

Financialisation and the Limits of Circuit Theory

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Abstract

The theory of the monetary circuit aims to provide a realistic, albeit highly stylised, account of the workings of a modern monetary production economy. While there may have been a time when it succeeded in this aim, that time is over. The key development in the monetary sphere of capitalism over recent decades is the advent of financialisation, a phenomenon that circuit theory cannot explain other than by omitting some of its most important characterising features while indiscriminately dismissing those features that it does address as dysfunctional outgrowths. The crux of the matter is that a methodological framework that takes the aggregate monetary circuit as its basic unit of analysis is simply not flexible enough to accommodate the new reality of financialisation. Having made the above point, this paper goes on to argue that financialisation is best explained by using an alternative methodological framework that takes the individual commodity as its analytical unit.

Key words: financialisation, circuit theory, commodity reductionism

JEL Classification: H10; G2

1. Introduction

It can happen that the congruence existing between an economic theory and economic reality at one point in capitalism's history abruptly gives way to incongruence at a later point in that history following the emergence of new phenomena. Two interpretations of such an occurrence are possible. The first is to lay the blame at the door of the phenomena in that they can be said to represent dysfunctional and thus transient aspects of capitalism's development. The second interpretation is to lay the blame at the door of the theory in that it can be said to have been rendered obsolete by the new phenomena. What is not possible is to advance both interpretations simultaneously, that is, to maintain that the economic theory in question continues to be valid even while acknowledging that the new phenomena are entirely in keeping with capitalism's unfolding logic. It is the central thesis of this paper that just such a conundrum characterises the relation between the theory of the monetary circuit on the one hand and the reality of financialisation on the other.

When the reality was that the financial markets were small in size, marginal in status and passive in character circuit theory had little difficulty in accommodating that reality in its

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idealisation of the triangular relations linking banks, firms and households: financial markets simply constituted an auxiliary space where firms sold shares to recoup the money from households not spent on consumption thus enabling the former to repay their debt to banks. By contrast, circuit theory does have a problem in accommodating the new reality of financialisation, one where the financial markets have grown to enormous proportions, have moved to centre stage and have become extremely active. The problem is that none of these phenomena can be reconciled with firms' production motive, which in circuit theory is that which sets in motion the whole monetary circuit process because of firms' need to finance production and the payment of wages through bank borrowing. The consequent reaction of circuit theorists has been to interpret the phenomena of financialisation as nothing other than so many different manifestations of excessive speculation. In other words, the reaction has been to characterise financialisation as a deviation from the established norms of capitalism and therefore as something that does not merit any critical reassessment of the fundamental premises of circuit theory.

This state of affairs may be acceptable if the growth of speculative activity was indeed the only characterising feature of financialisation. The fact of the matter is that it is not. There are several other characterising features that have nothing to do with speculation. Now one may still excuse the omission of these features from the circuitist interpretation of financialisation if the latter also happen to constitute deviations from the norm and therefore also something not worth serious attention. However, if it turns out that these other, non-speculative features are in fact indicative of the emergence of new and historically necessary norms of behaviour in capitalist economies then it must follow that circuit theory will do more to hinder than to promote an understanding of these new norms for which reason it must be summarily discarded. This paper will put this latter position.

The paper is structured as follows. Section two gives an outline of circuit theory and of its interpretation of financialisation and provides evidence as to why this interpretation is wrong. Section three gives an alternative explanation of financialisation based on an appreciation of the available evidence. Section four puts the financialisation phenomenon in perspective by looking at the constraints and pressures of contemporary capitalism that have propelled its development. Section five concludes.

2. Circuit theory and its interpretation of financialisation.

The theory of the monetary circuit as developed by heterodox economists drawn principally from Italy and France aims to provide a realistic, albeit highly stylised, account of the workings of a modern production economy¹. The concern with realism explains the rejection of methodological individualism, or indeed any other form of methodological reductionism, in favour of an aggregative approach that focusses on the relations linking together the different sectors of the economy. The characterisation of these relations as constituting a circular chain manifests the assumption that the dominant type of relation in contemporary capitalism is the personal, associative relation between fixed counterparties. Finally, given the essentiality of money to the modern economy and given that banks are the dominant suppliers of money, one can see why circuit theorists assign primacy to the bank based credit relation in the triangular relational chain. Circuit theory has a distinctive take on a number of other subject areas including those of income distribution, employment determination, economic stability and monetary policy. However, its highly aggregative approach to the study of the economic system and its prioritisation of fixed counterparty relations in general and of the credit relation in particular are the only characterising features of the theory that really matter for the present investigation into how it approaches the subject of financialisation. The fundamental question in this regard is this: does circuit theory provide as robust an account of today's 'financialised' capitalism as it did of yesterday's 'industrialised' capitalism? To answer this question, we first look at how circuitists have adapted their theory to explain financialisation, taking as our example a recent paper by Mario Seccareccia².

