

# THE WHOLE OF THE STORM

## MONEY, DEBT AND CRISIS IN THE CURRENT LONG DEPRESSION

### **Abstract**

This article investigates the mechanisms and causes of recessions and depressions, and their relation to the more spectacular financial crises which announce them. It demonstrates how the concept of the Monetary Expression of Labour Time (MELT) allows us to understand the most difficult aspect of this relation, namely how money acquires value, and thereby serves, under definite conditions which characterise recessions and depressions, as self-expanding value, so becoming an alternative use of capital to production.

### **Keywords**

Recession, value, money

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### THE CASE FOR A GENERAL THEORY OF CRISIS

In his masterly account of the 'Second Slump' of 1974, Ernest Mandel (1978) remarks that though recessions engulf the whole economy, each breaks out in a unique part of it. Because conventional economics has no real theory of downturns, it mistakes the unique features of each crisis for its cause. As I write, a burgeoning downturn is being ascribed to oil price collapse; the 2008 crash is universally blamed for the last recession and the 'dotcom' bubble for the 2000 downturn, whilst Walsh (1993) inculpates "Pessimistic consumers, the debt accumulations of the 1980s, the jump in oil prices after Iraq invaded Kuwait, a credit crunch induced by overzealous banking regulators, and attempts by the Federal Reserve to lower the rate of inflation" for the recession of 1990.

These reactions are irrational. Recessions date from the dawn of capitalism; the National Bureau of Economic Research (NBER 2016) lists 33 since 1854 alone, an average of two per decade, never more than 11 years apart. To deny that some common factor is at work is as perverse as being surprised by a hurricane. Every storm is different, but they are all products of weather. Likewise, no-one can deny that every crisis is distinct, but this is not a license to ignore what unites them. If we want to understand an event which repeats itself again and again, which appeared at the same time as capitalism, has existed throughout capitalism, and has never gone away under capitalism, we must ask what it is about capitalism that makes them happen.

A good place to start is Marx's (1992:25) famous observation that capitalism is in the last analysis 'an immense collection of commodities', or as Mandel puts it, 'generalised commodity production'. Since the commodity is the foundation of capitalism's success, it is logical to study its role in failures. As Marx notes, nearly all commodities have two things in common:<sup>2</sup> they are produced by labour, and can be exchanged with other commodities. Capitalism's most general features are hence money and labour; therefore, just as a general theory of reproduction should lay bare their connections, a general theory of crisis must clarify how these connections fall apart.

For this reason, Ramos and Rodriguez's re-discovery of the MELT (1996, see also Ramos 1997, 2004), the relation between the expression of a commodity's value in money, and in labour time, is a cardinal contribution to knowledge. Temporal Single System Interpretation (TSSI) scholars have already shown how it renders Marx's transformation of values into prices, and his Law of the Tendency of the Rate of Profit to Fall (LTRPF), completely consistent. Since this is well-covered in the literature (for example Carchedi and Freeman 1996, Kliman 2007) I will not repeat it. The MELT takes us beyond this necessary

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<sup>1</sup> The greatest compliment one can award a critic is 'she made me think'. Acknowledgement is due to everyone mentioned in this article. Pride of place belongs to Alejandro Ramos-Martinez and Adolfo Rodriguez-Herrera, without whom Marx scholarship could not be where it is today, as attested by the range of writers who now use this term without acknowledging its origin. I thank the editors for letting me set the record straight. Errors are, of course, my own.

<sup>2</sup> We will later explore the meaning of the word 'nearly' in this sentence.

refutation of sterile allegations of inconsistency by clarifying the decisive question ‘how does money acquire value?’ This frees us to study its role in crisis unencumbered by preconceived prejudices.

In particular, it allows us to distinguish the spectacular lightning-strokes of financial crashes from the persistent collapses in output and employment which, like the gales and torrents of the tempest, conduct the true business of recession. The concept of the MELT re-opens a closed chapter in economic theory. It lets us study the whole of the storm.

## MONEY, CAPACITY, AND RECESSION

Two phenomena appear at some stage in every recession: a departure from the normal course of production, manifesting as a fall in output and employment, and a departure from the normal course of circulation, appearing as a decline in sales. A simple error, which I call Say’s Fallacy out of respect for the English language,<sup>3</sup> is to suppose that this is logically impossible; if you produce something, Say’s argument runs, you create demand for it by the mere fact of acquiring the means to produce it. Yet, at a definite stage in every crisis, goods are produced but not sold. Both Marx (1992) and Keynes (1967) pinpointed the error in Say’s reasoning: products are not exchanged for other products but for money. If the money spent on inputs is not used to make new purchases, the outputs will remain unsold.

The conception adopted by Ricardo from the tedious Say, that overproduction is not possible or at least that no general glut of the market is possible, is based on the proposition that products are exchanged against products (Marx 1992:210)

As Marx (1970: 136, 1990:227) also insists, the unused money has to sit somewhere. A recession therefore manifests itself in hoards of idle money, as shown in chart 1, which are decisively more persistent than the spectacular but brief defaults which announce it.

Equally, although overproduction is a phase in most recessions, it is a short one. Capitalists soon stop making goods that no-one buys. Yet recessions don’t stop at that point; to the contrary, it’s when they start. The persistent counterpart of the idle money is not an excess of goods but unused *capacity*, as chart 2 shows. These are expressed above all in a mass of unused labour: unemployment.

