieves the higher profit and, therefore, also a higher interest rate, G' , than small-scale, short-term lending ($G \rightarrow G'$). The extra money, G , from the bank-depositors, becomes a leverage for appropriating ($G' \rightarrow G'$) which will be much higher than the normal interest yield on g .

So, for example, if bank X takes in deposits to the value of \$100,000 at an interest rate of 5 per cent and then invests this together with \$10,000 of its own equity capital in a business that achieves a 10 per cent yield, then the resulting profit of \$11,000 will be distributed thus: \$5,000 will go to the original depositors (at their 5 per cent interest rate) \$1000 will be direct interest yield on the bank's capital but an extra \$5,000 will be the result of leverage, making a total profit of \$6,000 for the bank. In this example, the effect of

leveraging with non-bank-owned capital is an increase in the interest yield from 10 per cent to 60 per cent.

If L (for ?Leverage?) stands for the relationship between non-bank-owned capital (that is, the deposits held by the bank) to the bank?s equity capital, NIM (for ?Net Interest Margin?) stands for the difference between the rates of G? and G? and FIM (for ?Financial Interest Margin?) stands for the rates achieved in financial business (that will be effective immediately for bank-owned capital) then the return on equity (RoE) for banking capital will be:

$$\text{RoE} = \text{FIM} + \text{L} \times \text{NIM}$$

In the example above, 60 per cent (RoE) = 10 per cent (FIM) + 10 (L) x 5 per cent (NIM)

This means that, as long as there is a considerable spread of interest rates favourable for financial investment, the Return on Equity will be higher, the higher the leverage is, that is, the more non-bank-owned capital is used as against bank-owned capital. As a result, the natural speculative drive of banking capital is to force this leverage higher and higher, thereby diminishing the capital ratios (for example, the relationship between the credit capital and the assets of the bank consisting of the sum of debts and its own capital).

When these capital ratios tend towards single figure percentages, serious questions are raised about the bank?s liquidity. If, for example, a number of the outstanding long-term loans made by the bank have to be written off, the bank may have to use its equity capital to pay its short-term liabilities. This can lead to a collapse of confidence on the part of the bank?s creditors that their deposits in the bank are safe and, thus, to a sudden sharp increase in the withdrawal of deposits, in other words, a ?run on the bank?. In such a situation, it is entirely possible that a bank will cease to be solvent within a matter of hours or days.

Indeed, such speculative, leverage-based booms, with their dangerously low capital ratios, have been followed by bank runs on many occasions in capitalism?s history. Following the banking failures of the 1930s, a series of banking regulations, such as the Glass-Steagall Act of 1933 in the US, were introduced in an attempt to stop any repetitions of such events. These regulations set minimum requirements for cash reserves (expressed in terms of M1 money) capital ratios and leverage ratios (for the ordinary types of capital credit) in which the deposits held by banks are weighted according to different types of risk.

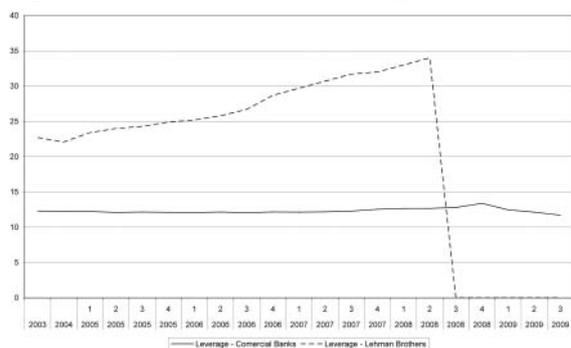
Institutions, such as the Federal Deposit Insurance Corporation (FDIC) in the US, were given the task of supervising the balance sheets of the banks with regard to such criteria and were intended to insure deposits to some extent so that, should they decide that a bank had gone into default, they could take over its operation to ensure that the depositors did not lose all of their money. In addition, agencies were established to rate the creditworthiness of businesses and banks so that there could be a differentiation of rates for prime (AAA) and non-prime/sub-prime loans. A comprehensive set of such rules was adopted internationally via the Basle Accords with the Bank of International Settlements (BIS) acting as the central agency for overseeing their implementation.

While these regulations did help to shield the core commercial banks in the imperialist world from big speculative waves, they did not regulate a whole range of new types of financial facilities that were not foreseen in the Basle Accords. Thus, a whole system of ?non-bank banks? or ?shadow banks? emerged as a result of the liberalisation of the international financial markets in the early 1990s. These shadow banks, mostly operating via ?investment banks?, often lacked any traditional deposit base but transformed short-term deposits into highly profitable big business loans by means of enormous leverage effects.

For example, Lehman Brothers were famous for inventing ?auction rate securities?: they offered cheap

long-term credits to big institutions such as the New York Port Authority, securitised those loans and then traded them in weekly auctions. In this way, short term lenders could achieve higher interests than putting their money into short-term bank deposits but their interest rates were still less than the long-term rates achieved by Lehmans themselves. In 2007, such Asset Based Securities (ABS) were already a \$400 billion business but there was no FDIC or BIS to check liquidity criteria or to insure people who bought such securities. Moreover, ABS was just a small facility in a whole range of 'new, innovative' financial products that were traded in this shadow banking system. In 2007, the five big investment banks in the US that traded in this shadow banking system had a valorisation of their assets that amounted to two-thirds of that of the whole commercial banking system of the USA.

Figure 6: Lehman's Leverage (borrowed capital in relation to own capital) 2003-2009⁵⁸



Source: FDIC

Figure 6 presents a comparison between the levels of leverage in the commercial banking sector during 2004 - 2008 and those achieved by Lehman Brothers, taken here as an example of the shadow banking system. It can be seen that Lehman's, operating with a capital that was more than 30 times its own capital base, achieved fabulous profits until about 2007. For comparison, the standard figure for commercial banks was a multiple of 12. Put another way, Lehman's own capital represented little more than 3 per cent of its liabilities while for the commercial banks the figure was 8 per cent, firmly above the lower limit of 6 per cent allowed by banking regulations. The figure shows that the multiple for commercial banks rises a little in the fourth quarter of 2008 when the financial turbulence resulting from the Lehman Brothers' default cut into their equity capital base. Without government action to guarantee the liquidity of banks in the fourth quarter of 2008, this curve would have gone up steeply, signalling a run on the whole banking system.

In fact, the shadow banking system did experience a bank run, mainly in an electronic form, on their 'innovative financial products'. For example, the ABS market collapsed in 2008 in just a few weeks. Because there were fewer and fewer buyers of ABS-paper, their interest rates went up sharply and, as a result, Lehman Brothers lost one of their sources of funding for their big liabilities. The market for ABS has disappeared today, as have a lot of the other 'innovative products'. This was a secondary effect of the 'sub prime crisis'. The big profits gained from high leveraging were based on there being a wide spread between the normal, low interest rates and the high interest rates to be achieved in especially profitable businesses. As it turned out, a lot of these rates were achieved from a speculative bubble in the market for sub-prime loans. As the name implies, these are high-risk loans and, when they failed, leveraging turned into its opposite; deleveraging multiplied losses.

Table 1: Key data of US commercial and savings banks 2004-2009

	2009 (2)	2008 (1)	2008	2007	2006	2005	2004
Return on assets (%)	0,10	0,32	0,04	0,81	1,28	1,28	1,28
Return on equity (%)	0,93	3,26	0,36	7,75	12,30	12,43	13,20

Core capital ratio (%)	8,54	7,81	7,47	7,97	8,22	8,25	8,11
Charge-offs to loans (%)	2,38	1,18	1,29	0,59	0,39	0,49	0,56
Asset growth rate (%)	- 2,40	6,82	6,20	9,89	9,04	7,63	11,37
Problem institutions	552	171	252	76	50	52	80
Failed institutions	95	13	25	3	0	0	4

source: FDIC

In table 1, the effects of the crisis on the US banking system after the 2008 crash and the subsequent rescue operation by the US government can be clearly seen. While both the profits of the banks and the security levels of capital ratios in general have been restored, it is important to note that there has been a decline in assets, that is, in the volume of loans, and that there is a very high level of write-offs of bad debts. So, while the US government and the Fed have thrown billions of dollars into the banking system, this money has been used mainly to rescue the equity base of the banks? assets and has had little effect on interest rates and the volume of loans, especially as far as non-financial companies and consumers are concerned. Behind the 2.4 per cent decrease in bank assets, lie double-digit decreases in loans to industry and construction. In addition, at 2.38 per cent, the burden of bad debts is twice as big as in 2008. It is, therefore, no wonder that, in the first three quarters of 2009, 95 banks failed, as compared to 25 in 2008. Even now, there are 552 banks (more than 6 per cent of the total) facing problems meeting capital ratio requirements.

As the governments of the imperialist world stepped in to rescue and bailout their banking systems, following the collapse of the ?shadow banking? system, there were many radical speeches about the need for new banking regulations. Negotiations within the Basle Accord system did result in rules covering new ?financial products? but, as in Basle Two, the financial industry has some 10 years in which to introduce these measures. This will be more than enough time for shadow systems to develop outside the framework of the new regulations, indeed this will happen almost spontaneously.

State debt, issuing banks and credit money

With the transformation of capital into a commodity via the credit system and the credit-based acceleration of the circulation of commodities, there is also a change in the form of appearance of money. As the social expression of abstract labour and, as such, as the measure of value, money must be, as the means of circulation, a commodity itself or a symbol of a particular commodity. A new possibility for funding money, one that goes beyond the limitation of money as the commodity gold, results from the securitisation of debts. Even if the price of credit commodity is a derived and illusory form, it nonetheless corresponds to a claim on the appropriation of a certain portion of surplus value in the form of interest payment. In developed capitalism, therefore, credit money becomes a dominant form of money without thereby setting aside the fundamental basis of money.

?A banknote is nothing more than a bill on the bank, payable at any time to its possessor? This last form of credit seems especially striking and important to the layman, firstly because this kind of credit money emerges from commercial circulation into general circulation and functions here as money; also, because in most countries the major banks that issue notes are a peculiar mishmash between national banks and private banks and actually have the government?s credit behind them, their notes being more or less legal tender, and because it is evident here that what the banker is dealing in is credit itself, since the banknote merely represents a circulating token of credit? In actual fact, bank notes are simply the small change of

wholesale trade, and the deposit is always the main thing as far as the banks are concerned.⁵⁹

Despite this, the rumour still circulates that Marx had a 'gold standard theory' of money (that is that all money symbols, cash or paper, must ultimately be exchangeable at any time for gold) although Marx in the chapters dealing with interest-bearing capital explicitly criticised the 'currency theory' that also had political influence in the middle of the 19th century (in contrast to the 'banking' theory).

As Marx made clear in the above quote, the state debt is an essential source of credit money. As already mentioned, the capitalisation of this debt falls under the category of fictitious capital. Through the state, the bourgeoisie organises social tasks which, while they are essential for the general reproduction of capital, would not be profitable as investments by individual capitalists. This function as the 'ideal general capitalist' is made possible by financing state undertakings through taxation on corporate profit, interest payments, wages and other forms of revenue, a premium on production prices (lowering the average profit) and charges (for example, the centralisation of particular elements of the reproduction process of labour power through social insurance).