Figure 1 reproduces Seccareccia's illustration of the canonical model of the monetary circuit in the pre-financialisation era. The key links in the circuit are as follows: (i) the initial finance or 'efflux' stage of the circuit is set in motion when banks lend money to firms (M) for the purpose of paying wages (Y) to households (the payment of wages to bank workers (Y_b) plus

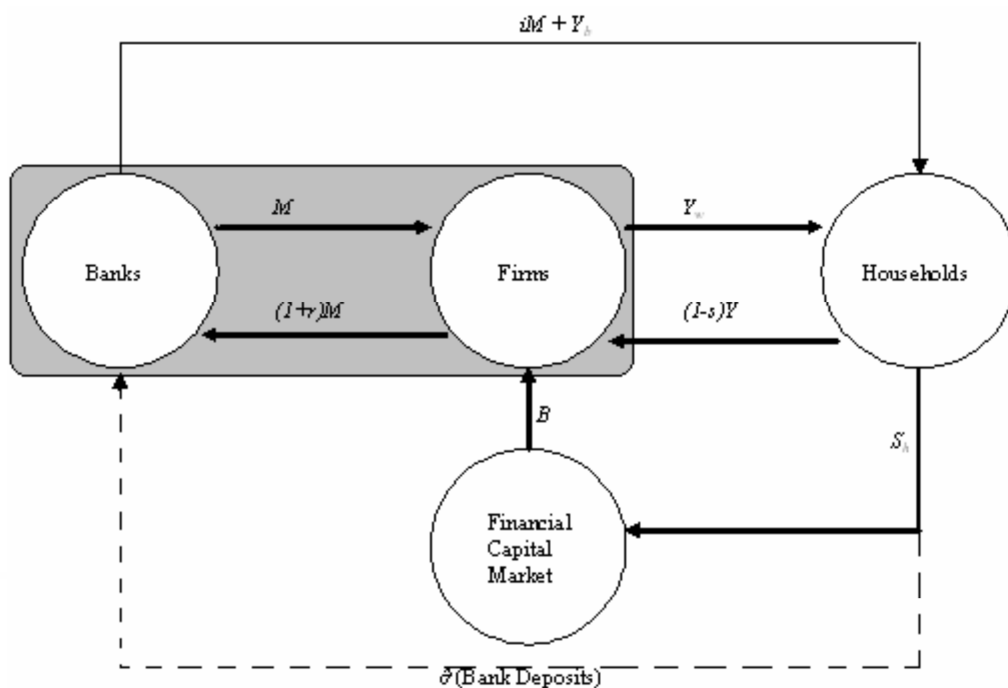
¹ Italian circuit theory is most closely associated with Graziani (e.g. 1988; 2003) – see Realfonzo (2006) for a review; Parguez (e.g. 1996; 2001) is an important figure in French circuit theory, but for a review of both earlier and later contributors to this branch see Gnos(2011).

² Given that financialisation represents one of the most important developments in the monetary sphere of capitalism over the past two decades, it is curious that few of the leading circuit theorists have addressed this phenomenon. Graziani makes only small reference to it in his *Theory of Monetary Production* published in 2003, but he could be forgiven in light of the fact that financialisation was only then just beginning to merit serious attention from heterodox economists (as attested by the fact that they had yet to reach agreement on the term 'financialisation' as the best way to label the new development – Graziani himself uses the term 'financirisation'). There have been heterodox economists looking at financialisation from a circuitist standpoint (e.g Passarella, 2012 and Sawyer , 2013) but of those who have been closely associated with the development and propagation of circuit theory only Mario Seccareccia (2013) , as far as we can see, has been prepared to confront financialisation head-on from a circuitist perspective. This is presumably why Passarella, for example, when giving his own circuitist take on financialisation, takes as his cue Seccareccia's paper (a draft of which first appeared in 2010)

interest on deposits (iM) also constitute part of the efflux stage); (ii) households allocate income between consumption ($(1-s)Y$) and savings S (with s being the average propensity to save); (iii) while household consumption expenditure allows firms to repay bank loans, the final finance or ‘reflux’ stage of the circuit will only be closed if firms can divert household savings away from bank deposits and into the securities (B) issued by the former. Although one can disagree with this interpretation of the role of the securities markets in the pre-financialisation era, one cannot deny that it may have some plausibility: these markets are presented as small and peripheral because their primary purpose is not to raise funds for production, which is the province of the firm-bank nexus, but to recoup the money spent on wages, while the passivity of these markets is put down to the fact that the main buyers of securities are households who have a vested interest in firms’ long term investment plans. What has far less plausibility is the interpretation of the role of the securities markets in the financialisation era.