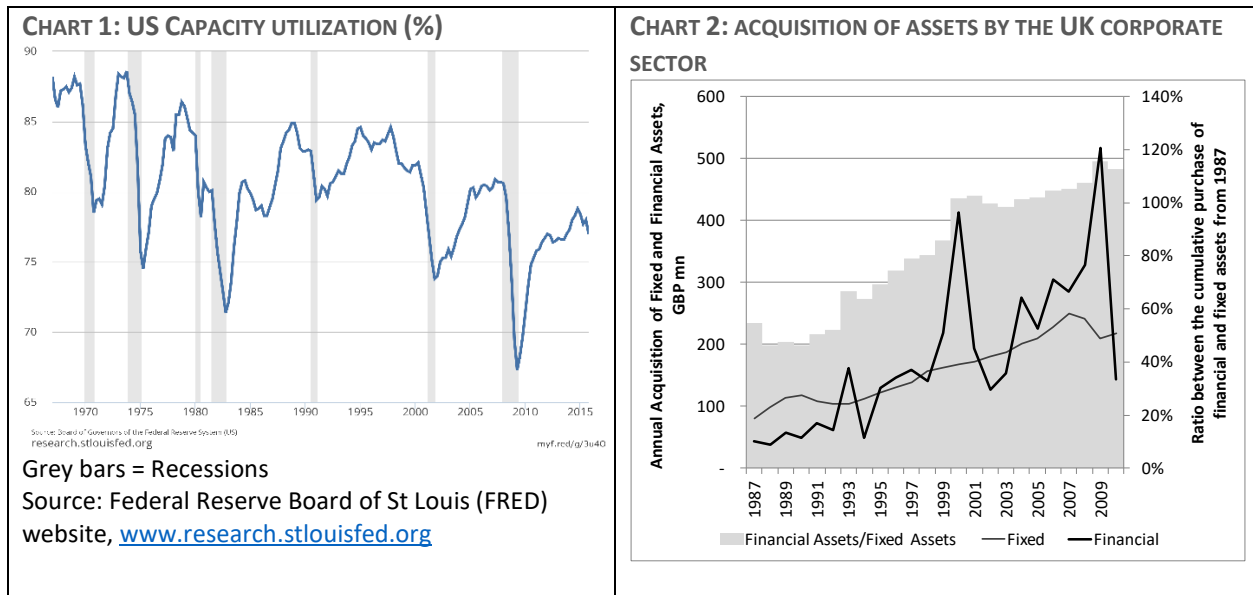
Underused capacity cannot be reduced to overproduction. The capitalist economy cannot produce ‘too many workers’ because it doesn’t produce workers; the working class does that. Furthermore, we can stretch language by saying the capitalists have produced ‘too many machines’, but to call this overproduction misses the point because the idle machines have already realised their value; they have been sold. A disused car factory does not belong in the same class as an unsold car: though they both lie idle, they do so at entirely different points in the circuit of capital.

In conclusion, the two truly characteristic features of every recessionary phase are *masses of unused productive capacity side by side with hoards of unused money*. This is not the cause of recession (Kliman et al 2014, Freeman (2016) but an adequate description. Before discussing the cause of anything, we must be clear what that thing is; we must recognise a recession when we see one. Many misconceptions arise because the spectacular stages of the crisis are treated as the thing to be explained. If we define a storm as thunder and lightning, we should not expect to learn much about floods or gales.

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<sup>3</sup> Economists call this Say’s Law. I balk at using the word ‘Law’ to describe things that don’t happen.

An analytical point does emerge, however: recession is a general breakdown of reproduction, a joint suspension of both production and circulation. If only one is singled out, this leads to responses like Quantitative Easing, which displace or even postpone, but do not resolve, the problem. Of course, a recession cannot end unless money is prised loose from circulation, but this is not enough. Recession is a sickness; idle money does not walk like Lazarus into production when roused, but lurches off to another pallet. Either the rate of return must rise sufficiently to coax the reluctant money into production, or the money (Freeman 2016, Burke 2012) must be directed there.



This highlights the core puzzle: *why* can't money be 'pushed' out of circulation? This is especially problematic during *Long Depressions* – entire historical periods, such as 1870-93 or 1929-42, in which recessionary conditions persist from one crisis to the next. As our charts show, we have been living a Long Depression since 1974.

On *a priori* grounds, we should first ask why capitalists ever want to keep their money idle. This is not a trivial question: the whole point of capital is to grow it. They can't eat money, so why not do something with it? Keynesian theories of transactional, liquidity, precautionary and speculative demand for money shed some light, but are rooted in the hidden psychological state of the holders. Now, a psychological state may or may not explain behaviour, but if it is externally induced, it is irrelevant. If we see a man running from a tiger, it is obtuse to diagnose an aversion to furry animals; he runs because he is pursued by a carnivore.

Some choices are so finely balanced that perhaps only mental states can explain individual actions, but the evidence that they explain collective capitalist behaviour is unconvincing. The MELT furnishes an alternative explanation for holding money, in terms of the predilection for maximising returns which, along with traits like greed, capitalists exhibit as normal representatives of their class.

## WHAT USE IS MONEY?

All economics students are taught that the reason for not buying now is to do so later. Yet, while understandable in a consumer, this is an unwise preference for a capitalist, whose job is to make more money. If I put a dollar bill under my bed, in the morning it is still a dollar bill. This behaviour is only rational for a capitalist if, the next day, the bill is in some sense worth more: if money functions as

capital – self-expanding value. This can clearly happen when prices are falling, in Marx’s day a characteristic phase in all recessions.<sup>4</sup> But how can it continue when, thanks to managed inflation, prices rise continuously?

Ramos and Rodriguez’s contribution helps solve this conundrum by clarifying the fuzzy concept ‘worth more’. The MELT explains how money functions as value at all, without which it clearly cannot function as self-expanding value. This facilitates a critique of the conventional economic concept of purchasing power, a vague concept which really means ‘capacity to acquire use value’.<sup>5</sup> Capitalists have no direct interest in these use-values: their concern is to sell them at a profit. They therefore set labour to work to produce them, and the value of money-capital is thus given by its relation to the labour-time thereby fixed in what it buys. The MELT makes this arithmetically precise by telling us how much past labour a quantum of money represents in exchange.<sup>6</sup>

In earlier treatments (Aglietta 1979, Foley 1982)<sup>7</sup> this ratio is a kind of technical device to solve the transformation problem: the MELT poses the qualitative issue behind the device: it tells us how money can *function as capital*. This is already implicit in Marx’s formula:

$$M - C \dots P \dots C' - M'$$

This is often reduced to the idea that money is nothing but a means of purchase. The only reason to hold it would then be to go shopping. In fact, money *possesses* value: as Marx (1990: 161), notes, it is the most universal form of value. What is its magnitude? the labour it represents in exchange. This is why the transformation ‘problem’ does not really exist: capitalists purchase inputs with money, and this is the value transferred to the product, not the value of the inputs themselves. This is the kernel of a workable account of the relation between crises, recessions and depressions. It remains to develop it by enquiring how this value can expand when nothing is done with it.