State income is therefore an appropriation of part of the social surplus value as well as of a part of the reproduction fund for the commodity labour power. As a result, where there is expanded reproduction of capital it can be assumed that there is a constant increase in the function of the state and its income. This growth can be accelerated through the taking on of debt with the safeguard that the accelerated accumulation in general capital (also with this state 'safeguard') will result in an increased income for the state budget which then allows repayment of the debt together with interest.

To a certain extent, the state debt is taken on by the central bank, mainly through the issuing of government bonds. The central bank can then pass these credit notes on to commercial banks in the form of banknotes in that they are exchanged against, for example, securities or the raising of their deposits in the central bank. On the other hand, the central bank can withdraw the means of circulation by selling loans or securities in its possession against banknotes. In this way, the state debt is the almost exclusive cover for circulating cash. In 2004, the \$800 billion either in circulation or deposited by commercial banks in the US central bank were 'covered' by \$760 billion of US State bonds in the possession of the Fed, \$40 billion through other securities (for example debts to other states) and only by \$15 billion of gold, precious metals and other currencies (the difference constitutes the bank's own capital or profit). The dollar is backed by gold only to the extent of 1.8 per cent (with the euro it is something under 10 per cent).

Banknotes are only a small part of the total means of circulation necessary for the circulation of goods (the cash for wholesale trade). The calculation of the money supply M1 includes all readily available means of circulation as well as current accounts held by non-banks (such as Giro accounts) as well as banks. Because, in effect, transactions do not require any real payments in and out of the accounts and are settled by discounting between the accounts (book money) it is convenient to include this within the means of circulation. In 2004, in the USA, this accounted for an M1 of \$1,350 billion.

Money supply M2 adds to this all deposits of less than two years' duration or withdrawal notice periods of up to three months. Because of their higher availability, these monies can also be drawn on to balance payments. Using this M2 reckoning, the US money supply in 2004 rises dramatically to \$6,340 billion.

Money supply M3 adds to this, above all, the traditionally quickly discountable trading in bills of exchange. Today, however, this has been substantially replaced by the price evaluations of money market funds. That is, the 'price' of mutual fund shares held by non-banks and invested in short-term investments. Because these funds are directly bound up with liquidity, they can be used to settle bigger payments cost-effectively (short-term credit is turned directly into money here in the form of share certificates).

Using this calculation of M3, money supply in the USA in 2004 rises to \$9,400 billion, almost 12 times the volume of cash.

One example of means of circulation outside the money market funds is 'asset backed commercial paper' (ABCP). Here, specialist funds bundle together short-term credit notes (up to 90 days) in securities of particular denominations at interest rates corresponding to the 'capital value formula'. Blocks of these ABCP's can then be passed on as means of circulation from debtor to debtor. If there were large-scale failure to make the repayments on the underlying short-term debts this would naturally result in a classic monetary crisis, as in the collapse of the trade in bills of exchange. Therefore, the banks, which ultimately manage these ABCP funds, have to guarantee them through their reserve funds.

In the current financial crisis it is not only securities based on long-term real estate credits (asset backed securities) but also ABCP's based on short-term credits that have been massively hit by payment difficulties. The near-collapse of the German IKB bank was essentially caused by the need for this bank to stand in for the payment problems of an ABCP. In such a crisis, the financial system is drawn into the conflict between two monsters, a monetary crisis and a banking crisis.

If in the past it was the discounting of bills of exchange (the discount rate) or the extension of credit based on them (the Lombard rate) that were the principal means by which the central banks, through their business with the commercial banks, determined the interest rate, then, today, securities transactions are to the fore. Thus, the European Central Bank determines the 'prime lending rate' by means of a weekly tender in which the commercial banks offer securities (particular prewritten securities) for sale to the central bank.

As explained above, the price for securities is determined by reference to the assumed market rate. In this 'main refinancing operation', the central bank and the commercial banks haggle directly over the interest rate which then determines the price for securities. This interest rate then becomes the reference point for all other interest rates such as those for overnight deposits or credits, loans based on securities, the interest rate on minimum reserves (at present, commercial banks must hold at least 2 per cent of their deposits in the central bank).

From this it becomes clear that the room for manoeuvre of central banks is considerably more restricted than is widely believed. Ultimately, the market rate for interest is determined by the relationship of supply and demand for money capital in relation to the available mass of profits. In the last analysis, this also affects the settling of the key rate; under such a regime, no central bank could force through movements in the interest rate against the market.

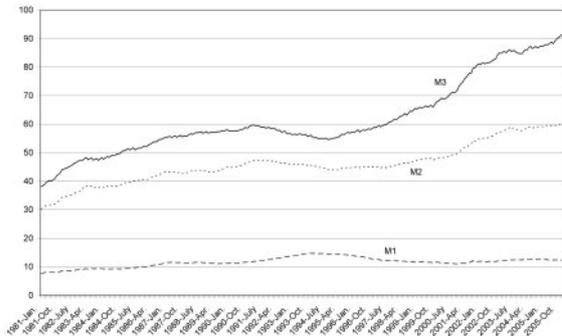
A variation is possible under certain circumstances at particular moments in the cycle if there is a corresponding agreement between central bank and private banks. The idea that the level of interest rates can be influenced through state-political decisions in a capitalist economy with a well-developed financial system is therefore, in the best case, naive. The central bank is essentially an organ of finance capital and it is effective when the main fractions of capital are pulling in the same direction.

From this it is clear that the determination of the interest rate has an essential effect on the money supply in whatever form it might be measured. As a result of the higher returns on discounting securities, as well as the higher valuation of money market paper, a lower interest rate will lead to an expansion in the money supply, higher interest rates, by contrast, lead to a reduction in money supply. Therefore, if the velocity of circulation remains constant, the level of prices can be determined through these changes in interest rates on the money market. This is, of course, irrespective of real movements in value (for example, cheapening of goods through improvements in productivity or cheaper imports) or the increase or reduction of long-

term capital investments. Therefore, it is not the absolute scale of the money supply which matters but rather its development in relationship to the development of total accumulation. Thus, the long-term statistics provided by the Fed for the development of money supply M2 show a clear parallel to the long-term trend in accumulation. Roughly speaking, there was a sharply increasing money supply during the boom years of the 1950s and 1960s. By contrast, in the 1970s and 1980s, there was a sharp reduction in money supply.

In contrast to this, the development of the money supply since 1990 presents a very contradictory picture. With the recovery from the recession at the beginning of the 1990s, there was once again an increase in money supply. Nonetheless, the effects were very different on the various forms of money supply. If money supply is viewed in relation to growth in price-adjusted GDP then M1 remains constant to the present-day at approximately 10 per cent of GDP. By contrast, since about 1997, M2 and M3 have exploded. Since 1980, the relationship of M2 to GDP has risen by 100 per cent and that of M3 by 145 per cent (and the years 1997 ? 2003 accounted for half of this increase).

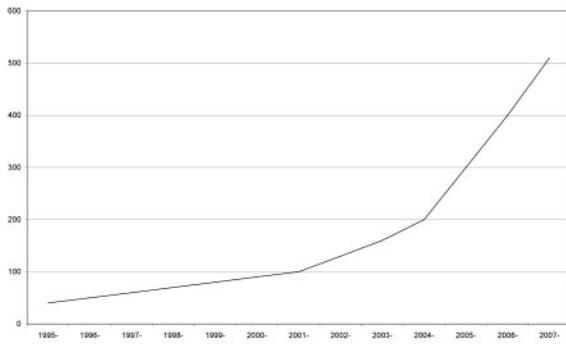
Figure 8. Development of the money supply in relation to real GDP in the USA, 1981-2006



In particular, the increase in M3 accompanied an enormous expansion in short-term commercial credit which became the basis for a self-reinforcing monetary speculation. Naturally this was bound up essentially with historically low bank rate and market interest rates for short-term credits and deposits which were maintained over several cycles. The expansion in the money supply here is clearly a function of the speculative bubble. The US central bank (unlike the Bundesbank and the European Central Bank) had no interest in applying monetarist dogma to the control of the money supply. US finance capital and, following it, the Fed, clearly had no interest in combating the expanding speculative bubble.

This expansion of monetarised commercial credit was accompanied by a corresponding increase in the volume of trade on futures exchanges. The measure of this is provided by the sum of outstanding claims that were traded in derivatives. In 2007, this broke through the \$500 trillion limit and can be compared to \$50 trillion in 1995 and \$100 trillion in 2001. (See Figure 8) The 2007 figure is almost five times world GDP. This is obviously explained by the fact that a greater part of these derivatives was calculated on values representing fictitious capital, in particular ?gambles? or ?insurance? based on movements in interest rates, currencies and bond prices. The actual value, that is, debt, appears here to have grown by a factor of two or even more on new securities upon which other securities are then based.

Figure 9. Development of the value of outstanding contracts on the Derivatives Markets (\$ trillions) 1995-2007



While this expansion of derivatives is, on the one hand, a real insurance against movements in the market, that is, an appropriation of an average rate of interest or profits against payment for an 'insurance premium?', these instruments (like all money market paper) became the object of speculation. By means of futures transactions, a relatively small investment can yield very big profits in a short space of time (the leverage effect) or very big losses. On the basis of the expectation of big profits, the leverage business was mainly financed via credit, through the sale of debts. The interest to be paid on these was expected to be lower than the anticipated speculative profit. Compared to normal banking operations, the reserves of funds that trade in this way are generally very limited, often only 1/10 of the huge sums which can be moved through the 'lever'. The funds are therefore vulnerable from two sides: unexpected losses with the derivative papers could lead to problems with the settling of the secured underlying business or the securities used by the fund to settle its transactions could be found to be no longer sufficient for the corresponding credit financing of the business.

Problems with payment, or incapacity to maintain the business of a greater number of such funds, however, leads to a difficulty in insuring their own businesses. Thus the industrial and mercantile capitals directly involved must either write off businesses they believed to be insured or they must get insurance and capital for the new business problems that have to be settled. In this way, the crisis in the money markets and the collapse of hedge funds has a direct impact on 'real capital'.

The problem that faced the global economy in the financial crisis of September 2008 was that the monetary bubble built up by the shadow banking system had itself become one of the main sources of finance for all kinds of business. The liabilities of this shadow system were only very partially secured by the equity capital of the financial capital involved itself. The spreading of these risks via hedge funds or special securitisation devices, such as CDO's, was revealed to be an entirely illusory substitute for cover based on equity. In the end, a large part of the circulating 'money' turned out to be worthless and this expressed itself in the fact that most businesses had once again to turn to 'traditional' sources of credit for financing. When they did, they found much tougher and more constrained conditions for accessing new money. For example, the interest rates for non-prime-rated companies shot up into double digits.