Figure 1

Traditional Role of Banks in the Pre-Financialisation Era

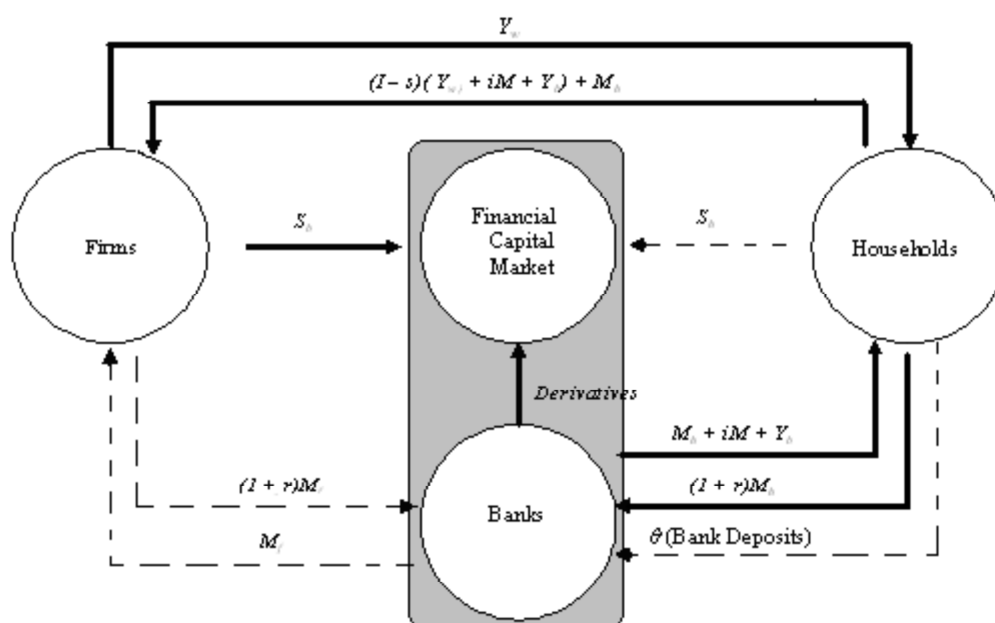


(Source: Seccareccia, 2013)

Figure 2 reproduces Seccareccia's illustration of the monetary circuit in the new era. The financial markets are now depicted as having the central dominant position in the circuit, first because firms, faced with growing profits and declining investment opportunities, are directing substantial proportions of these profits into share buy-backs and purchases of other securities, and, second, because the banks, eager to exploit the opportunities for boosting their own profits, are feeding firms' demand for securities through sales of securitised household mortgage and other credit loans and through sales of derivatives. The monetary circuit under financialisation still involves the same three sectors, firms, banks and households, and it still essentially consists of a chain of fixed counterparty relations. The difference is that both the content of this relational chain and its underlying motivational force are now the exact opposite of what they once were: firms are now net lenders rather than net borrowers; households are now net borrowers rather than net lenders, and banks, while still occupying a central, strategic role, do so less as lenders of money to firms to finance their production than as sellers of derivatives and other financial products to accommodate firms' speculative excesses. As Seccareccia sums up what he perceives to be the essence of financialisation: *"owing to the corporate sector's position as net lender, rentier speculative behaviour (that Keynes had so vehemently criticised in the General Theory) has slowly prevailed in the financial sector and has probably been the largest impetus in pushing this financialisation frenzy into hyper drive over the last decade. It is, therefore, in large part due to the growing proportion of corporate saving that has been directed towards speculative ventures in a way that household and even, say, group pension funds would be less likely to do, because of legal restrictions imposed on portfolio managers regarding the risk structure of their portfolio of pension assets."* (2013, p.186)

Figure 2

Strategic Role of Banks during the Financialisation Era



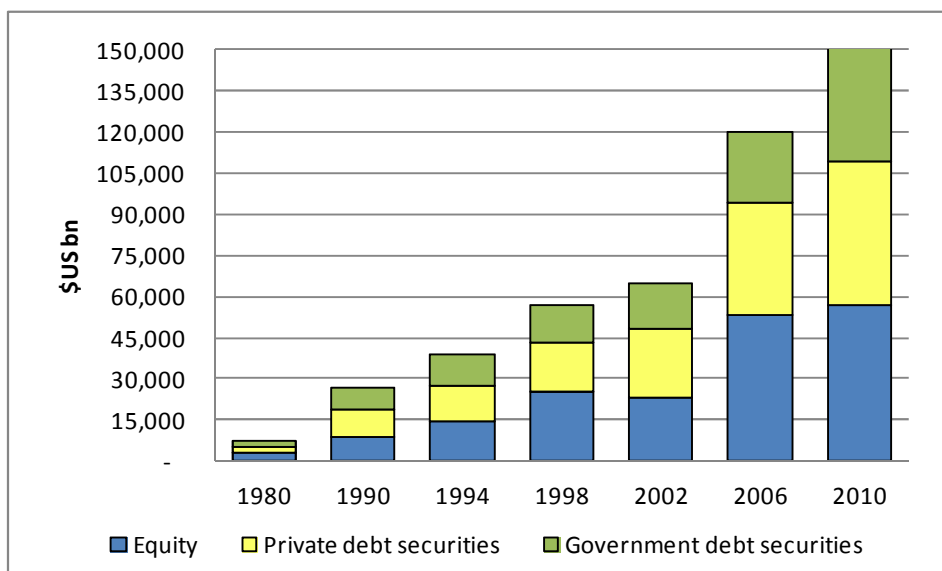
(Source: Seccareccia, 2013)