Partial understanding comes from noting that the capitalist effects a *comparison*, between the prevailing return on hiring labour, that on holding money. In recessionary times these may *both* be negative but idle money will be preferred if the latter is less negative. This explanation is however inadequate if the negative self-expansion of mere means of circulation persists over an entire historical period. Capitalists cannot lose money for ever: they need recoup, in upturns, that which they lose declines.

The answer lies in the fact that money has more than one form. Money commodities with intrinsic value, like gold, can potentially express a growing magnitude of labour when other money prices are falling. However, to do this they must really function as money: they must be universally exchangeable.

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<sup>4</sup> Claims of universal inflation are inflated. Between 1980 and 2000 the purchasing power of the dollar over the labour of the third world rose by a factor of 2.5 (Freeman 2009). Through the dollar’s role as a world store of value, the US and its partners thus made up forty years’ ground lost to colonial and economic independence (Desai 2012). Space prevents us exploring this point, but it cannot pass without mention.

<sup>5</sup> with all the unresolved problems of measurement that this entails.

<sup>6</sup> The MELT is not a quantity theory, the ratio between two separate capitals, goods and money. It is a ratio between two expressions of the value of the *same* group of commodities – those exchangeable against money. Authors measure this in different ways, depending on what they think this group consists of. I argue (Freeman 1996) that it comprises all commodities with prices, including stocks. This is not an issue of principle; the decisive point is that money represents labour in exchange, not production.

<sup>7</sup> See Ramos (1995) for an evaluation of these earlier contributions. Aglietta (1979), as Ramos notes, should be credited with the first use of the expression ‘Monetary expression of Labour Time’.

Speculative gains can be made in any commodity, but one cannot pay debts with a barrel of oil. Gold's monetary role is thus a function of its dual character as a money commodity that is also produced. This persists today because, as a reserve asset, it will always find a buyer. Many monetary fiascos – bitcoin is the latest – arise from a failure to realise that even modern money needs a retreat of last resort.

Nevertheless, it is unsatisfactory both theoretically and empirically to suppose that value relations are imposed on money prices *only* via exchange with gold. In this paper we turn to the value discipline imposed by *credit-money*, the instrument of that industry which Marx (1992: 431) calls 'money-dealing'. Credit-money, and more generally fictitious capital, comprises financial instruments entitling their owner to a stream of income. The credit industry came into being because capitalists, from early times, acquire movable wealth by converting capital into debt – bills, bonds, shares, and so on. These become money, and thereby a branch of total capital, *money-capital*:

A definite part of the total capital now separates off and becomes autonomous in the form of money-capital, its capitalist functions consisting exclusively in that it performs these functions for the entire class of industrial and commercial capitalists ... The movements of this money capital are thus again simply movements of a now independent part of the industrial capital in the course of the reproduction process (Marx 1992:431)

Trading in money-capital becomes a separate industry, shorn of a direct relation to production, when this trade becomes its primary purpose.

Money-dealing is fully developed, even if it is still in its first beginnings, as soon as the functions of lending and borrowing, and trade on credit, are combined with its other functions (Marx 1992:436)

In this developed form, the money becomes capital in its own right; it expands itself by attracting interest, and can be bought and sold for this capacity.

On the basis of capitalist production, money – taken here as the independent expression of a sum of value, whether this actually exists in money or commodities – can be transformed into capital, and through this transformation it is turned from a given, fixed value into a self-valorizing value capable of increasing itself ... in this way the money receives, beside the use-value that it possesses as money, an additional use-value, namely the ability to function as capital. In this capacity of potential capital, as a means for the production of profit, it becomes a commodity, but a commodity of a special kind. Or, what comes to the same thing, capital becomes a commodity. (Marx 1992:460)

Credit thus *becomes* money and thereby capital.<sup>8</sup> With a stream of income attached to it, it can grow in value even when prices are rising. Capital comes to rest in those credit instruments whose rate of return, expressed in labour-time, exceeds that of the alternative available industrial uses. This is the modern mechanism of recession and depression.

The expansion of credit-money of the last three decades, or financialization (Lapavistas 2013) as it is often termed, has led to a certain self-expansion of confusion, because the connection between credit

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<sup>8</sup> Financialization has notoriously tapped non-industrial streams of income like personal mortgages. However, the income still depends on production; a mortgage defaults when the value that pays for it is no longer produced. Personal loans, a kind of deduction from wages at the factory exit, are really a disguised form of surplus value.

instruments and the borrower is increasingly concealed by devices such as derivatives. Old-fashioned defaults – when the borrowers cannot pay – have given way to asset price collapses. Yet the net effect is the same: the retreat of money from production. As Riddiough and Thompson (2012) point out, the panic of 1857 differed from the crash of 2008 only in form: the former was dominated by defaults, the latter by asset price collapses.<sup>9</sup> In a default, lenders ‘call in the debt’; in an asset collapse, they sell off credit instruments. Both actions are driven by the need for ‘safe money’: money in its function as a store of value or, in *extremis*, means of payment. Industry is denied credit, leading to a decline in output.

This leads to many paradoxical effects, such as a rush for dollars, even though the defaults originate in the weakness of the world’s dollar economy. It creates the illusion that the crash caused the downturn, though it is industry’s inability to pay that provokes the crash. All these illusions are fed by the very fact that monetised debt acquires a price, making it appear that interest constitutes a form of production; this is, in a definite sense, the ur-illusion on which all others rest.