Recognition of the dangers facing the whole accumulation process, as well as the chain reaction resulting from the write-off of important pillars of highly leveraged global financial markets, was the reason for the rapid and astonishingly coordinated intervention by the imperialist states and some of the more developed semi-colonies in the last quarter of 2008. Once again, the bourgeois state acted as the lender of last resort. Having looked over the precipice after the breakdown of Lehman Brothers and the near collapse of AIG, the imperialist states had to act to prevent a depression such as that which followed 1929. Unlike at the time of the gold standard, and because of the situation of state finances, in 2008 there was still some scope for counter acting measures.

The first priority, particularly for the state banks, was to secure the liquidity of the banking system. This was done by using low interest rates to pump cheap money into the credit system, by the invention of new

facilities to give banks not only short-term funding but, by acting as 'normal' creditors, to provide monetary funding for as long as an entire year, by taking over bad loans or other valueless 'money' from finance institutions as 'security' for their liquidity (in the US, the Fed used \$1 trillion to back valueless mortgage obligations). In addition, central banks bought back state securities themselves as a new way of 'printing money'. In the US, the Fed bought Treasuries to the value of some \$300 billion by means of this 'quantitative easing'. As a result of such measures, the dollar money supply was increased by 138 per cent as compared to 2007. In the EU, similar measures taken by the European Central Bank (ECB) increased the Euro money supply by 35 per cent.

Secondly, a massive increase in state debt was used to counter the effects of the crisis. Measures ranged from direct state intervention, taking over bankrupt banks or corporations, through state guarantees on subsidies to indirect measures like tax cuts and consumer credits and state investment programmes. It is estimated that by the second quarter of 2009 these measures had already accounted for a 0.5 - 0.8 per cent increase in the US GDP (or, rather, a lessening of the decrease in GDP) and this trend will survive at least until the second half of 2010. The cost of such policies has been to increase the public debt of the USA to 90.4 per cent of GDP at the end of 2009, compared to less than 70 per cent before the crisis. Overall, within one year of the crash, the G20 states invested \$1.5 trillion in their rescue programmes, this figure is some 3.5 times the size of the entire German state budget.

Central banks and states have achieved only very moderate effects on GDP growth by pumping these mountains of money into their economies. This makes it obvious that most of it was used to enable financial businesses to return to something close to the 'business as usual' they had known before the crash. This means that the developing financial bubble is now based on international state debts (or 'sovereign debt') instead of sub-prime mortgages. Since, with the exception of China, most of these state debts have been raised on the financial markets themselves, the states will face difficulties as soon as interest rates begin to rise again. At some point, the question 'Who will give credit to already indebted states like the US?' will be raised. This problem is already facing states like Greece, Spain and Hungary.

[60](#) For the US, in particular, there will remain the option of devaluing state debt by allowing massive inflation, with all the consequences that would have.

Speculative bubbles

Normally, the money supply develops in step with the long-term tendency of accumulation. If it does not, negative effects on the development of prices are to be expected, either inflation or deflation. These can be postponed if the surplus money that cannot find any profitable investment in reproductive accumulation is able to find other forms of investment which appear to offer a certain valorisation. Fictitious capital provides just such possibilities. With the lowering of profits and the accompanying fall in interest rates, there is the possibility of an increase in the value of securities (as the capital value fiction showed) if the expectations on the yield of the underlying debt obligations can be maintained. That is, if the investors of 'surplus' money that could be invested even at a lower interest rate believe that a certain undertaking will once again make bigger profits in the foreseeable future, then the demand for investment in shares or deposits in this undertaking will grow (the discounted value of the expected yield on the capital is greater than the investment possibilities at low market rates). That, however, requires a fast rising price for the security which then creates further demand. Thus, the first to buy the securities makes a profit which confirms the original expectations. This can result in a credit-based financial bubble which will last until the expectations in the undertaking are seen not to have been fulfilled.

Figure 10 Price/Earning Ratios for Standard and Poor's 500



Figure 10 shows the development of the price/earning ratio of shares on the S and P 500. What is clear from this is that, at the time of the New Economy bubble, prices had separated strongly from the real profit situation of the undertakings. A 'normal' p/e ratio of 15 corresponds to an interest rate of 6 per cent. The values achieved during the bubble, by contrast, correspond to an interest rate closer to 1 per cent! Today, with regard to shares, a further appearance is important. Through the buying back of their own shares, big firms can decisively 'improve' their profit situation. Because the increase in the prices of securities leads to a positive 'valuation adjustment' in the assets of the corporation, the share of its equity capital on the balance sheet (and the retention of part of the profit dividend) is raised and the profit of the corporation will be presented as correspondingly 'expanded'. In this way, and usually by means of low-interest credit, the p/e ratio can be maintained even when profits are already crumbling. This then continues to maintain the increase in share prices. This central strategy of corporate policy for raising the price of their own shares is also strengthened by the transformation of a portion of corporate profit in the form of share options as 'performance payments' for managers.

The next example of the development of a speculative bubble concerns real estate. Marx explained the possibility of a revenue form of ground rent arising where a limited supply of goods based on the capital exploitation of the soil confronts rising demand to make possible a price which does not enter into the equalisation of profit rates. The difference between the average profit and the actual profit can therefore be appropriated by the landlord as rent. As with capital value, the interest rate can be used to calculate the 'capital value', that is, the basic price.

That is, with a sinking average profit and sinking interest rates, through the corresponding demand for real estate by 'surplus money', there will be a tendency to an increase in the price of real estate. As with shares, speculation now feeds on itself because rising real estate prices stoke up demand, further sales realise speculative profits and set in motion what is, in effect, a 'pyramid selling' scheme. That is, the losers are those who at the end of the bubble can no longer sell what they have bought when the price of the object of speculation collapses. The overall effect on wealth is zero, only that the wealth is now very differently divided between winners and losers. With real estate bubbles, the break in the chain comes either when interest rates begin to rise again or, equally, when the yield on the use of land clearly does not generate the average profit because of the high price of land.

Clearly, in the present credit system, soft mortgage credits have played an essential role. The rising price of real estate appeared to guarantee soft credit which then encouraged credit with higher interest rates. A 'wealth effect' set in which allowed the indebted householder to suddenly appear creditworthy. With the expectation of secure yields from these mortgages, the 'debt obligations' based on this credit became securities with 'high-value'. Thus, in the real estate bubble after 2003, these debts were for the most part placed on the capital markets as 'asset backed securities' (ABS) by the credit-giving banks who presented them as long-term investments. In this way, this real estate bubble was not only characterised by exploding business in real estate but by the fact that it also created a further investment possibility for rootless capital on the capital markets.

Graph 8 also shows the P/E ratio of housing prices (calculated on the basis of the Case-Schiller Index). It is obvious that housing prices began to rise to irrational heights in 2002, a short time after the stock market bubble burst. It can also be seen that the end of the price boom in 2006 marked the beginning of the financial crisis pushing down the stock market after a certain time-lag. What is interesting is that the P/E ratio of the S&P 500 stocks increased sharply again after the first quarter of 2009. Since the 60 per cent increase in stock prices after March 2009 is not backed by any corresponding increase in the earnings of the rated corporations, it is clear that the state rescue plans have fuelled a new stock market bubble.

With the formation of a global, all-embracing market in derivatives with huge volumes of trade, there is a further field for speculative bubbles. In 'normal' times, the futures trade is an insurance against unexpected variations; it creates liquidity promptly or sends early demand signals to production. However, this defensive instrument can, in the face of the irrationality of the market, become self sustaining and turn into an instrument for sharpening crises.

Surplus capital searching for investment opportunities can wind up on this market. Once the expectation of higher prices to be achieved in the future feeds back into the actual determination of prices (for example, through hoarding, holding back existing goods in order to achieve a better price later) this can lead to a rising spiral of prices, particularly if there is already a tendency for prices to rise. This was clearly visible in recent months with the price of oil, some metals and particular agricultural products. As a result of this, the futures and options on these goods became securities themselves whose price was forced up through huge volumes of trade (short-term arbitrage profits on the basis of constantly rising prices). Unlike share and real estate bubbles, which lead to an expansion of credit on a broader basis (which affects capital and those with middle incomes) this form of speculation leads to rapid increases in costs for the greater part of productive capital (with the exception of those who deal in these raw materials) and the mass of consumers and heats up inflation.

Figure 11: development of commodity futures in comparison to spot markets.

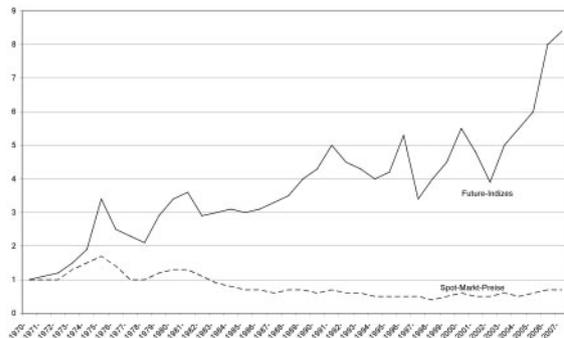


Figure 11 shows that, in the long-term, the prices for raw materials on the spot markets sink. Only in the last two years (2006-8) has there been a slight change in the trend. By contrast, the indices for commodities futures rise continually. The balancing out of market risks, of extreme variations in price, through insurance based on derivatives, thus leads to a speculative increase in prices which runs directly contrary to a lowering in value. This stokes up the speculation further. In the last two years the volume of trade in commodity-futures has practically doubled.

While commodity speculation surged in 2008, it could not prevent the crash in the autumn of that year. With the sharpening of the global recession, commodity prices fell and it appeared that this option for speculation was over. However, with the state rescue plans came the prospect of some future growth and therefore commodity market speculation resumed on an enormous scale. A few examples will suffice to illustrate the price increases of important global commodities during 2009: copper up 133 per cent, oil up 112 per cent and sugar up 79 per cent. These price increases are not backed by any real increase in

demand or production, they are an expression of expectations for future demand and profit increases. In fact, they may even be a brake on future productive growth because of the negative effects of such high prices.

Finance and monopoly capital

Marx saw in the formation of joint stock companies a countervailing factor to the fall in the rate of profit, because the shareholders were happy with a form of interest (dividends). However, in the age of concentrated bank capital and speculation-driven finance markets, this has turned into its opposite. Rudolf Hilferding was the first to develop this insight in the seventh chapter of his book on 'Finance Capital'. Here he showed that, for modern finance capital, what is decisive is not the sluggish cashing in on dividends but, rather, the battle over the sale price of fictitious share capital. This becomes possible for the banks or other similar financial institutions through the negotiation of the raising of capital for establishing firms, expanding capital, takeovers, fusions etc. The transformation of profit bearing capital into interest-bearing (that is the apparent relaxation of the profit rate) is paid for by the negotiator who raises the capital being able to capitalise the difference between profit and interest.

Take, for example, a firm previously run as a partnership with a capital of €1 million producing an annual profit of €150,000 corresponding to the average profit rate of 15 per cent which is then turned into a joint stock company. If the interest rate is 5 per cent then an annual dividend of at least €50,000 must be paid out to the shareholders (depending on how great the competition is between fixed interest investments and the market in shares). If one adds to the dividends the fictitious corporate profit, however, then, for example, up to €100,000 profit on the investment could be generated. All the same, the 'capital value' of the company (as shown by the formula for 'perpetual rent?') would be set at 150,000 divided by 0.05, that is, 2 million (the fictitious sale price or initial value of all shares). This surpasses the actual capital requirements of the company by one million.