This characterisation of financialisation and of its driving forces is inaccurate. The reason is not that the particular facts produced in support of this characterisation are questionable so much as that other important facts have been omitted. Most notable amongst these are the following: First, while it is true that there has been a sharp rise in share buy backs over the past two decades, the corporate sector taken as a whole continues to be a net borrower of funds as attested by the continuing growth of the corporate bond markets, which, as can be seen in figure 3, constitute a significant component of global securities stocks. Second, while there has indeed been a steep rise in the indebtedness of the bottom 90% of the populations of the US and other countries as measured in terms of income and wealth distribution, the accumulation of wealth held by the top 10% means that the household sector continues to be an important lender of funds as attested by the dominant role on the buy side of the global securities markets played by institutional asset managers (whose major clients are households) and by high net worth individuals (see figure 4). Third, while the volume of asset backed securities created by the banking sector has grown in size in recent years, this still remains extremely small when compared with the volumes of outstanding debt and equity

securities (see figure 5) and while bank created derivatives have exploded in size in the past two decades, these OTC products (apart from the re-securitised products such as CDOs) have less to do with the augmentation of securities stocks than with the manipulation of the risk characteristics of existing securities. Finally, as concerns the claim that it is firms who more than any other institution are engaged in speculative activities, this is contradicted by the fact that in the long term capital markets it is not firms but asset managers who account for the bulk of trading (some of which is indeed speculative in nature but most of which has more to do with portfolio rebalancing as will be explained below) and by the fact that in the short term money markets it is not the firm-bank speculative trading relation so much as the inter-bank liquidity generating relation that predominates.

Figure 3

Financial Deepening of the Global Economy



Deposits	5,000	16,000	18,000	22,000	29,000	45,000	59,000
GDP	11,000	22,000	26,000	30,000	33,000	49,000	63,000

(Source: Lysandrou, 2013)

Figure 4

Major Holders of Securities, 2010

(\$trillions)

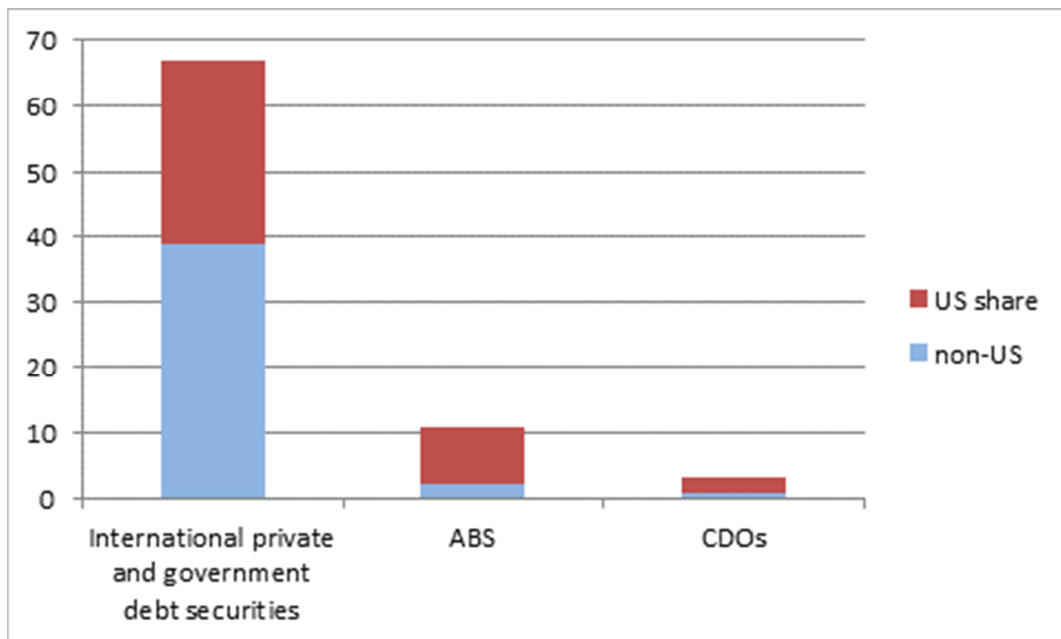
	Total Assets	Securities	Other
Institutional Investors	77.4	63.0	14.4
Pension Funds	31.1	25.2	5.9
Mutual Funds	24.7	21.4	3.3
Insurance Companies	21.6	16.4	5.2
Banks	100.1	49.0	51.1
High Net Worth Individuals	42.7	26.5	16.2
Governments	11.4	9.3	2.1
Reserves	7.2	5.8	1.4
Sovereign Wealth Funds	4.2	3.5	0.7

(Source: Lysandrou, 2013)

Figure 5

Composition of Debt Securities, 2006

(\$trillions)



(Source: Lysandrou, 2013)

Although these other facts of financialisation are widely known, they have been omitted from the circuitist interpretation of this phenomenon ultimately because they simply cannot be fitted into the framework of circuit theory. That framework is just too restrictive. The core idea of a triangular circuit connecting banks, firms and households already comes under strain with the recognition that impersonal exchange relations involving the securitisation of loans and the marketization of these products are encroaching upon the traditional, associative relations between fixed counterparties. However, that idea collapses completely once it is recognised that financialisation taken in its entirety completely subordinates all personal counterparty relations under impersonal exchange relations in the financial sphere. To fully understand this development and the forces driving it is necessary to abandon circuit theory in favour of an alternative analytical framework that is based on different, less restrictive assumptions. The next section outlines such a framework.