In summary, in a crash almost everything about the money markets appears as its reverse. The crash is the expression of the crisis, not its cause. A default produces a growth in idle money, not a shortage of it. The ‘value’ of money capital is not an independent magnitude but a monetised claim on value produced beforehand; and financial assets do not add value to production, but levy a charge on it. As with value analysis, the sound basis that Marx offers for resolving this confusion is stoutly resisted by his followers.

## MARX AND MONEY

Unfortunately, credit-money is responsible for particular confusion among Marxists, who devote, on average, substantially more labour time to finding fault with Marx’s theory than to understanding it. Whether this time is socially necessary is a matter for history to settle. More creditable, but equally mistaken, are attempts to defend Marx by elevating gold to an absolute principle in his theory of money (see Kim 2010, Freeman and Kliman 2011). A more pernicious claim is that Marx ignores or rules out credit, paper money, and all modern capitalism’s financial innovations.

Yet Marx’s first ‘economic’ work, the *Paris Manuscripts* (Marx 1988) is dedicated to the political and social functions of money. The ‘Chapter on Money’ is a quarter of the *Grundrisse* (Marx 1993). The first 126 of 195 pages in *Contribution to the Critique of Political Economy* (Marx 1970) – the ‘prelude’ to *Capital* – are about money. *Capital* (Marx 1991:188) Volume 1, chapter 3, ‘Money, or the circulation of commodities’ is the logical centre of the volume. Money is the subject of 14 chapters and 291 pages in Volume III (Marx 1992:459-750), twice the space allocated to the rate of profit. Marx’s writings on the money industry exhibit an encyclopaedic knowledge of banking theory and practice as Lapavistas (1994) rightly acknowledges.

In Volume I of *Capital* and in the *Contribution* Marx makes a simplification; he excludes credit money when deriving money’s properties.

The principal difficulty in the analysis of money is surmounted as soon as it is understood that the commodity is the origin of money. After that it is only a question of clearly comprehending the specific form peculiar to it. This is not so easy because all bourgeois relations appear to be gilded, i.e., they appear to be money relations, and the

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<sup>9</sup> Not least because US and UK governments staved off the worst defaults by recapitalising their banks.



money form, therefore, seems to possess an infinitely varied content, which is quite alien to this form.

During the following analysis it is important to keep in mind that we are only concerned with those forms of money which arise directly from the exchange of commodities, but not with forms of money, such as credit money, which belong to a higher stage of production. For the sake of simplicity gold is assumed throughout to be the money commodity (Marx 1970:64)

This leads to genuinely dogmatic defences which lend unwonted credibility to the widespread fancy that Marx thought of debt-money as some kind of fake or pretend-money. But if Marx had wanted to say 'credit money is not really money and gold really is' he would not have 'assumed' that gold is money or called credit a 'form of money'. He would have said gold *is* money, and credit is not. His simplification is strictly analogous to the assumption in Volumes I and II that products are sold for their values; *both* simplifications are dropped in Volume III. They are made for the purpose of logical deduction, not as claims that real capitalism works this way. Marx proves that exploitation arises from the wage relation itself and not, as contemporaries like Proudhon maintained, because goods are sold above their value, by showing it arises even when goods do sell at their values. The justification is not that goods really sell at their values, but that the argument holds whether or not they do. In like manner, Marx's deduction of money holds good whether or not credit is used as money.

There is little room for doubt that Marx recognised tradable credit instruments as money. The chapter on credit (1992:525) opens with a discussion of it:

I have already shown (in Volume 1, Chapter 3, 3,b) how the function of money as means of payment develops out of simple commodity circulation, so that a relationship of creditor and debtor is formed... money now functions only as means of payment, ie commodities are not sold for money, but for a written promise to pay at a certain date...until they expire and are due for payment, these bills themselves circulate as means of payment; and they *form the actual commercial money*. (Marx 1992:525, my emphasis)

The conclusions deduced when 'gold is assumed' to be the money commodity therefore apply fully when this simplification is dropped, just as exploitation also takes place when prices differ from values.<sup>10</sup> The MELT lets us construct general rules that apply to all forms of money including credit, just as Marx can deduce in Volume III that total profit is equal to total surplus value and thereby confirm that exploitation is a general rule applying to all rates of exchange.

## MONEY AS A COMMODITY

A commodity, in its most general sense, is a thing with both use-value and exchange-value. Given that things which have not been produced can serve as money, what is their use, and how can they be function as commodities in providing that use? Marx's exposition of money develops its multiple functions (Marx 1970, de Brunhoff 1976, Nelson 2014, Freeman 2004): means of circulation, means of

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<sup>10</sup> In contrast, Sweezy's (1942) simultaneist 'simplifications' sneak in the contrary assumption that capitalism reproduces perfectly; this more restrictive assumption makes it impossible to study what happens when capitalism does not reproduce perfectly. Marx's simplifications *remove* restrictions which would arise, if we explained exploitation as a deviation of price from value, or money as a consequence of credit.



purchase, measure of value, standard of price, means of payment, store of value. Each function is a distinct use-value of money; moreover, unlike a table, say, whose use is restricted or even defined by its physical structure, the use-value of money is determined by what it is used for. A dollar in a vault is a store of value, but in a purse it is a means of purchase. These uses conflict with each other; as with the nation (Desai 2012), these conflicts only establish that capitalism's highest forms of existence concentrate all its contradictions in their own being.

However, one use rules them all. For a thing to perform any monetary function, it must at least serve as universal equivalent;<sup>11</sup> if it cannot be exchanged, it cannot function as money. It does so, therefore, not because it differs from other commodities but because of a property it shares with them: it is exchangeable. This is why Marx develops its properties from the commodity form. However, all money commodities do differ from produced commodities in one respect: their value is not determined by their cost of production.<sup>12</sup> How can a 'valueless' thing have a value? In the same way as a valuable thing: by being exchangeable for something that does have a value. This capacity to exchange defines the value even of gold, when it functions as money:

The weight of gold fixed upon as the standard of prices diverges from the weight which serves as the circulating medium, and the latter thereby ceases to be a real equivalent of the commodities whose prices it realises. Marx (1990:222)

The 'money' use then takes over from its use as a metal; money 'becomes a symbol of itself' (Marx 1990:226). When gold coin was legal tender, £1 coins regularly cost less or more than £1 to produce. The face value, not the intrinsic value, determines the purchasing power. Intrinsic value imposes itself indirectly when coin is melted into bullion, or bullion coined into gold; in effect gold commutes between uses by changing its form, without the tiresome necessity of exchange. Thus, each specific use of money adapts to its concrete function, so that monetary instruments appear and disappear as the cycle proceeds through the commutation of their use. This is especially puzzling for any view of money as a fixed and constant thing whose 'quantity' adjusts in the same way as produced objects. It is then a mystery why, for example, credit-money should be in 'short supply' in a crash, when the price of credit instruments has collapsed.