Whoever actually succeeds in realising the capital value on the stock market, whether by the formation of the joint stock company, by its sale or by takeover etc, succeeds in realising in advance the not-yet-realised corporate profit. Whoever pockets this difference, for productive capital it means that it has to pay the 5 per cent interest rate not on its real capital but on the fictitious capital value which has been forced up by the raising of capital. It is productive capital that ultimately has to pay off the 'underwriting profit?' to the shareholders. In this way a form is found in which, over the long-term, finance capital can appropriate a large part of the mass of profit above and beyond the interest rate.

In developed finance markets, stock exchanges are the quickest way of raising large sums of money for founding new companies, takeovers etc. The investors are promised a return on their capital through dividends that are somewhat higher than the market rate but characterised by more risk. Through the overvaluation of the functioning capital, as is given by the capital value, there is for productive capital a de facto higher price which finances the 'founder's profit?' of those who raise the capital. That is, productive capital has to pay a kind of extra rent to finance capital.

This 'financing profit?' for raising capital is still an important source of profits for finance capital as in the speculative bubble of the 'New Economy?' where the 'founder's profit?' came at the cost of the mistaken expectations of the deceived investors. This is strengthened by the activities of hedge funds which buy companies in order to force up their 'capital value?'. This can also lead to financing profits, this time, above all, at the cost of productive capital (or of the workers affected by restructuring).

Let us illustrate the role of 'founders' profits?', that were characteristic in the finance industry in the build-up to 2008, by looking at two hypothetical banks. The two banks, X and Y, are both founded with a start-up capital of \$5 billion. They are founded as stock companies, with a \$1 price for each share. Bank X provides

credit of \$10 billion to Bank Y at an interest rate of 10 per cent for 20 years and Bank Y does the same for Bank X. Let us assume that the general interest rate in the economy declines to, say, 5 per cent, as a result of recessionary tendencies. The securitised credits of X and Y now become extremely valuable because the capital value of their assets, at 10 per cent, is \$30 billion each (see the capital value formula). Compared to the value of bonds yielding 5 per cent, the two banks have made a gain on their lending of 50 per cent. In their books they can show a gain of \$5 billion, without having made a single productive deal.

Let us suppose they pay half of this 'gain' (that is, \$2.5 billion) as dividends to shareholders. In comparison to the recessionary environment, with its decrease in interest rates, this enormous return on equity (100 per cent) has a quite profound effect on the stock market. The original owners of X and Y now sell perhaps 1.5 billion of their shares on the stock market at a price of, say, \$2 (a 'fair' price in the light of the latest returns on equity). Together with their already 'earned' dividends, the original owners have now taken \$5.5 billion each out of the banks, that is, they have made \$1 billion out of nothing. Even if the banks turn into losses, they themselves will have lost nothing. The risk of losses will be borne by those capitals that follow the lead of the founders and believe they can repeat their spectacular founding profits.

In real life, this would be the big pension funds or public banks looking desperately for profitable investment opportunities for their deposits. In this scenario, \$5.5 billion was unproductively wasted by each of the banks to provide the founding profits before the banks could begin any productive operations with a real capital that remains \$5.5 billion (\$2.5 billion of which is left from the original owners). As the share price was based on the expectation of exceptional gains, the non-founding shareholders are in danger of losing their investments as soon as it is clear that such exceptional growth rates cannot be maintained. In the end, then, these are the capitals that will pay the cost of the founders' profits of \$1 billion with corresponding losses in their own share values.

Finance charges become, alongside the business with speculative bubbles, one of the main sources of the increasing power of modern finance capital. Both accelerate concentration, as much in the financial sphere as with productive capital. This is achieved through actually increased appropriation of profit as well as through the financial ruin of potential or actual rivals. Finally, and above all, as a result of the market dominant position of particular industrial capitals (the monopolies), monopoly profits create a greater source of appropriation of surplus value for interest bearing capital. As a result of the lack of equalisation of the profit rate, which is a given with monopoly profits, there are increased possibilities for gains through financial engineering in the expectation of extra profits through trust or cartel formation. The latter are, therefore, encouraged by finance capital. As a result, the struggle for control over total accumulation between finance capital and productive capital grows. 'The more powerful the banks become, the more successful they are in reducing dividends to the level of interest and in appropriating the promoter's profit. Conversely, powerful and well-established enterprises may also succeed in acquiring part of the promoter's profit for themselves when they increase their capital. Thus there emerges a kind of competitive struggle between the banks and corporations over the division of the promoter's profit, and hence a further motive for the bank to ensure its domination over the enterprise.'⁶¹

Hilferding assumed that the struggle over financing profit and the securing of monopoly profits through division of the market must necessarily result in the fusion of bank and industry capital in the form of control by particular banks over particular industrial groups. In fact, huge funds operating on unregulated international financial markets are in an even stronger position to use the threats of sale and takeover to ensure that industrial capital directs its accumulation and financing decisions in accordance with the interests of finance capital.

Thus, even if the 'German' model of finance capital, the fusion of banking and industrial capital under the

hegemony of the banks, was relinquished in favour of the 'US model', indirect control of industrial capital through the financing power of funds, the fundamental truth remains: 'Finance capital, concentrated in a few hands and exercising a virtual monopoly, exacts enormous and ever-increasing profits from the floating of companies, issue of stock, state loans, etc., strengthens the domination of the financial oligarchy and levies tribute upon the whole of society for the benefit of monopolists?' Capitalism, which began its development with petty usury capital, is ending its development with gigantic usury capital.⁶²

No wonder that these great investment funds and investment banks today form an elite circle and have been nicknamed the 'masters of the universe'. With its daily turnover of billions, this concentrated usurers' capital can, with a few keystrokes, determine the destiny of millions of people. Therefore, the impact on the whole financial system if one of these big investment banking institutions crashes, as was the case in 2008 with Bear Stearns and Lehman Brothers, is absolutely staggering. It was immediately clear that the whole financial system could collapse like a house of cards. Since then, such banks have come to be called 'system relevant', that is, they are so big they cannot be allowed to fail and so the state has to intervene to save them, whatever the cost. Immediately after the crash there was a lot of talk about regulating, or even forbidding, investment banking. A year later, investment banking is once again operating in a kind of golden age: not only have the central banks provided cheap money for speculation but there is no serious state regulation and such banks now have the reassurance that they are 'system relevant' so any risk will in the end be taken over by the state.

International capital flows

The formation of capital relationships was initially successful within the context of the formation of a national sphere of circulation within whose framework the formation of value production, like the equalisation process of the profit and interest rates, took place. On the other hand, capital relations from the very beginning were oriented towards the world market and struggled always to overcome the limitations of local and national markets. On the world market, commodities that result from very different value forming labour processes (for example, the length of the national working day) confront each other. Even if, within certain frameworks, there are equalisation processes at work, there are limitations in particular with regard to the labour market but also concerning the structure of qualifications, infrastructure, the formation of monopolies and financial capital and state organisation which only ever allow a tendency in the direction of equalisation. This also affects the formation of value, average profit rates and also the interest and rent structure. On the world market, therefore, commodities which originate from different processes of price formation and price levels, confront one another.

Nonetheless, on the world market there is only one price for any particular commodity, a price which must be expressed in one currency, 'world money'. This can only take place to the extent that there is a definite exchange relationship controlling the exchange of money from one sphere of circulation to another. This exchange relationship therefore expresses the varying value relationships of the national working days, it is the measure for different levels of prices: 'It is otherwise on the world market, whose integral parts are the individual countries. The average intensity of labour changes from country to country; here it is greater, there less. These national averages form a scale whose unit of measurement is the average unit of universal labour. The more intense national labour, therefore, as compared with the less intense, produces in the same time more value, which expresses itself in more money.'⁶³

These different weightings of the national amounts of labour must work themselves out in the tendencies to movement in the flow of value between the spheres of circulation. This can result in trading surpluses and also in the transfer of value through the retention of extra profits (not passing on lower prices). The extent to which this results in varying exchange rates is certainly related to that but is essentially determined by the price of the money commodity itself. The flows of value in the trafficking of goods and capital play an

essential role in this as they set the supply and demand for the various currencies. In addition to that, however, there are also movements on the international money market. The value of a national currency is determined by the reserves in the central bank and the creditors on the money market. An increase or decrease in these reserves can therefore serve to equalise discrepancies in the balance of payments and have a direct influence on the value of the national currency. At the time of the gold standard this meant entirely concretely the movement of gold between the central banks in accordance with the balance of payments. However, the more money presents itself as capital commodity, in the various appearances of interest bearing capital, so the more the dynamic of the development of the value of money is determined through the interest rate. As a result, the interest rate that is valid for the means of circulation within the country is also essentially valid for the money flows on the foreign exchange markets.

While, therefore, today, the formation of currency reserves through exchanges between the central banks takes place by means of trade in government bonds, short-term currency variations are strongly influenced by movements on the money markets. The international trade in foreign exchange, which is no longer settled through exchanges but by the unregulated network of interbank trade, is today one of the areas of business with the highest turnover (\$3 billion per day, see graph 10). The foreign currency reserves of central banks are scarcely enough to counteract major waves of speculation against particular currencies.

Figure 12: Volumes of daily turnover on foreign exchanges (\$bn) 1992-2007

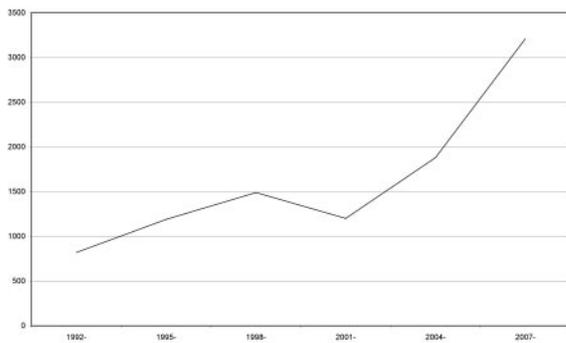


Figure 13. Share of major financial institutions in foreign exchange trade, 2007

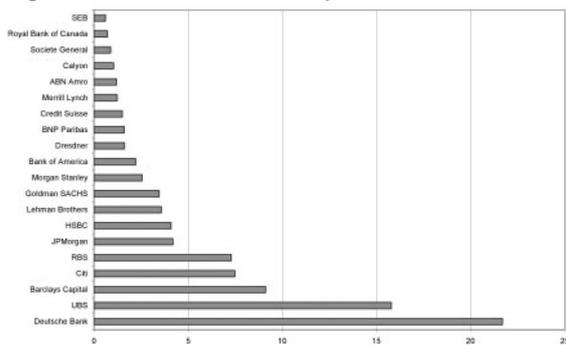


Figure 13 also shows that the imperialist major banks generally dominate trade on the deregulated foreign currency markets (indeed it is a 'Who's Who' of international high finance) within which particular financial institutions (such as the Deutsche Bank) have specialised.