3. An alternative framework for understanding financialisation

The source of all circuit theory's problems is the belief that methodological reductionism is incompatible with a realistic analysis of a modern monetary economy. This belief is based on the identification of methodological reductionism with methodological individualism, which, it has to be said, does indeed lead to an idealisation of an economy that gives no essential role to money. However, the methodological individualism associated with mainstream economic theory is not the only form of methodological reductionism. There is another form, notably one that is associated with Marx³. Interestingly, Marx's analysis of the different phases of the capital circuit is usually cited as one of the major sources of inspiration of modern circuit theory⁴. Now while not wishing to denigrate the desire to list Marx as one of the illustrious forbears of circuit theory, it has to be pointed out that his analysis of the capital circuit is only developed in volume two of *Capital* and thus cannot be seen to be his analytical point of departure. In fact, Marx does not begin with any aggregate economic category, whether it be class or sector, but with a disaggregated category, a single element as unit of analysis, namely the 'commodity'. In so doing, Marx also presents a realistic account of a money using economy but he does so in a way that puts an interpretation on the money-bank credit nexus that is very different to that portrayed in modern circuit theory.

³ For further elaboration of this argument see Lysandrou (1996)

⁴ See, e.g., Bellofiore, (1989); Bellofiore and Realfonzo,(1997) and Bellofiore et al, (2000)

In focussing from the outset on the triangular relations linking together banks, firms and households, circuit theorists in effect begin, not with what all these sectors have in common, but with what differentiates them, namely, the fact that they all play different economic roles: banks a financing role, firms a production role and households a consumption role. From this aggregative, sectoral, starting point it is then but a short step from the identification of the financial sector with the banking sector to the identification of ‘money’ with the bank based credit relation. This latter identification, however, is wrong because it conflates the ‘functions’ of money with the ‘quantity’ of money. Money is ultimately defined by its functions, and these are three: measure of value, medium of exchange and store of value. In a modern economy, bank credit can be associated with the second and third functions but not with the first, which now can only be performed by state issued money. What private commercial banks do as financial intermediaries is to expand the total quantity of money, while conserving the quantity of state issued money, by hiring out money’s function as a medium of exchange for set periods of time and for a set interest charge. From this perspective, the notion of ‘endogenous money’ is an entirely legitimate way of denoting the fact that the dominant portion of any domestic economy’s money supply, or stock of purchasing power, comprises of bank credit whose quantity varies in response to demand as opposed to an exogenously determined supply of state issued money. What is not legitimate is to go from this bracketing of endogenous money with the idea of bank credit as the dominant component of an economy’s money supply to the bracketing of endogenous money with the idea that bank based credit relations are the dominant component of all money mediated exchange relations. That position of domination is occupied by the impersonal commodity exchange relation, not the personal credit relation, a point made very clear by Marx.

In beginning with the commodity Marx begins with the individual, but the individual viewed not subjectively but objectively, not as a preference maximiser but as a commodity seller. As all individuals operate in a fully developed division of labour system, their commodities have to conform to social standards of production – unlike ‘products’ that need only to conform to privately established criteria – a constraint that immediately presupposes an essential role for money. In a neoclassical world populated by rational agents there is no need for money because the subjective preferences and choices of agents can be reconciled both with each other and with technological and resource constraints by some central market force or authority (e.g. Walras’ ‘auctioneer’) that sets exchange ratios accordingly. In Marx’s

commodity world where there is no central price setting and market clearing authority, money is the vital intermediary medium through which social standards of pricing are set and enforced: it is through money's function as measure of value that each individual can assign a price to the commodity put on offer, while it is through money's function as medium of exchange that privately assigned prices are either sanctioned (i.e. offers of money by buyers informs the seller that the commodity conforms to social standards of provision and pricing) or falsified (i.e. the non-offer of money by prospective buyers informs the seller that the entity put on offer does not conform to social standards and thus does not qualify as a commodity).

Now while Marx's concept of commodity leads immediately to the concept of money, the latter does not lead immediately to the credit concept, as is the case in circuit theory, and the reason for this comes down to Marx's distinctive methodological reductionism. The whole point of this reductionism is to establish not only a realistic but also a generalising insight into the economic system: to reduce the system to a single representative unit is to allow one to see across the system and identify what all its constituent parts have in common and that is not the credit relation, or indeed any other type of fixed counterparty relation, so much as the impersonal commodity exchange relation. Only having first established this generality of commodity exchange relations, does Marx then proceed to discuss particular types of counterparty relations, beginning with the production relation in volume 1 of *Capital* and subsequently the credit relation in volume 3. Indeed, even in the capital circuit analysis developed in volume 2, the capitalist-worker relation underpinning P, the productive phase of the circuit, is sandwiched between two money and commodity phases, M-C and C'-M', that are both based on impersonal exchanges. In sum, where circuit theorists collapse money into credit and thus see credit relations as the dominant type of monetary exchange relation, with impersonal exchange relations subsumed under this type, Marx on the contrary separates money from credit and sees the commodity exchange relation as the dominant type of monetary exchange relation with credit merely representing a subordinate type of relation. As we shall now see, this difference of approach to the money-credit nexus is absolutely crucial to the understanding of the difference between bonds and bank loans.