It is for precisely this reason that the behaviour of money, in a crisis, cannot be understood without an independent source of reference, the labour which the money represents. In the crash, the only use of money is a store, so creditors rush to get 'hard' state debt or currency. But the issue then is whether the state can pay or the currency can purchase. The nation-state's real assets are its people, which its creditors treat as disposable pieces on the economic chessboard. 'Pure' economic relations are displaced – or rather, returned – to the political sphere. A neoliberal Argentine president, or an imposed Greek settlement, may destroy the livelihood of millions, but restores 'confidence' in their state's debt. Eventually, people react as humans instead of cogs and these vampiric claims are staked out to die. As crisis unfolds, the layers of glitter are one by one peeled away to reveal this simple human substance beneath.

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<sup>11</sup> Many commodities achieve money status because they exchange for other money commodities. Shopkeepers cannot be paid in gold or in railway shares, but both of these 'buy' currency which the shopkeepers accept.

<sup>12</sup> It is not quite accurate to say paper money has no production costs. The work of the court officials, police, security guards and tax collectors who create its use-value amounts to a tidy sum per banknote. The point (as the Austrians indignantly note) is that in the absence of competition, it is not produced as a commodity.

## THE PRICE OF MONEY

Marxists occasionally remind us that money has no price (Moseley 2003, Mandel 1984). This is true in the tautological sense that the price of a dollar is a dollar which, they rightly note, is not very informative. Yet gold is also money. One can exchange dollars for it, normally termed 'buying', and can exchange it for dollars, called 'selling'. A dollar can also be sold for Euros, pounds, or even RenMinBi. Money commodities are priced *in each other*. The phrase 'money has no price', correctly stated, tells us that a money commodity's price can only be expressed in another money commodity. The rational kernel of the statement is that it makes no sense to 'sell' money for a non-money commodity; to 'sell' a Euro for a pig, for example.

Behind this mental fact lies a real one: I cannot produce pigs by means of Euros. Their price is therefore determined by the pig's cost of production, not the Euro's. Two sets of relations are thus determined autonomously. 'True' commodities acquire prices by virtue of the value placed in them by labour. Money commodities acquire prices in trade with each other. However, the former imposes itself on the latter because money is used to buy products, which in turn possess value.

The central focus of our enquiry is the way this is achieved. Rodriguez and Ramos conclusively demonstrate that the relative prices and values of produced commodities are formed in a single system (the 'Single System' in TSSI). This single system *also* determines the both the relative prices of money commodities, and the absolute relation between the two sets of prices.

To see this, we must first grasp the fact, uncontroversial in business theory, that relative asset 'prices' are fixed by their return on capital. This process is none other than the equalization of the profit rate, disguised by the peculiar way it happens, namely by means of price adjustments. A bond whose return on face or 'par' value is higher than average will go up in price. The 'yield', or return on this bond then falls, and vice versa. The process is slightly more complex for assets whose actual return becomes clear only with the passage of time, but the principle is the same. The price adjusts to a given return.

This is the reverse of what happens in production. The prices of productive assets are fixed before their return is known, by the cost of raw materials, machines and wages. As the outcome is discovered, competition brings profit rates together because capital flows to where profitability is highest. That is to say, the return adjusts to the given price.

These processes are however joined. If the prevailing return on financial assets rises above that on new productive investments, capitalists will start purchasing these instead of investing, and vice versa, forming a common rate. This return is the average of a distribution (Wells 2007, Farjoun 1984) so the migration is a fluctuating chaotic process, not a once-for-all simultaneist settlement. If the average return on monetary assets rises relative to the average on industrial assets, the total magnitude of productively invested capital will fall relative to that resting in monetary assets, and vice versa.

Unproductive and productive capital participate jointly in the formation of the general profit rate, which thus, in addition to regulating the relative prices of produced commodities, regulates the proportions in which social capital is allocated to productive and non-productive uses.

This account is confirmed by Marx's own theory. He introduces the section of *Capital* on interest-bearing capital with these words:

On our first consideration of the general or average rate of profit (Part Two of this Volume) we did not yet have this rate before us in its finished form, since the equalization that produces it still appeared simply as an equalization of the industrial capitals applied in different spheres. This was supplemented in Part Four, where we discussed the participation of commercial capital in this equalization, and commercial profit. The general rate of profit and the average profit were then presented within more closely defined limits than before. In the further course of our analysis it should be borne in mind that *when we speak of the general rate of profit or the average profit from now on, this is in the latter sense, ie always with respect to the finished form of the average rate* (Marx 1992:460, my emphasis)

This passage is greatly neglected in the literature. It is not simply productive capital which enters the equalization of capital but all capitals with a claim on the total surplus value to which it gives rise. Without this generalisation to the 'finished form of the average rate' there is no explanation even for commercial profit. Merchants secure a share of total surplus value, in proportion to their capital, by the same equalization process that governs the industrial sphere: capital migrates out of those enterprises whose profits are low in comparison with the available alternatives, and into those where profits are high:

*Commercial capital is involved in the equalization of surplus value that forms average profit; therefore, even though it is not involved in the production of this surplus-value. The general rate of profit thus already takes account of the deduction from the surplus-value which falls to commercial capital, i.e. a deduction from the profit of industrial capital* (Marx 1992:400, my emphasis)

It is consequently misguided, if laudable, to 'subtract' commercial capital from the numerator and denominator of the profit rate to correct for its unproductive role (Moseley 1992, Mohun 2000). Merchants get their cut by purchasing from producers at lower prices, and selling to consumers at higher prices, than would be realised in direct trade. Their share of profit is therefore already deducted from the total reported by the industrialists, which will be understated unless commercial profits are explicitly included in the numerator. To calculate genuine 'industrial profit' one should, strictly speaking, divide all profits by industrial capital alone. But this in turn overestimates the 'finished form' of the real social average rate, by omitting competing claims on the total surplus which genuinely lower it.