Naturally, credit relations are also decisive for the international process of circulation and its improvement and acceleration. The export business demands even stronger credit guarantees and risk cover. This leads naturally to the expansion of financial markets to a supra-national level. With the abolition of the gold standard (effectively after the end of the Bretton Woods agreement at the beginning of the 1970's) the dollar became world money not only as money deposited in US accounts or central banks but increasingly also in reserves hoarded in 'offshore' accounts by internationally active financial companies as a basis for bigger credit operations.

An export surplus in country A with regard to country B generally means that in country B there is a surplus of payment obligations with regard to country A. Sooner or later this must express itself in the flow of money from B to A. The usual balance of payment statistics therefore assume that the current-account balance (the balance of trade in goods, services and the transfer of wealth) and capital account balance (the balance of capital exports and imports) will balance each other in so far as they are not influenced by the foreign currency balance (that is there is a drain on reserves or changes in the foreign exchange rate). Generally, it follows that:

Current account balance = capital account balance + foreign currency account balance

Thus the growing current account deficit of the USA was for a long time balanced by the positive capital account. US investments abroad brought considerably higher profits than the increasingly puny US bonds which, however, for example, China and Japan continued to hoard in order to maintain their own export based growth. From approximately 2005, this equalisation mechanism was not strong enough to hold back the continued decline of the dollar. While changes in productivity, labour intensity and, in general, the relationship between capital and labour can be important for changes in the current-account balance and, likewise, the fundamental relationship in price levels (or purchasing power parities) between the countries may move, for the capital and foreign currency accounts in general the question of profit and interest expectations is decisive. Naturally, fundamental changes in the conditions of capital valorisation and the general trend of capital accumulation are also expressed in this. The difference in interest rate levels is important both with regard to which country longer-term capital tends to prefer to invest in (for example in foreign government bonds) and also for the direction of speculation in foreign exchange. Again, the different average rates of profit are important for the direction of productive capital investment whether that is as portfolio investment (for example purchase of shares in countries abroad) or as direct investment abroad.

With falling profit and interest rates in the imperialist centres, in particular phases of over accumulation, there will be a tendency to increase capital export while the transfer of wealth back to the centre (as increasing items in the current account balance) will become increasingly important. Equally, big firms can, with the help of monopoly prices, realise extra profits on the world market which also lead to a transfer of value into the home countries of these concerns. The latter appears as a balance of trade surplus through the higher monetary expression (price) of the corresponding goods.

The structure of the capital streams (the international credit, investment and distribution system) together with the corresponding exchange and interest rates, establishes a corresponding international division of labour. Ultimately, it is the laws of motion of international capital accumulation that determine the circulation of goods and money on the world market. With the establishment of giant monopolies and their domination by finance capital concentrated in the Northern metropolises bound up with the corresponding state apparatuses, an international regime is created that can rightly be called 'imperialist'. Capital export and the issuing of credit become instruments for domination of the overwhelming majority of the states and their economies which make up the world market. The established international division of labour serves to secure the highest possible monopoly profit rates for the corporations, the corresponding interest rates for finance capital and the other additional rents which are thereby made possible in the imperialist states.

In this, the capital flow between the imperialist centres and the periphery should not in any way be seen as steady and long-lasting. In reality, there are particular periods of time which determine whole phases of the epoch, in which a huge wave of capital exports flows into quite definite, more or less imperialised regions, usually bound up with speculative bubbles. They are followed by a more or less massive financial crisis (for example the debt crisis) which introduces an entire period characterised above all by a flood of capital

back into the imperialist centres.

Periods of imperialism

Classical imperialism

In the last decade of the 19th century, the industrial centres of the world economy emerged from long years of stagnation. During this period of stagnation there had been widespread development of monopolisation and the concentration of banking. With the technological renewal of heavy industry, chemicals, and means of transport and communication, the field was wide open for rapid accumulation. At the same time, there was sufficient investment capital available at healthy interest rates. With the rise of monopoly industries there was an 'explosion' of capital exports. As Lenin showed in the first chapter of his pamphlet on Imperialism, this capital export was concentrated in the years between 1900 and 1914.

Before the First World War, a level of capital export was achieved in England, France and Germany that was more than 100 times greater than that of the middle 19th century. This capital export was organised in the form of government bonds and credits administered via governments and banking consortia. This flow of capital had conditions attached, for example, infrastructure contracts had to be given to the big industrial monopolies of the imperialist states. To secure these capital relations in particular regions, direct colonialism was used on an unprecedented scale whilst elsewhere 'independence' was formerly retained although, de facto, the relationship of 'semi colonies' was established.

The division of the world under this imperialist regime was bound to lead to sharpened competition and ultimately to military confrontation. The crisis of this regime was by no means resolved by the First World War because the old hegemonic power, Great Britain, could no longer achieve the capital accumulation required for its political role. The colonial regimes of Britain and France revealed themselves increasingly as brakes on the accumulation of world capital.

The world economic crisis and the era of Bretton Woods

Particularly in the USA, the 1920s saw an enormous increase in private investments in loans to Latin American and East European states and to Germany which were bundled together and administered by US investment banks. These investments served as cover for an extension of credit on the basis of low interest rates. With the increase in US interest rates towards the end of the 20s, and the growing problems with repayments from the debtor countries, the speculative bubble burst in the expanded financial crisis after 1929. The following year saw a massive flood of repayments, the liquidation of reserves, falling exchange rates and highly disadvantageous terms of trade from the point of view of the countries concerned. Particularly in Latin America, 'import substitution' was a logical answer to these problems. With this there was a change in the dominant form of capital exports towards direct investment, in particular in the locally-based affiliates of US corporations in Latin America.

However, it was only after the Second World War, and its survival in the revolutionary situations it produced, that imperialism was once again able to establish a stable global regime. The USA was the obvious hegemon and the dollar established itself as world money. With the agreement at Bretton Woods, a system of fixed exchange rates against the dollar together with its rate against gold and a mechanism for correcting currency imbalances (the International Monetary Fund, IMF) was created. The structure of capital exports in the post war boom was characterised above all by an enormous increase in capital exports between the imperialist centres USA, Germany and Japan and the simultaneous construction of a huge network of affiliated companies in the semi colonies.

The collapse of Bretton Woods, petro-dollars and the debt crisis

By the beginning of the 1970s, the fixed rate of the dollar against gold had long become a fiction and

likewise the system of fixed exchange rates. With the collapse of Bretton Woods, the US central bank lost control over a part of the global dollar reserves. Through the establishment of large offshore dollar reserves (known as petro-dollars because their source was often the oil exporting countries) in the 1970s and the end of the postwar boom, a new period was introduced that was characterised by large-scale credit transfers to Latin American and Asian states. This time the wave of credit was maintained above all by the commercial banks in the imperialist centres that had control of these dollar reserves. Once again, it was a change in the direction of US interest rates that unleashed a massive 'debt crisis' at the beginning of the 80s. The result is well known; the interests of the creditor states were combined and represented by the IMF which unleashed a decade of harsh 'debt relief regimes' in Latin America and Asia. As a result of the ending of Bretton Woods and the debt crisis, the semi colonial countries now had, on the one hand, to maintain huge currency reserves of dollars, yen or euros and, on the other, to pursue a restrictive budget policy in order to avoid becoming victims of massive speculative moves against their currencies or their bond markets. According to Stieglitz, precisely the poorest developing countries had to spend around 2 per cent of their GDP financing their currency reserves. That is approximately four times the 'development aid' and these reserves are laid out in useless US government bonds etc. With the weakening dollar, moreover, this meant that their own currencies fell even faster than the dollar.

The era of deregulated financial markets

Lastly, with the upturn in the US cycle at the beginning of 1990s, a wave of very high portfolio and direct investments, particularly in Asia but also, for example, in Mexico, developed and opened the period of 'globalisation'. Once again, it was mainly private or institutional investors from the international finance centres that invested in the semi colonial countries by means of shares, securities and derivatives. Therefore, the repeatedly implemented measures of the IMF period could not stop the bursting of the speculative bubbles in Mexico (the 'Tequila Crisis') of 1995 or that in Thailand in 1997 (that unleashed the 'Asian Crisis'). While capital was flooding in between 1990 and 1994, at only 11 per cent of the capital inflow 'official' debt, such as government loans, no longer played a great role. Even the commercial banks played a far smaller role than in the period 1978 - 81. What was decisive was, on the one hand, deregulation in the semi colonies (for example, privatisations) which stimulated a rapid increase in direct investments. On the other hand, there was the growing securitisation of international capital debts, that is, the deregulation of the international financial markets, which made possible offshore investments even without state guarantees against risk, for example, the expansion of the derivative and foreign currency markets.

As the phase of low interest rates and the low dollar exchange rate came to an end in the mid-1990s, so the flood of capital began to ebb and at the same time the export-oriented growth, for example in Asia, ran into difficulties because their currencies were tied to the dollar. No restrictive budgetary policy or high interest rates could help with this. Offshore banks, investment banks, hedge funds, and dealers in derivatives and foreign exchange created a massive speculative bubble which ultimately brought the currencies concerned to their knees and left behind deeply indebted private corporations in the semi colonies. The flood of capital now began to move massively in the direction of the USA whilst in the countries hit by the financial crisis there was a new wave of takeovers or capital destruction by imperialist finance capital.

Like a mirror image of the Asian crisis and the development of the credit bubble in the USA, there began the Chinese 'export miracle'. The precondition for this was the limited and controlled opening for direct investment alongside a still closely regulated Chinese financial market. For a long time, this could prevent a revaluation (that is, an increase in the value) of the Chinese currency even though a trade surplus resulted in huge reserves of dollars being held in China. The bursting of the real estate bubble in the USA, a massive devaluation of the dollar and an increase in prices for raw materials then turned these

conditions, which had been healthy for China, into their opposites.

The business cycle and interest-bearing capital

Capital accumulation takes place under conditions where the social evaluation of the results of production is established only in hindsight, in circulation. The varying capital investment periods, the fortuitousness of fulfilling the conditions for reproduction, wages increasing with the overheating of accumulation and, finally, the tendential fall in the rate of profit (as soon as the profit mass itself no longer grows) lead to regular, cyclical interruptions in the movement of accumulation. As we have shown, through its various credit instruments, the money economy makes possible not only temporal disproportions but also a general overproduction. These 'medium-term business cycles' of between five and 10 years play a necessary cleansing role for capital accumulation by which the law of value imposes itself even to the extent of destroying obstacles to the equalisation of the profit rate. The renewal of the capital stock, the centralisation of capital and likewise the destruction of surplus, less profitable, capital, is essentially carried out by the sequence of recessions and booms. In this way, cyclical crises counteract the general tendency to collapse in the movement of accumulation.