From a purely substantive standpoint, corporate bonds and corporate bank loans are simply alternative ways in which corporations raise money from creditors. From a formal standpoint, however, bonds and bank loans represent two very different types of debt: bonds notionally come under the commodity principle insofar as they signify the compression of the debt

relation into a tradable entity while bank loans do not come under this principle because they signify a credit relation between fixed counterparties. Inside this relation, it is the services of money as medium of exchange that are sold as a commodity for a set term and a set price (the rate of interest), but the credit relation itself is never a commodity. This said, the notional distinction between bonds as tradable commodities and bank loans as non-tradable credit relations only becomes a real, practical distinction under certain specific historical circumstances. If the investors buying corporate bonds do not subsequently actively trade them but simply hold them to maturity, then the distinction between bonds and bank loans is effectively erased. This was the situation through most of the 20th century not only in the bank-centred corporatist networks of continental Europe and East Asia where cross-ownership of bonds was an integral component of these networks but also in the supposedly capital market based Anglo-Saxon economies inasmuch as bonds, although sold to a wider array of investors, nevertheless tended to be held to maturity. It is only in the very recent period that corporate bonds, along with corporate equities, finally became commoditised with the steep rise in securities trading, the catalyst for this development being the transformation of institutional asset management into a mass industry.

In circuit theory, asset managers such as pension funds and insurance companies do not constitute a sector in its own right separate from the household sector, the assumption clearly being that any differences separating professional asset managers from households can only be those of degree (e.g the former have greater expertise than the latter) and not of kind (i.e both types of investor ultimately face essentially the same type of investment choices). This assumption certainly had validity in the period when asset management was merely a small cottage industry catering for the wealthy: just as households, when including bonds or shares in their wealth portfolios had no reason to subsequently trade these securities in any active sense, so was it also for professional asset managers insofar as their task was simply to try and generate a higher return on a wealth portfolio, subject to a given level of risk, than was possible for households. However, the assumption lost its validity at the point where asset management became a mass industry catering for large sections of the population. As happens when any industry grows in scale, institutional asset management has shifted towards the standardisation of investment products and processes in order to accommodate the increased demands on its function while containing the costs of that accommodation, and it is this shift that has in turn caused a fundamental divide to open up between households and asset managers concerning portfolio management and the status of trading. For households,

who never have cause to treat a portfolio as a product to be marketed to the public, securities trading always remains an exogenous activity in that while necessary to set up a portfolio it is not subsequently necessary to its maintenance. By contrast, securities trading has become an endogenous activity in the case of mass marketed standardised portfolios because it is now required not only for the construction of these portfolios but also for their subsequent maintenance to a target risk-return ratio as advertised in a fund prospectus. As institutional trading has to be very frequent and thus short term in nature it can take on the appearance of speculation even while in essence it has nothing to do with speculation. Short term trading that is genuinely speculative has indeed grown in recent decades in line with the growth and closer integration of the world's capital markets, but in the final analysis it is not speculation but portfolio rebalancing that provides the chief explanation for the observed steep rise in capital market trading volume⁵.

The growth of the capital markets in size and turnover activity helps to explain the parallel growth in size and turnover activity in the money markets⁶. Central to this explanation is the conundrum facing commercial banks concerning liquidity provision. As can be seen in figure 3 detailing the growth of the financial sector relative to the production sector since 1980, money stock growth has broadly kept pace with material output growth while securities stocks have grown at a far faster rate. Of course, the size of an economy's money stock can never deviate to any significant degree or for any significant length of time from the size of its material output base because the dominant component of that stock is 'endogenous' money, and the whole point of this classification is to bring out the fact that the supply of bank credit is always determined by production and consumption needs. However, whatever the reasons for the slower growth of bank money, the fact remains that this development conflicts with the parallel increase in the institutional investor demand for liquidity. The expansion of the money markets is ultimately nothing other than a manifestation of the way in which this conflict is resolved by banks through the simple technique of cash recycling: banks with surplus cash at any point in time lend to deficit banks not only to generate returns on the cash and thus boost profits but also because of the knowledge that at some later point they themselves may be in deficit and thus in need of short term cash loans. In effect, the enormous expansion in short term inter-bank lending and borrowing activities (which take collateralised as well non-collateralised forms) represents a continuation of the same

⁵ For further details on this subject see Grahl and Lysandrou (2006)

⁶ For further details see Grahl and Lysandrou (2003; 2014)

conservation principle that underlies bank credit: in the same way that when banks hire out the services of money they thereby expand the amount of purchasing power available while helping to conserve the quantity of exogenous or state issued money, so it is that when banks recycle cash amongst themselves at great speed and in huge volumes they are thereby able to continue boosting the supplies of liquidity to the financial markets while at the same conserving the quantity of endogenous money.

The conclusion that falls out of the above discussion is that circuit theory's rejection of methodological reductionism is doubly disadvantageous in that its highly aggregative point of departure prevents it not only from seeing across the economic system and identifying what all its sectors have in common but also from seeing across time and identifying the emergence of new sectors and of new norms of behaviour in existing sectors. The point is that the distinguishing characteristics of households, firms and banks in the 19th or 20th centuries are not all that different from the characteristics that these sectors have in the present, which means that to keep attention consistently focussed on these sectors and on the distinct functions that they perform runs the risk of missing out on the emergence of any new economic phenomena. Contrast this situation with the possibilities opened up by Marx's methodological reductionism. The advantage of this approach lies not merely in allowing one to see across space and identify what all sectors of an economy have in common, namely a conformity with the commodity principle, but also to see across time and thereby track the unfolding development of this same unifying principle.