On this Marx is remarkably clear, stating that 'in future we shall keep the expression 'price of production' for the *more exact* sense just developed.' (1992:399, my emphasis). It is clear that this approach is general, because the point is made precisely in the introduction to the section on interest-bearing capital, and because after that, he extends it to absolute rent. There is therefore a strong *a priori* reason to bring financial capital into the framework of profit equalization, which further study supports.

We have already shown that Marx recognises, as money, all exchangeable instruments. Moreover, the interest on them is a share of surplus value, calculated as a percentage return on the capital sum they represent – exactly like any other capital involved in profit equalization. Confusion arises only because of the sector's two peculiarities. First, as noted, equalisation is achieved by price adjustments. If an equity with a face value of \$100 yields only \$1 per year and the prevailing average rate is 5% then its price falls to \$20. If we mistake the paper title to the capital for the capital itself, as if one could produce pigs with title deeds, then the 'real' value of the deed seems to be the sum marked on it. But the deed's price is

fixed by the income it receives, not the property it represents. Its value is therefore in turn, the MELT informs us, given by the labour that this price represents in exchange.

Second, the financial instruments must first be exchanged for means of payment – ‘sold’ – before the commodities in which this labour is incorporated can be purchased. The ‘price’ of a piece of paper is always the relation between the whole class of money commodities in which it is denominated, and the labour that this denomination represents in exchange. If 10 hours’ worth of commodities are priced at \$500, then the value of bond whose market price is \$50 is 1 hour. Interest-bearing instruments thus function not merely as capital but as *money-capital*, whose value is determined by the MELT, and depends neither on their cost of production nor the underlying value of the asset they represent. This is what makes them ‘fictitious capital’, a term especially poorly understood because of the physicalist misconception that only tangible objects can be ‘truly real’. The term does not mean that stocks and shares cannot function as capital: it means they do so without participating in production.

Equally, not all loan-capital functions as money-capital. A private IOU, for example, does not serve as a capital investment. Which money instruments do function as capital? This is, fundamentally, an empirical issue. Duménil, G. and D. Lévy (2004), who unlike most Marxists accept that certain financial investments function as capital, provide quite detailed calculations corresponding to one possible approach. But since this line of investigation is still in its infancy, and since most Marxists are strongly resistant to the whole idea, theoretical principles must take priority over the technical formulae that are derived from them.

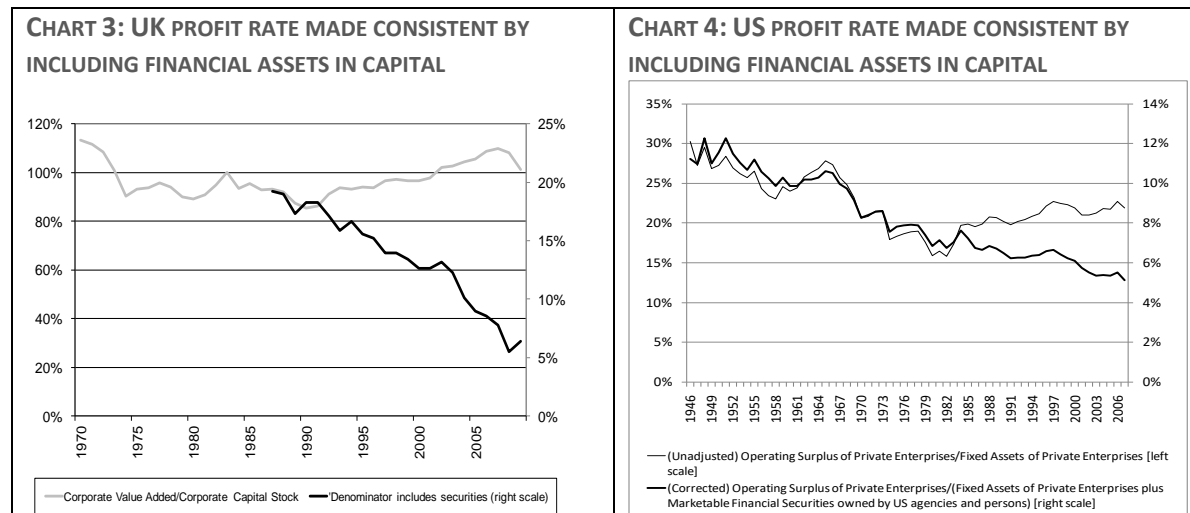
The key issue is which instruments *enter the process of equalization*: namely those that compete with productive investments as a destination for capital. These include at least the medium- and long-term loans which are the bedrock of industrial finance and are also counted as capital by the banks. However, a loan can only enter the equalization process if it is alienated and traded in the financial markets. The yield on a private loan depends only on the relative social power of the lender and borrower, which is why loan sharks can extract usurious returns.

For comparable reasons it is an error to offset assets against the corresponding liabilities. Technically, every debt asset is an equal liability; offsetting leads to the bizarre conclusion that total financial capital is zero. Lending is an asymmetric relation; liabilities are not exchangeable and neither function as capital nor reduce it. Otherwise, enterprises could not operate on borrowed capital. Care is therefore needed with the term ‘net worth’, employed by Dumenil and Levy to distinguish capital from non-capital assets in the banking sector. If a company takes on 500 workers by borrowing \$500,000, and then buys a further \$500,000 on credit and sets up in production, this is a real productive activity and the capital engaged is a million, not zero.