The role of credit is decisive for the way in which the business cycle unfolds (even if it is not its actual origin). Only through it can unbalanced growth, despite falling profits, be expanded to the point where this leads to a general payment problem. The crisis first becomes visible in the money and capital markets and this leads to a corresponding impact in the productive sector through the contraction of credit. With the destruction of capital, pressure on wages and the cheapening of credit during the downturn, the conditions are once again established in which investment is profitable and financeable. This not only creates demand in the investment goods sector but also in consumption. Accumulation gets back into full swing while the preconditions for profitability are only slowly eroded. With the increase in wages, the growing demand for capital for renewal, the overflowing of the markets etc, the business cycle then begins to weaken until this culminates once again in overproduction and a squeeze on credit.

Before the banking and financial system was fully developed, the payment crisis at the end of the cycle always brought with it a threatening monetary crisis. Bills of exchange were massively devalued or could only be discounted at great loss. This resulted in a serious lack of means of circulation and to a panicky run on 'hard cash'. With the developed banking and financial system liquidity problems are noticeable at an earlier point through movements in interest rates and price movements in securities or derivatives. Bank reserves allow a monetary crisis to be avoided and bring the situation more quickly to the phase of the credit crunch.

In this way, interest rate movements in the money and capital markets become important moments in the business cycle. The normal business cycle ends with a crisis of oversupply of investment capital in relation to the demand (the savings overhang) and the interest rate, in comparison to a revived profit rate, is low. It is therefore first of all demand for capital credit which is strengthened with the renewal of investment. Therefore, long-term interest rates both, as credit and as investment, are normally the first to increase again. Where financing is undertaken more by raising capital on the stock exchange (see 'the underwriting profit?') this may express itself, instead, in fast rising share prices and less in interest rates on the capital market.

With the revival of the cycle, demand grows for both commercial credit and money market credit. This continuously accelerates the speed of investment of circulating capital and has a stimulating effect on accumulation. At the same time, growing accumulation washes ever more capital into the money markets in order to develop reserves. Only when the cycle stalls and there is an increased flow of capital away from replacement investment and, finally, demand is maintained, or the ability to pay is secured, by short-term

credit, is there necessarily a growth in pressure on short-term interest rates.

The interest rate movement, therefore, is not the cause of the cyclical downturn. This rather lies in the fundamental limits on capital accumulation in search of a rise of investment goods and consumption funds of the wage dependent. This limitation now imposes itself in a different way: in the increasing costs of capital and consumer credit.

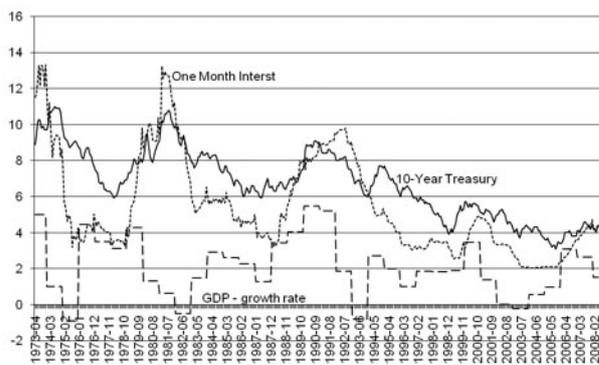
It is clear that the collapse of the cycle expresses itself first and sharply in short-term credit where it takes the form of spectacular collapses or a squeeze on liquidity. This leads on the one hand to pressure to borrow money 'at any price' in order to fulfil payment obligations and this pushes short-term interest rates sky high. That, however, intensifies the crisis still further. In the face of falling profits, rising interest rates restrict investment and also force the sale of stored goods at any price. Through the purging of the crisis, collapses, devaluation of capital, collapse of prices etc, the demand for credit also dries up, particularly with regard to commercial credit. Short-term interest rates, so recently risen, will fall again even faster. This is also the only point at which central bank intervention (with regard to money market policy) and an increase in state spending can have an exhilarating effect on the cyclical recovery. As has already been shown, however, central banks are essentially reinforcers of interest rate movements on the capital markets. This is analogous to the way that it is the burden of interest payments for the state debt (and with it finance capital) which decisively determines the 'trade cycle policy' of the bourgeois state.

This progression of the business cycle and the movement of interest rates can be empirically followed for the cycles in the period of the post war boom. This only changed with the crisis of 1973/74 and the beginning of the period of general over-accumulation.

Figure 14 demonstrates the relationship between industrial cycles and short and long-term interest rates, using the example of (West) Germany. Until the beginning of the 1980s, movements in interest rates corresponded to the classical time-lag scheme described above. With the onset of the new era of structural over-accumulation, it becomes obvious that interest rates gained a considerable degree of independence from the industrial cycle.

Speculative bubbles in big imperialist countries, as well as on global financial markets, allowed the development of financial cycles, as it were, 'above' the industrial cycle. Comparison with the movement of interest rates in the US (see Figure 3 above) shows that the rise and fall of the Fed-rate did to some degree influence the movement of German interest rates more directly than Germany's own industrial cycle and, if this is true for Germany, then it will be true for a lot of other countries. This also indicates that, as an expression of the interest of finance capital, inter-imperialist politics have become a more important factor in influencing interest rates than was the case in the era of the long boom. In other words, even on questions of finance and banking, international agreements and summits are increasingly determined by the competition between competing imperialist powers and their finance capitals.

Figure 14 The relationship of the cycle and interest rate movements



Finance capital and the long-term tendencies of capital accumulation

It is not only through the cyclical enforcement of the conditions for valorisation and the average profit rate that the credit system plays an essential role. The general lawfulness of capital accumulation is effective above and beyond the cycles and is strengthened by its combination with the accumulation of interest-bearing money capital. The rising value composition of productive capital, such as the methods of increasing relative surplus value, lead to the tendential fall of the average profit rate at the same time as there is an enormous increase in the absolute mass of profit. This dual lawfulness ensures, first of all, a period of increasingly accelerating accumulation over several cycles. Cyclical collapses each make possible the effective impact of countervailing tendencies on the falling rate of profit.

In the period of long-term accelerating accumulation there is also an acceleration of capital investments at an ever higher level. This includes the shortening of the phase of circulation, for example, by expanding the corresponding money market credit. However, there is also an activation of dormant reserve capital for expansion or replacement investment with help from the capital market credits.

The period of accelerating accumulation is also always a period of expansion of the credit and banking systems and, ultimately, an enormous transformation of disposable reserves into interest-bearing money capital. Along with this, and the more so as blockages or pauses in growth occur, the proportion of interest-bearing capital continually grows as an input into the movement of reproductive capital. Even these periods of growth of capital are periods in which the transformation of independently functioning capital into capital under the control of interest-bearing capital (capital as property title) is further enforced. This is clearly shown in the accounts of the companies through the growth of ?borrowed capital? as compared to ?equity capital? or, in relation to assets, to the growth of ?passive income? as compared to tangible assets. That means that interest-bearing capital continually increases as against functioning capital. The clearest consequence of this is that the proportion of their profits that reproductive companies have to pay as interest (the interest quota) continually grows.

Alongside the tendential fall in the rate of profit, the tendency to an increase in the interest quota can be established as a further law of combined real- and money-capital accumulation. As already noted, this does not have to lead to a tendency to an increase in interest rates (as we have seen, Marx rejected any such lawfulness for interest bearing capital); it does mean, however, that the interest burden, relative to the mass of profits, becomes ever heavier.

This is how the contradictory significance of interest-bearing capital in accelerated accumulation develops. On the one hand, it strengthens accumulation by shortening turnover time, accelerating circulation, strengthening the purgative effects of the cycle etc while, on the other, it sharpens the problem of the development of the profit rate through the increasing burden of the interest quota and thus a more rapid lowering of the rate of company profits in relation to the development of profit rates. This contradictory form of movement must raise to new heights the fundamental contradiction of real capital accumulation, that the development of the forces of production through the acceleration of capital accumulation is limited by

capital itself and its ability to valorise itself. With the increasing limitations on real accumulation and the immensely increased social expansion of interest bearing capital that goes with it, capital necessarily tries to free money capital accumulation from the restrictions on real accumulation.

The fact that the finance market is ultimately derived from the total reproduction process of productive capital does not prevent capital from also using fictitious capital as a starting point for accelerated accumulation. It only means that in the end productive capital has to pay the bill. Thus, the various forms of speculative bubbles already described can all become starting points for real accumulation which has otherwise come to a halt: speculative capital export, speculation in foreign currencies, real estate bubbles, stock exchange bubbles, waves of speculation on the futures markets etc, are all consequences of over-accumulation.

The structural over-accumulation of capital brings the contradiction between the productive forces and the relations of production into a collision which is unique to capitalism. The development of the productive forces has grown too big for capital valorisation, increased production can no longer be realised in such a way as to lead to a profitable expansion of further production, accumulation declines because there is a superfluity of productive capital which, at the same time, appears as a lack of money capital for investment. The onset of the period of structural over-accumulation means that, as well as the fall in the rate of profit, the growth in the mass of profit also begins to stagnate and the rate of accumulation over and above the cycles becomes lower and lower.

On the finance markets, this situation appears to be contradictory; on the one hand, with the decline in productive investment, the demand for long-term credit must also reduce, on the other hand, there is an increase in the need for means of payment, credit or bail outs. Preparedness to provide long-term investment credit also goes down while the criteria for credit on the money markets become more restrictive. Ultimately, a mass of surplus capital is established that is searching for profitable investment outside the blocked sphere of accumulation. The result of this is paradoxical; on the one hand, the supply of loan capital, in particular for productive capital, decreases and difficulties with payment increase, on the other, this lack of money capital is combined with a simultaneous surplus of money capital appropriate for other forms of investment.

The solution of this contradiction has both a processing and a structural component. With regard to the structure of surplus capital, a difference has already developed in accelerated accumulation in the wake of interest-bearing capital for various forms of productive capital and this gains greatly in significance with the onset of over-accumulation. While the external financing of small and medium-sized corporations becomes more difficult, the big capitalist companies can, relatively speaking, fall back on larger reserves of their own capital. They are therefore less affected by the scarcity of loan capital. On the contrary, they can cover their capital needs by issuing securities which can relieve the pressure on their profit rates. By contrast, the indebtedness of small and medium corporations increases and their opportunities for accumulation are reduced. The destruction of capital in these sectors, or their takeover by other companies, frees up money capital that flows into the great mass of speculative investments, for example, into securities issues by capitalist companies. ?The so-called plethora of capital is always basically reducible to a plethora of that capital for which the fall in the profit rate is not outweighed by its mass? Or to the plethora in which these capitals, which are incapable of acting by themselves, are available to leaders of great branches of business in the form of credit.?[64](#)

This trend is strengthened by the fact that these companies increasingly turn themselves into purely holding companies with a high equity position which transfer their most risky sectors or those with the highest stocks of fixed capital, to small or medium-sized operations. These not only have high pressures to

provide profits to the mother company, but most also carry the interest burden of higher external financing. In this way, the general development of the profit rate is completely concealed by the fairytale-like returns on equity of the 'blue chips' while the pressure of exploitation on those employed in the satellite companies increases sharply.