Capitalism itself marks a certain critical stage in this development: elements of commodity relations may have existed in virtually all pre-capitalist formations, but it is only with capitalism that commodity exchange relations are stretched to the point where they dominate all other economic relations and this is because it is only with this system that the commodity principle is deepened to include the labour power and capital capacities as much the material output flowing from those capacities. Now if the very emergence of capitalism marks a watershed in the historical development of the commodity principle, so must its subsequent expansion mark a continued development of that principle, both in the sense of continued 'stretching' – i.e. more entities of the same type become subject to social standards of pricing and provision – and in the sense of continued 'deepening' – i.e. further types of entities become subject to these standards. Equity and debt securities come under this latter heading: always notionally capable of becoming commoditised, it is only now that the specific historical circumstances requiring their actual commoditisation have fallen into place. This

last point is key here, for once it is understood that bonds and equities have finally been brought under the commodity principle it is then but a short step to understanding how financialisation logically fits in with capitalism's history as a commodity system: it simply marks the point in that history where financial commodities displace material commodities as the dominant matter in the system.

4. Financialisation in historical perspective

To define financialisation as the domination of financial commodities over material commodities is to open the way to explaining why this domination is, generally speaking, a functionally necessary and hence irreversible development. Before elaborating on this explanation let us again look at the basic reason why circuit theorists construe financial market domination as a dysfunctional and hence reversible development. That reason is linked to the fact that the focus of attention in circuit theory always remains fixed on firms' production function: if firms' rationale is to produce goods and services for consumption, the rationale for securities is to provide one of the means by which firms can raise finance to assist their production function. From this standpoint where what is normal is that finance serves production, it follows that financial markets should remain comparatively small, stable and passive. On the contrary, if these markets become too big and too active to the point where they appear to force the real sector to support them rather than the other way round, then this development can only be interpreted as a highly abnormal one. As for the explanation of what is driving this abnormal development, this too is framed in terms of the central focus on production: as long as the rate of growth in aggregate consumption levels keeps pace with the growth of output, profits can be ploughed back into investments for production thus continuing the production-consumption cycle; however, when consumption levels fail to keep pace with output growth thus causing profit realisation problems, firms will seek alternative ways of realising profits most of which end up one way or other in boosting the size and speculative character of the financial markets.

We agree that financialisation is in the end driven by the need to outstep constraints that exist in the GDP realm, but these have less to do with production constraints than with the constraints of time. Financialisation is the domination of the markets for financial commodities over those for material commodities, but if these financial commodities, debt and equity securities, are nothing other than tradable claims on the future income streams

generated by firms and governments, it follows that the systematic expansion of the financial markets can mean nothing other than the systematic occupation of the future. This colonisation of time is analogous to the colonisation of geographical space. Take the example of Latin America in the time not only before its different national states won independence from Portuguese or Spanish colonial rule but even in the time before European colonisation. The first European arrivals in this continent were explorers, adventurers and fortune seekers and only afterwards was there an influx of large numbers of European families intent in settling and developing the land and its resources. Just so with the future: this has long been a time dimension occupied by speculators, swindlers and fraudsters, but it is only now that it is being shaped and developed by groups and institutions intent on its permanent settlement. The above analogy goes further, for just as the major driving force behind the European colonisation of Latin America, as of other regions of the world, was to escape material resource constraints, so is the major driving force behind the colonisation of the future the need to escape the constraints of the present.

The part played by national governments has been pivotal to this spatialisation of time, for if the chief impetus behind the growth of the capital markets has come from the bond markets as can be seen in figure 3, the chief impetus behind bond market growth has come from governments. The latter have always had to rely on bond issuance to finance deficits, but if the government bond markets remained comparatively small up to about 1980 this was in large part because of the absence of a deep enough volume of private investor demand. The situation changed after this point in time because a) it was roughly from then that the reorientation in government policy away from universal towards more selective forms of social and welfare provision became a pronounced trend; b) because it was this trend that was chiefly responsible for the transformation of institutional asset management into a mass industry and c) because it was this transformation that helped to transform in turn the size and depth of the government bond markets. Of particular importance in this regard are the insurance companies not only because the repayment profile of their liabilities forces them more than is usual to rely more on the fixed interests paid by bonds than on the variable dividends paid by equities but also because the maturity profile of their liabilities dovetails more neatly with the preferred maturity profile of government bonds. The fact that insurance companies, as also pension funds, have determinate amounts of liabilities falling due in 10 or 20 or even 30 years in the future makes it easier for governments to issue determinate amounts of bonds of similar maturities thus enabling them to more easily spread borrowing

costs over time. Essentially the same logic involving institutional investors also underpins the parallel rapid growth of the corporate bond markets after 1980. These markets have traditionally been less liquid and hence less developed as compared with their equity counterparts because the much higher average monetary value of individual bonds has precluded all but the very wealthiest households from direct participation. However, this has now changed as mass household participation in the bond markets has become a reality via the intermediary role of institutional asset managers. As the presence of these managers in the corporate bond markets has grown so also have the cost advantages of corporate bond issuance over corporate bank loans: banks always need to be heavily compensated for any long term tie up of their capital, but bond holders need no such equivalent level of compensation now that the corporate bond markets are deep and liquid. Although large corporations still tend to rely on bank loans for their very short term borrowing needs, bond issuance is now the preferred form of long term corporate borrowing.