Financial capital, in conclusion, consists of those instruments which compete in the market for investment beside productive assets, and which can thereby establish a claim to a share of total surplus value in the form of a stream of income. In consequence, first, the larger the total market price of these assets, the lower the average rate of return on all forms of capital taken together; and second, the higher the average rate of return on the financial assets, relative to the average rate in new industrial assets, the smaller will be the volume of total social capital that engages in production.

This exegesis is empirically verifiable. Charts 3 and 4, from Freeman (2012), show the rates of profit in the US and UK when corrected by including medium- and long-term financial assets in the stock of

capital – the denominator of the profit rate. These graphs settle the long dispute on the actual trend of the US profit rate, showing it never recovered after the 1974 slump; they also match, and explain, the secular reduction of capacity and growth in hoards of money-capital shown in Charts 1 and 2. They explain, in conclusion, the whole storm.



### CRISES OF CREDIT AND UNDERSTANDING: THE ILLUSIONS CREATED BY MONEY

Given the explanatory value of the above analysis, the soundness of its theoretical basis, and the extent of empirical support for it, opposition to it is at first sight surprising. Yet responses to Freeman (2012) where I first proposed treating credit-money as capital,<sup>13</sup> and elsewhere, have been negative. When any compelling conclusion is rejected in contradiction to both reason and evidence, it is necessary to respond pedagogically, but in such a way as to lay bare what lies behind the objections.

Beneath the normal hostility with which intellectuals greet useful ideas lies a deeper cause of resistance: commodity fetishism. Economic ignorance is not a mere failure of understanding but a joint product of capitalism, rising to a peak during the monetary phases of the crisis, and diminishing with every day of real depression. The chief obstacles to monetary knowledge are the illusions that money itself generates. In illustrating and fleshing out the argument, I therefore finish by addressing these illusions.

The central illusion created by money-dealing is that the financier appears as a producer of wealth. This is demonstrably false; however, as with commercial capital, well-intentioned attempts to correct for it (Moseley 1992, Mohun 2000), misstate the problem insofar as they treat interest payments as an absolute loss of surplus value. This implicitly supposes that once received by the bankers, this surplus can never re-enter production. However, it can and it does, if the financiers lend it back to the producers, in which case it is accumulated as normal. Recessions arise not when the surplus passes into the hands of a banker, but when it *stops* there. The crisis is therefore not caused by the exaction of interest but by a collective failure to re-invest that interest in production. The banks are not solely responsible: if the industrialists don't take up their offers of loans, the banks cannot make them. Only

<sup>13</sup> See the blog discussion at <http://australianpe.wix.com/japehome#!freeman-finance/cdjh>, especially the comments from Jones, McKee and Cockshott.

the state can do that. In a recession, *all* capitalists accumulate money instead of productive assets. This is what accounts for ‘hollowed out’ companies like Enron.

It is for this same reason that the crisis is neither explained by conspicuous or wasteful consumption nor by its consequences such as generalised inequality. These are repugnant, and eliminating them is in all likelihood a precondition of stable recovery; it is not however sufficient. Capital accumulation is itself the cause of the crisis, which leads to a political conclusion: the only sustainable solution is a change in the means by which society allocates resources to production, in which the private allocation of capital governed by the pursuit of surplus profit is replaced, in whole or part, by the public allocation of productive resources.

Finance interacts with production, as noted, via the joint formation of a profit rate which is the average return on both capital in both spheres. This process is neither specific to industry, nor to finance, but arises from the interaction between the two.<sup>14</sup> Capital is no respecter of boundaries. It restlessly seeks the best return it can find, regardless of form or place. If it is more profitable to invest in money, everyone does it – not just bankers.

This brings us to the greatest obstacle to understanding, arising from a mistaken critique of the portrayal of banking as productive which is confined to negating this claim. This superficially radical, but actually quietist response expresses itself in a trenchant hostility to the idea that money-capital is indeed capital.

The critique begins with the claim that ‘double counting’ arises if we include both the original value of an asset, and loans raised on it. As noted earlier, this is rooted in a failure to grasp the asymmetric nature of the credit relation. Marx clearly insists that multiple claims are made against a single productive asset. To take only one example, he considers an industrialist originally earning £20 on a capital of £100 at a rate of 20%, who ‘makes it over to someone else, who actually does use it as capital’. Interest then arises because

If the second man pays the proprietor of the £100 a sum of £5, say, at the end of the year, i.e. a portion of the profit produced, what he pays for with this is the use-value of the £100, the use-value of its capital function the function of producing a £20 profit. The part of the profit paid in this way is called interest, which is thus nothing but a particular name, a special title, for a part of the profit which the actually functioning capitalist has to pay to the capital’s proprietor, instead of pocketing it himself. (Marx 1992:460)

Note that the ‘use-value’ of the loan is that of *servicing as capital*:

All loan capital, whatever form it might have and no matter how its repayment might be modified by the nature of its use-value, is always *simply a special form of money capital*. (Marx 1992:465, my emphasis)

Jones (2013), who engages the most seriously with this idea, unfortunately misunderstands his own citation of Marx: “the capital does not exist twice over, once as the capital value of the ownership titles,

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<sup>14</sup> An anonymous referee asks whether ‘Marx’s law of profitability will eventually deliver a crisis in the productive sector anyway’. Whilst it is true that changes in the financial sector cannot overcome this law, so that in this sense the law is the ultimate cause of crisis, there is however no reason the rate of profit should not fall indefinitely close to zero without any interruption to production. It is the existence of alternative uses for capital – in the last analysis, hoarding – which enforces the law.

and then again as the capital actually invested in or to be invested in the enterprises in question". He omits what comes next: "the share is nothing but an ownership title, pro rata, to the surplus-value which this capital is to realize". The share is precisely, in this capacity, a new capital, a title to a share of the surplus. Marx's point is that this acquires a price all of its own, unconnected to the original value (which, therefore, cannot 'exist twice over') but which is calculated on the revenue it receives. The title acquires a new use value – serving as capital – and becomes a commodity, which is why Marx goes on to say that "A may sell this title to B, and B to C...A or B has then *transformed his title into capital.*" (op. cit., my emphasis)

The cited passage does not say these titles do not constitute capital; it says they do not constitute the original capital. They are transformed into a new capital, whose magnitude is determined independent of the original, as a yield reckoned as a percentage on the purchase price of the instrument. If this purchase price cannot be reckoned as capital, how does the money obtain the return?