Lastly, it is also clear that the big monopolies of finance and industry continue to be concentrated in the imperialist metropolises. With regard to external financing, structural inequality shows itself in the increased indebtedness, or dependence, of undertakings in the semi-colonial world with regard to the metropolitan firms in the same way that large masses of surplus capital are established which are available for investment in particular in the metropolises. As far as the form of movement is concerned, with the onset of structural over-accumulation, the significance of the business cycle is reduced. Cyclical crises certainly continue, but the recovery is by no means so pronounced. Thus the role of credit and the movement of interest in the upswings and downswings are also substantially modified. Recessions do not necessarily mean sharply rising interest rates and upturns do not produce big reductions in interest rates. It is rather the case that the finance market establishes its own cycles in the face of the movement of surplus capital and these are connected in specific ways to the business cycle.

The onset of the period of over-accumulation is generally bound up with the scarcity of loan capital, the failure of interest rates to fall during the upturns although they do rise in the downturns, increased investment in securities of the big monopolies and strengthened export of capital. This phase is associated with increased destruction of capital, decline in demand and higher (state) budgetary constraints. With the development of large-scale speculative bubbles, however, lower interest rates can be maintained over a longer period despite a weaker economy. After the collapse of a speculative bubble, new fields for investment must necessarily be found if these rates are to be maintained. Otherwise, there is the threat of collapsing into a period of high interest rates and a credit squeeze to which the alternative would be economic stagnation combined with a wealth devouring inflation.

If, in the long-term, the problem of over accumulation cannot be overcome and investment-seeking capital remains trapped in speculative cycles and productive capital has no prospect of accelerated accumulation, then the financial market cycle threatens to culminate in a crash and the business cycle to dissolve itself in Depression. As the 1930's showed, this is not the collapse of capitalism but a form of its crisis which can only be overcome at fearful cost to humanity.

Current developments and the structure of real and money capital accumulation

The period of accelerated accumulation after 1948 ended with the worldwide synchronised recession of 1973/74. At about the same time, heralded by the collapse of the global currency system established at Bretton Woods, increasingly deregulated and more and more extensive international finance markets emerged. For several decades, the accumulation of finance capital appeared to allow a prolongation of the long boom in some 'new form' (or a new 'regulation model?'). However, this was an illusion because the exceptional characteristics of the long boom after the Second World War were a consequence of dramatic historic preconditions and nothing on the same scale occurred during the decades following 1973/74.

The precondition for the 'long boom' (itself exceptional for the imperialist epoch) was the historic defeat of the world revolutionary upswing following the October Revolution and ending with the counterrevolutionary resolution of the revolutionary situations after the Second World War. This period included not only the consequences of working-class defeat at the hands of fascism (both in political and economic terms and in terms of the destruction of vanguard parties). It also included the effects of the degeneration of the revolutionary workers' state in the Soviet Union under the Stalinist bureaucracy, which were themselves prolonged by the establishment of degenerate bureaucratic workers' states following the Second World

War.

The survival of Stalinism for such a long time was a major factor in the stabilisation of world imperialist capital, along with the integration of the reformist Labour bureaucracies into the imperialist state apparatuses. These were important factors in ensuring that workers' resistance was contained within the limits of the imperialist world order and that the transition to socialism in the post-capitalist societies was blocked. Therefore, the breakdown of Stalinism around 1990 was not so much a new kind of historic defeat but rather a continuation of the defeats of the post-war period. In fact, the crisis of the degenerate workers' states was an effect of the economic crisis period since 1973/74 that shattered one of the pillars of the post-war world order. Although, for some time, the downfall of Stalinism allowed some softening of the crisis of capital accumulation (through an increase in available cheap labour and large markets) in the longer term it added to the volume of already over-accumulated capital on a global scale and intensified inter-imperialist competition, not least by adding a new potential challenger to US hegemony as a result of capitalist restoration in China.

These developments have undermined the second historic precondition for the long boom: the resolution of all the problems resulting from the lack of a single hegemonic superpower that had dogged imperialism for the long period before and between the two world wars. After 1945, with the establishment of the USA as the economic, political and military hegemon, there was now a clear framework for accelerated accumulation and the necessary financial superstructure. Even during the long boom this led to increasing US state deficits that stretched the limits of the gold-standard-based US dollar. The breakdown of Bretton Woods in 1971, therefore, also revealed the increasing economic costs to the USA of its own hegemony and opened a period in which that hegemony was based on increasingly fictitious dollar-capital.

The third important basis of the long boom was the massive destruction of capital during the Depression, followed by the destructive effects of the war itself and the early post-war years. This was the basis for a big US-financed investment boom in the recovery period in the imperialist heartlands themselves. The massive destruction of capital, together with an enormously increased rate of exploitation of the working-class and the establishment of a clear imperialist world order, was the absolute pre-requisite for the sustainable resolution of the preceding crisis period and the establishment of a long boom period in capitalism. None of these preconditions have been met on a global scale since the beginning of the period of structural over accumulation, and neither have they been met as a result of the finance market crisis of 2007-2009.

Finance market cycles since 1973/74

With the onset of structural over-accumulation, there was first of all an increase in public debt in the imperialist centres and this was combined with the first speculative wave of capital export (?petrodollars?). Far from resolving the fundamental problems of this period, these measures sharpened them into stagflation and into a further globally synchronised recession at the beginning of the 1980s.

Unlike during the boom periods, US imperialism kept interest rates high throughout that recession and even during the recovery (the ?Volcker shock?). This was a deliberate policy on the part of US finance capital that redistributed profit in its favour. On the one hand, this resulted in the ?debt crisis? of the semi-colonial world and, on the other, the strong dollar and the resulting destruction of large parts of US industry led to a further recovery phase for German and Japanese industry. In the mid-1980s, the decision not to increase interest rates even at the high point of the cycle, again contrary to the classical pattern, fuelled the first big speculative wave on the international stock markets and was followed by the crash of 1987. This crisis proved to be the final blow for financial market regulation as well as marking the obvious return of financial market cycles and their crises, apparently independent of the industrial cycle. The measures

taken to overcome this first post-war financial crisis led to the collapse of firms and banks on a massive scale, combined with a sharp purgative recession in the USA at the end of the decade.

By the beginning of the 1990s, the USA emerged strengthened from this phase. Nonetheless, the recovery of the profit rate did not last long and the upturn in the USA was accompanied by a strong decline in Japan (the decade of Depression) and development also stagnated in Germany and continental Europe. At the same time, however, deregulation within the framework of the debt regime of the 1980s now opened up the markets in important Asian and Latin American countries for an enormous increase in financial investment. The US recovery bubble was therefore bound up with a new wave of capital export to ASEAN states and Latin America, mediated through the US financial markets.

When this first great 'globalisation' speculative bubble collapsed in the 'Asian crisis' of 1997, the USA was able to attract to itself the greater part of the means of investment that were set free and these fuelled the next speculative bubble, the stock exchange boom of the 'new economy' or the 'dot com boom'. Thus, despite global cyclical weaknesses, interest rates in the USA could be held down without fear of a flight of capital. As can be seen in Figure 3, the Fed rate was increased only slightly above the 5 per cent level in the middle of the 1990s (an important factor in later igniting the Asian crisis) and was kept at that level even during the phase of declining output in the real US economy in the late 1990s, all in all this fuelled the speculative bubble.

From the end of the 1990s, China, in particular, was able to take over from the weakening 'Asian Tigers' and Latin American 'emerging countries' the role of the source of cheap imports for a US market increasingly financed by credit. Even the collapse of the new economy bubble in 2000, and the recession of 2001, could not undermine this new world economic axis between the USA and China. There was no other financial market, apart from the USA, into which the speculative investment capital could have flowed; to varying degrees, corresponding to 'local' circumstances, Japanese, Chinese and EU capital strengthened the US finance market. Interest rates remained low and this combination led to the next speculative bubble, this time in real estate. In addition to this, increased state spending, particularly in the context of the 'war on terror' was also used to accelerate the cycle. Inflationary tendencies remained limited because of the continuing flow of cheap Chinese goods.

There was, however, another side to these 15 years of apparent prosperity in the USA. This was the enormous increase in indebtedness of private households, the state, corporations etc, which created an enormously inflated mass of credit money based on the gigantic reserves held in China and Japan and the further destruction of the productive basis of US capital. Greenspan's hope that low interest rates and 'asset inflation', combined with cheap Chinese labour power, would generate an increase in investment in the productive US sphere, that is, to profitable conditions for accelerated growth, was not fulfilled.

With the collapse of the real estate bubble in 2007, the problem of the under-capitalisation of real accumulation and the over-capitalisation of money capital accumulation could not be resolved as easily as in 2001. All the mechanisms that had been used before, such as the Fed proclaiming lower and lower interest rates, the provision of special credit facilities or even the US government distributing tax donations, turned out to be ineffective. The total volume of write-offs by international finance institutions, the breakdown of credit chains and the panic-driven run for liquidity meant that real interest rates (that is those charged to commercial institutions, inter-bank loans etc) kept rising while one shadow banking device after another was the subject of a bank run. As a result, in the third quarter of 2008 all the important investment banks were facing collapse as were the major international finance markets connected to them. At the same time, the dollar and stock markets were in freefall and a new speculative bubble in commodity markets, for example, oil, added an extra recessionary impact on the industrial cycles of the world. The

financial crash was paralleled by a world wide, synchronised collapse of the industrial cycles into recession at the latest at the end of 2008.

At this point it became clear that the world hegemon, the USA, could not unilaterally provide any solution via the policies of the US government, the Fed or its financial institutions. Unlike on previous occasions, when the US could dictate interest rate and trade agreements, there now had to be an internationally coordinated action by all the imperialist states and even some of the advanced semi-colonies. Only internationally coordinated state action on a massive scale by the EU states and, most notably, China, in combination with US action, ranging from flooding the money and credit markets through to state investment programmes, was sufficient to stop the world capitalist economy from sliding immediately into a crash followed by a Depression comparable to that of 1929 ? 1932.

Nonetheless, as already noted, this is only a temporary solution and the situation remains pregnant with fundamental problems. In particular, although there was some writing-off of financial and industrial capital, the fundamental purpose of state intervention was to prevent massive capital destruction of over-accumulated capital in the various sectors and regions. In fact, it is clear that the different imperialist actors are intent on securing their own capital at the cost of the destruction of their competitors' capital. This can be seen most clearly in the international car industry. On the other hand, little more than one year after the shadow-banking crash, the remaining investment banks and their deregulated international finance markets were back at full strength and new speculative bubbles were generating fabulous profits for finance capital once again.

This time, these were mainly based on the unprecedented mass of state debt from the rescue packages. While these have generated a shallow recovery of real accumulation alongside the feverishly growing finance markets, this recovery is heavily dependent on state money. Because there are clear limits to such state intervention, the major actors are already discussing possible 'exit strategies'. They recognise that any harsh reduction in the supply of money or credit, any reduction in state securitisation, would carry the danger of a massive bubble burst and a wave of crashes. Dependent on how this 'exit' can be managed, there is the prospect of either a double-dip recession or a continuation of the present shallow recovery. Either way, the fundamental problem of the need for massive capital destruction, as the only sustainable 'exit strategy' for capitalist crisis management, will remain.