While governments and corporations have reaped benefits from the increased depth and liquidity of the bond markets brought about by the growth of institutional asset management, the flip side of this development is that it has also made both types of security issuing organisations subject to far tighter governance, accounting and disclosure constraints than was previously the case. The explanation ties in with the standardisation of institutionally managed portfolios and the corresponding change in the role of securities trading. In all previous eras where frequent trading was not essential to the maintenance of bond or equity portfolios and where the original securities purchased by investors would typically be held to maturity or indefinitely in the case of equities, agreements over what should be the appropriate degree of investor protection, the appropriate form of financial reporting or the appropriate level of transparency could be reached on a bilateral basis. However, this is no longer possible in the current era where the typical portfolio that is marketed to the public is a standardised product carrying a specified mix of risk and return. As such portfolios presuppose constant trading if they are to be kept to their advertised investment targets, there has to be common agreement amongst all investors as to how to measure and thus price the risk characteristics of the securities that are being traded, and such common agreement presupposes the imposition of socially sanctioned – as opposed to privately negotiated – governance, accounting and disclosure standards on all security issuing organisations. This imposition is often interpreted as something that is economically dysfunctional in that it hinders rather than promotes the production or service provision functions of corporations

and governments. However, this interpretation misses the point of the new standards of behaviour that are now being enforced in the capital markets, which is that they have less to do with the exigencies of production than with those of investment management. Given the mass popular demands made on their investment management function, institutional investors now see governments and corporations as organisations whose role is not only to provide the goods and services to meet the consumption needs of households but also to provide investable securities to meet their own portfolio needs. From this standpoint, it follows that just as households check the material quality of goods against prevailing production standards to ascertain their suitability for consumption, so do institutional investors check the risk quality of securities against prevailing governance and accounting standards to ascertain their suitability for inclusion in a portfolio.

To construe financialisation as a logically consistent and functionally necessary outgrowth of capitalism as a commodity based economic system is not to argue that this outgrowth has no accompanying dysfunctional characteristics. On the contrary, it is fully accepted that there are such characteristics, one of the most notable among them being the ever growing global concentration of wealth in the hands of a tiny number of individuals⁷. While there are several contributory factors to this wealth concentration, there is little doubt that financialisation has helped both to accelerate and accommodate it: the former through such practices as making securities-related inducements a major component of corporate and banking remuneration packages, and the latter through offering the accumulating amounts of private wealth a convenient means by which it can be stored in a compressed and portable form. The implications of these observations is that were wealth to be more evenly distributed through, say, government coordinated wealth taxes, the size of the capital markets would be appreciably diminished as would the amount of speculative trading in these markets given the consequent diminishment of such speculative vehicles as hedge funds and the wealth management arms of investment banks whose major client bases are the high net worth individuals.

The above said, the financial markets would still continue to dominate the real markets on which they rest because there would still remain pressures on organisations to continue colonising the future to escape the constraints of the present. Consider governments. The growing complexities of modern economies present governments with enough difficulties in trying to balance their expenditures against their tax revenues, but such difficulties will only

⁷ For further discussion of global wealth concentration and its economic impact see Goda and Lysandrou (2014)

be further compounded with new pressures such as those connected with population ageing and the consequent rise in dependency ratios. Consider next the large corporations. The rapidity of technological and institutional change already make it imperative for them to be always ready to tap the capital markets for extra funding so as to be able to meet the new competitive challenges, but such challenges, and hence the need for capital market dependency, are only likely to be reinforced with the continuing globalisation of the product markets and the consequent continuing removal of any protective barriers. Turning to the other side of the equation, consider finally asset managers. The continuing privatisation of welfare and social provision as cash strapped governments force increasing numbers of households to make their own retirement and health arrangements will only mean a continuing increase in demands made upon institutional asset management, which in turn will only mean a continuing increase in institutional investor demand for investable securities. In sum, financialisation is here to stay. It may be that at some point in the distant future there will come into place new types of social structures such as will eliminate all these pressures on organisations to rely on the financial markets as a means of coping with the latter, but these structures presuppose a system of social organisation that transcends the current capitalist system based on the commodity principle. As long as we are stuck with this system, financialisation will continue to be an increasingly integral part of it because there will continue to be a need to annex time as an extra dimension of economic activity.

5. Conclusion

There was a time when circuit theory could give some meaningful insights into the nature of monetary production economies. That time is over. By far the most significant development in the monetary sphere of capitalism in recent decades is that of financialisation, a phenomenon that circuit theory cannot explain other than by omitting some of its most important characterising features while indiscriminately dismissing those features that it does address as dysfunctional outgrowths. The crux of the matter is that a methodological framework that takes the aggregate monetary circuit as its basic unit of analysis is simply not flexible enough to accommodate the new reality of financialisation, one where the financial markets dominate the real markets, where impersonal financial trades dominate personal financial relations, where trades between agents belonging to the same sector dominate trades between agents belonging to different sectors and where trading for portfolio rebalancing and

liquidity generating purposes dominate other trading motives. If there is to be a coherent and logically consistent account of what financialisation amounts to, of what drives it and of where it is headed it must be based on a more reductionist and hence more flexible and adaptable unit of analysis. This paper has proposed Marx's concept of the commodity as the appropriate analytical unit.

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