The money-dealers make their profit from these returns, and the money-capital constitutes their assets. If we perversely exclude it, we abolish the source of their revenue. The rate of return in the banking sector, calculated on this basis, is hundreds of percent.

What is true at the sectoral level is true at the social level. If we exclude money assets from the stock of capital, the rate of profit in the UK, one of the worst performing economies of the advanced world, rises without interruption since Thatcher first took office.

The attempts to reject this proposal leads to absurdities, which the critics do not even deny, much less refute. Such responses must therefore be considered fairly superficial. Why, then are they offered? Essentially, because – unlike Marx – they do not consider it necessary to understand what credit, and especially credit-money, really is. Jones supplies a useful example which lets us illustrate this point numerically.

Compare two new businesses, one that has its start-up capital funded by the managers of the business, the other that is funded from a share issue. Suppose they both invest \$100 into productive capital - plant, equipment, wages etc. In the first case, the denominator of the rate of profit should be \$100. But in the second, the business has obtained its \$100 by issuing shares. Suppose these shares trade at a total market capitalisation of \$100. Using Alan's approach, both the \$100 invested in productive capital and the \$100 invested in shares would count as capital advanced, and the rate of profit would be calculated based on a denominator of \$200.

But there was never \$200 invested. The \$100 invested in productive capital comes from the \$100 invested by shareholders; you could even imagine it being the same \$100 note. The shareholders will calculate their rate of return based on the \$100 they advanced, not \$200, just as the managers of the business will calculate their return on capital based on the \$100 they obtained from shareholders.

The shareholders do not calculate their return on the '\$100 they advanced' but on the trading price of the share. This is fully independent of the value of the factory; it depends only on the dividends the business chooses to give them. The shareholders can calculate their rate of return however they like, but the market has the last word; the capital value of their shares is fixed by what they actually receive.



Jones states neither the profit on the business nor the dividends paid (revealingly, since this is the actual determinant of the share values); let us suppose the profit is \$20. If no dividends are paid, the business makes 20% and the share price declines to nothing. Only in this case will the total capital be \$100.

If \$10 is paid out, the business will get \$10, a return of 10%. The market will equalize profits by pricing the shares fortuitously for their face value, \$100. There is now a combined capital of \$200 in the 'economy' and the return on this is 10%, throughout.<sup>15</sup> Suppose now the dividend is cut to \$5. The business retains \$15 – 15%. For expository simplicity, let's take this as the total industrial capital. The share will be *repriced*. If no other factors intervene such as speculation or glamour, it will be priced so that its yield is 15% on a return of \$5, that is to say \$33.33. Total social capital – industrial plus money-capital – falls to \$133.33 – a market 'correction'. Money capital – but not invested capital! – is liquidated.

Jones then asks what happens if the share price goes up "What if it triples, so that the market cap rises to \$300 even though nothing has been invested in the business?" But it is the money capital that has risen, not the industrial capital. What has been invested in the business is irrelevant. We are not told what caused the rise; either it is an overestimate, and a crash is on the way, or the manager must be paying enough to justify the rise. In the last case, the required dividend can be calculated: suppose it to be D. Then the shareholders' yield, at the market price of \$300, is

$$\frac{D}{300} \quad (5)$$

The business is left with 20-D, so its return is

$$\frac{20-D}{100} \quad (5)$$

Equating these gives

$$D=15 \quad (6)$$

The total capital is now \$400; the shareholders get \$15 giving them 5% and the business retains \$5, also 5%. The average is \$20/\$400 = 5%. The whole calculation is thus sound. Note that *whatever* distribution is arrived at, nobody can get a return greater than 20/100 = 20%. No amount of market manipulation can better this which is thus *imposed* by the conditions of production.

What does this tell us about crisis? Firstly, if the financiers price their shares too high, they will simply fall again, provoking a crash or correction. However, restraining the financiers does not solve the problem as we can see by reducing the dividend to zero to focus on building up the equity. With \$20 to invest, all may seem well. But Horror of horrors, next year this \$20 will be calculated on a capital of \$120 and the return will fall to 16<sup>2</sup>/<sub>3</sub>%, and 14<sup>1</sup>/<sub>7</sub>% the year after. The faster the business accumulates, the faster the decline in its rate of return. Before long, a 5% dividend will appear quite attractive. So should the shareholders cut the dividend, or the rate of accumulation?

The choice is between Scylla and Charybdis.

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<sup>15</sup> Note that if the factory was financed by a bond, giving it an liability of \$100, then the rigorous logic of the critique of double counting leads us to conclude that its capital is zero and its returns infinite.

The key point is this: if they restrain equity growth by increasing their dividends, the additional money remains part of social capital, unless they consume it in riotous living. The *general* profit rate will continue to decline, because the capital is now accumulating in the money sector instead of industry. But the only source of income remains the \$20, which sets an absolute ceiling on the return to any further instruments the financiers choose to create. This will not be immediately transparent, because of the illusion that money begets money, and they may well create an entire mountain of overvalued derivatives. This hot air bubble, however, merely stokes the storm; it lasts only, and precisely, until the lightning strikes again. In short, neither Main Street nor Wall Street produce the underlying problem but the very fact of accumulation itself; whether this takes place in the industrial, or the financial sphere, may modify the form of the crisis takes, but cannot eliminate its cause.

Will there be a solution? Of course; political forces, either of the right or of the left, will intervene at the point when either the social tensions, or the threat to capitalist rule, or both, become intolerable. This is what lies behind Syriza, Podemos, Corbyn and Sanders on the left and Trump, Erdogan, Modi and Orbán on the right. What is ruled out is that the economic system will resolve these contradictions on its own.

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