In summary, the period of shallow prolongations of the long post war boom, based on largely illusory forms of financial capital, has finally come to an end. There are no magic tricks with which finance capital can portray its destructive and parasitic world rule as a growth-driven development that can promise at least some profits for everyone while, in reality, impoverishing more and more people for the profits of a tiny minority. With regard to all the essential global problems: environment, nutrition, over-population, social tensions etc, global finance capital is clearly not even a part of their solution but the very heart of the problem. At the same time, at the very latest with the international rescue operation at the end of 2008, the role of the USA as the finance capital hegemon has been put in question. Maintaining the role of the dollar as the central world currency and the US finance markets as the main regulators of financial flows, together with the costs of the US political and military roles, is increasingly undermining the strength of the US economy. Thus, all the pillars of the post-1945 order are essentially cracked without having achieved the historic preconditions for another exceptional boom. This can only mean that we are entering a period in which the future of capitalism and the globe is at stake and requires fundamental answers. Since the destructive, crisis-driven character of imperialist finance capital has no answer other than an even more destructive crisis, there is, for us, no alternative to socialism.

Finance capital and socialism

The always limited possibilities for state intervention with regard to the financial markets are now even more reduced: currency movements, interest rates, capital flows, money supply, inflationary tendencies etc are today essentially decided by the international financial markets. In this respect, the term 'international financial markets' should be understood as a reified description of decision makers all of whom are actually real people with real names and addresses. Precisely because of the strong concentration of finance and monopoly capital, it is the big investment banks, together with the closely connected funds (which aggregate the interests of financial investors) and the big corporations, which increasingly act as financial holding companies, which determine the fundamental scale of real and money accumulation.

The role of central banks, or of institutions such as the IMF or the World Bank, is limited to articulating and coordinating the interests of these real actors, to being, as far as possible, the ideal general finance capitalist. Where there is no agreement between the financial centres, the policies of these institutions are unworkable. To that extent, all demands for the reform of these institutions are illusory. Political control of central banks would be no more able to enforce a different interest and currency policy than the IMF can act effectively as an instrument for limiting capital transfers. In the face of the interests of the financial centres, the demand (for example from Stieglitz) for a new global financial regime, comparable to Bretton Woods, to deal with the current dollar crisis, is equally utopian. The demand that particular goods be removed from the speculative grip of the exchanges (which had already been raised by Keynes) comes to grief on the internationalisation and computerisation of today's stock exchanges; in any event, it could not be introduced in any individual country. The same thing can be said about the many other demands for the re-regulation of financial markets and their ties to the reproductive and state sectors.

In his Imperialism, Lenin had already warned against 'petty bourgeois-democratic opposition' against imperialism which promised its own working class a reformed, pacified imperialism, disregarding whatever effects this might have, particularly in the imperialised regions. This is ultimately a disguised defence of imperialism, 'they obscure its complete domination and its deep-going roots, strive to push specific and secondary details into the forefront and do their very best to distract attention from essentials by means of absolutely ridiculous schemes for reform such as police supervision of the trusts or banks etc'[65](#)

What is essential is not the question of central bank interest rates, the regulation of stock exchanges or the introduction of taxes on capital transfers etc. The contemporary framework for the struggles over wages and social policy are not the result of a lack of political 'curbs' on the financial markets. We are not, by any stretch of the imagination, in a new 'finance market-driven regime of accumulation' that is to say a phase of accelerated accumulation which is prevented from an 'increased' or 'fairer distribution' by the parasitic attitude of finance capital. We continue to be in the epoch of finance and monopoly capital in which periods of accelerated accumulation, such as the boom after the Second World War, are the exception.

The situation today continues to be determined by the fundamental problem of the structural over-accumulation of capital which leads to tendential stagnation and sharpening of competition on the world markets. The role of finance capital in this situation is one of capitalist crisis management. It undertakes reorganisations, centralisations and occasional investments for short-term apparent gains that allow capital to survive over a particular timescale, at whatever cost to the workers of the world. This becomes more precarious from cycle to cycle but does not exclude the possibility of revival after a really serious crash, as can be seen from the 30s and 40s.

Finance capital, therefore, is not simply a parasitic growth on an otherwise 'healthy' real economy. As one of the countervailing factors to the tendency towards capitalist collapse it is, rather, a means of crisis management that, however, at important points becomes itself a driver of crises. As a crisis manager,

finance capital develops the forces of international socialisation within capital itself to ever higher levels. Both Lenin and Hilferding emphasised the progressive role of advancing socialisation in finance and monopoly capital as a moment in the transition to socialism.

The social *raison d'être* of wealth in the capitalist mode of production appears as an object, a thing, a commodity outside the real productive elements of social wealth. This first manifests itself in money and later in various forms of credit. Credit, being similarly a social form of wealth, displaces money and usurps its position. It is confidence in the social character of production that makes the money form of products appear as something merely evanescent and ideal, as a mere notion.⁶⁶

In a crisis it is equally unavoidable that the material form, the money form of social wealth, is once again manifested. This, in turn, shows strikingly by its effects that production is not really subjected to social control, as social production, and that the social form of wealth exists alongside wealth itself as a thing.⁶⁷

With the developed financial system that incorporates a global information and planning system that can take millions of economic decisions in seconds, socialisation of control of production has been achieved on an enormous scale. The fact that, at the same time, this is still controlled through the form of private property has to mean that this socialisation is bound up with the private appropriation of controlled wealth in material form, which must express itself in periods of crisis in the financial system in a massive de-socialisation. This shows that with the development of the credit system, capitalist production constantly strives to overcome this metallic barrier, which is both a material and an imaginary barrier to wealth and its movement, while time and again breaking its head on it.⁶⁸

Only the actual socialisation of the financial system can free it from these objective limitations and its ties to the money form. Its functions of analysing economic information, allocating economic resources centrally, social accounting etc must be taken forward by a self-organised association of direct producers, with at least the same degree of socialisation, in a system of conscious social planning. In the face of today's ever more integrated and complex production and circulation systems, the idea of 'socialism in one country' is as much a reactionary utopia as evangelising for small communal networks with interest-free credit. Socialism will be international and have the all-embracing scale of socialisation achieved under modern finance capital or it will not be at all.

Therefore, it remains a core element of any programme of socialist revolution that securing state power and preparing for a turn to a planned economy presupposes the immediate expropriation of all the different types of financial institutions and markets and their concentration into a centralised state bank. As long as the monetary form of economic relations cannot be superseded by higher forms of self organisation of the producers, this is the only way in which the distortions, the crisis-creating and alienating effects of money and credit can be brought under control. Such a centrally controlled, transparent, finance and credit institution will be indispensable in the first phases of introducing a democratically planned economy. In a federation of socialist states there will not only be free trade and 'cooperation' but as much monetary union as possible.

During the coming crisis, it will be essential to fight for the nationalisation of all financial institutions under workers' control. Combined with the fight to open the books of the crisis-ridden corporations, to reveal the networks and deals that finance capital keeps hidden, this fight will prepare the workers for the establishment of a state bank during the revolutionary process. Thus, the struggles of the coming years will teach the workers how to take over the tasks that are currently undertaken by parasitic finance institutions and fulfil them in a way that is fruitful and progressive for the whole of humanity.

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Endnotes

[1](#) This article was first published in our German language journal, Revolutionaerer Marxismus (RM) 39 in June 2008, some months before the collapse of Lehman Brothers. For this publication it has been edited to allow updating with materials published in RM 41, February 2010, and from English language sources. It was translated and edited for publication by Peter Main.

[2](#) See Neuhaus, L. (2009)

[3](#) Marx, K. (1976), p.236

[4](#) Marx, K. (1976), ibid

[5](#) Marx, K. (1976), p.209

[6](#) Letter from Say to Malthus, cited by Hein, E. (1997)

[7](#) Marx, K. (1969) p.502

[8](#) ibid

[9](#) Keynes, J. M. (1980), p.81

[10](#) Marx, K, (1976) p.240

[11](#) ibid p.235-6

[12](#) ibid, p.238

[13](#) ibid p.777

[14](#) Lenin (1967), p.204

[15](#) ibid p.230

[16](#) Marx, K. (1981), p.298

[17](#) Marx, K. (1981) p.297

- [18](#) Marx, K. (1981), p.298
- [19](#) Marx, K. (1981), p.300
- [20](#) Marx, K. (1981), p.319, emphasis in original
- [21](#) Grossmann, H. (1970), p.119 (extract newly translated for this article).
- [22](#) Marx, K. (1981), p.364
- [23](#) Grossmann, H. (1970), p.140
- [24](#) Grossmann, H. (1970), p.140
- [25](#) Marx, K. (1981), p.567
- [26](#) Marx, K. (1981), p.568
- [27](#) Lenin, V I, (1967) p.233
- [28](#) Marx, K. (1981), p.464
- [29](#) Marx, K. (1981), p.462
- [30](#) Marx, K. (1981), p.475
- [31](#) Marx, K (1972), p.500 , emphasis in original
- [32](#) On this see Krueger, S, (1986), p. 581
- [33](#) Marx, K. (1981), p.478
- [34](#) Marx, K. (1981), p.485
- [35](#) Marx, K. (1981), p.490
- [36](#) Marx, K. (1981), ibid
- [37](#) Marx, K. (1981), p.487
- [38](#) Marx, K. (1981), p.520
- [39](#) (Marx, K. 1981), p.523
- [40](#) Marx, K. (1981), p.484
- [41](#) Marx, K. (1981), p.501
- [42](#) Marx, K. (1981), p.503
- [43](#) Marx, K. (1981), p.460
- [44](#) Marx, K. (1981), p.512
- [45](#) Marx, K. (1981), p.557

[46](#) Marx, K. (1981), p.597

[47](#) Marx, K. (1981), *ibid*

[48](#) Marx, K. (1981), p.598

[49](#) Marx, K. (1981), *ibid*

[50](#) Marx, K. (1981), p.599

[51](#) Marx, K. (1981), p.600

[52](#) Marx, K. (1981), p.612

[53](#) Marx, K. (1981), p.567

[54](#) Marx, K. (1981), p.612

[55](#) Kruger, (1986). p.608, translated for this article

[56](#) Marx, K. (1981), p.570

[57](#) For Marx's own summary see Marx, K. (1981), p.566

[58](#) FDIC website

[59](#) Marx, K. (1981), p.529

[60](#) Clearly, since the original drafting of this article, the scale of the problem has become evident in a dramatic manner, particularly for Greece.

[61](#) Hilferding, R. (1981), p.128

[62](#) Lenin, V. I. (1967), p.717

[63](#) Marx, K. (1976), p.702

[64](#) Marx, K. (1981), p.359

[65](#) Lenin, V. I. (1967), p.716

[66](#) Marx, K. (1981), p.707

[67](#) Marx, K. (1981), p.708, *emphasis in original*

[68](#) Marx, K. (1981), *ibid*