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**Finance Capital and the Institutional
Foundations of Capitalist Finance:**

Theoretical Elements from Marx to Minsky

Working paper

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I

Almost a century ago the marxist economist Rudolph Hilferding warned that the critical comprehension of contemporary - early twentieth century - capitalism implied the development of a theory of finance capital. Finance capital, according to Hilferding, was a category which at the same time identified a particular form of *capital* and a new form of *capitalism*¹. To grasp in its complexity this economic and social transformation Hilferding developed a sophisticated analysis of the institutional mutations which accompanied the autonomisation of finance capital, an analysis the marxist tradition later reduced to a theory of bank dominance of industrial capital and of capitalist class structure as networks of interlocking directorates among large corporations (Niosi, 1985). The institutional foundations of Hilferding's analysis, which constitute the whole second section of *Finance Capital* entitled "*The Mobilisation of Capital, fictitious capital*", are developed prior to his conclusion in sections three and four of the book that then existing capitalism was drifting towards a monopoly form dominated by large universal banks. The institutional forms which are examined by Hilferding in section two were the emerging universal banks, large manufacturing corporations and buoyant and dynamic industrial stock exchanges. Finance capital was understood by him, first and foremost, as the product of the interaction between these three institutional forms, an interaction structured by and for the circulation of liquid fictitious capital.

Unfortunately, Hilferding's institutional insights weren't further developed by the scholars of the marxist tradition. The study of these economic institutions, of the structure of their interactions, of *finance capital* as the circulation of fictitious capital in this structure and of *finance capitalism* as a historic form *per se* was pursued by economists of the heterodox tradition such as Veblen, Keynes and Minsky rather than by marxists who drifted towards a theory of "monopoly" state-capitalism (De Brunhoff, 1973). Institutional analysis of financial systems was revived in France by the regulation school theorists, such as Aglietta (1976) and Boyer (1999) as they drifted from marxism towards a renewed form of critical institutionalist macroeconomics. This inquiry clearly situates itself in this regulationist tradition and we believe that Hilferding's warning of the importance of understanding, critically, Finance capital is, a century later, more important than ever.

¹ Just as industrial capital, as analysed by Marx thirty years before, was the unity of the production of capital and of reproduction of the whole capitalistic mode of production.

The last thirty years have seen major institutional changes which many have interpreted as the financialisation of capitalism and the triumphant return of finance capital dominating industrial and commercial capital (Lordon, 2000). Critical comprehension of contemporary capitalism once again necessitates the development of a theory of finance capital both as an economic structure and as a more general social form of capitalism. And this theory must, as Hilferding had rightly seen, ground itself in an analysis of the institutional structure by which finance capital reproduces itself and participates in the general reproduction of capitalism. This paper, by adopting a multidisciplinary approach, combining the findings and perspectives of economic sociology and the heterodox macroeconomy attempts to present an original and systematic theoretical analysis of these institutional foundations and thus hopefully contributes to the theoretical renewal and extension of current critical analysis' of financialisation. It is an attempt to weave together a marxian concept of finance capital with a keynesian concept of capitalist finance. This synthesis has been built on the institutional dimension of Minsky's financial theory of investment. We have thus expanded and enriched Minsky's work with theoretical insights from classical heterodox thinkers such as Marx, Hilferding, Keynes.

II

From Marx to Minsky: finance capital and capitalist finance

A Marxian Concept of Finance Capital

Marx synthesized the specificity of capitalistic economic relations in his famous formula $M-C-M'$ ², a formula he opposed to mere commodity exchange relations characterised by the $C-M-C$ formula. In this second formula money appears as a simple “numéraire”, as an equivalent for values which exist in themselves, the pure form of a commodity exchange relation is thus MM , a social relation typical of barter systems, money *facilitates* commodity exchange as Smith rightly noticed, but in no way initiates it, the social relations which render exchange necessary exist independently of money³. Now in a capitalist economy, characterised by $M - C - M'$, money is at once the initiator and the finality of the social relation, even more so, the relation is one of accumulation and reproduction of money as capital and of *capital as money*. Access to money, *the capacity to mobilize money as capital*, and reproduction of money values is thus a prime determinant of the accumulation process in a capitalist economy.

For Marx the reproduction and accumulation of capital as money reaches its purist and most fetichised state in $M-M'$, money-capital engendering money-capital, a form - characterised as an irrational aberration - that he analyzed as interest bearing and fictitious capital, and a form we

2 M meaning money, c meaning commodity, the formula represents a process which can be decomposed in a certain number of «moments», each moment being the dialectical mediation of the following figure, the formula represents as well the basic atemporal mode of existence of capital as a social relationship characterised by value valorizing itself.

3 These relations as Smith had discovered where the product of the «division of labor» between independent producers, money as a means of exchange has thus nothing to do with capitalism, just as exchange value can also be traced to a precapitalist economy. In Capital Marx shows how exchange relations are the result of the extension of capitalist production relations, the division of labor is not the spontaneous product of independent producer specialisation it is rather the conscious result of capitalist accumulation, it is also this accumulation which accentuates the development of exchange relations by expropriating non-capitalists of their means of subsistence, transforming them into wage laborers and thus rendering them dependent on commodity exchange for survival. The irony with which Marx criticizes those economists who analytically presuppose the existence of « free » labor at the disposal of capitalists could be turned against him when in the same breath he presupposes the existence of the liquid money capital his « Money bags » uses to hire « free » labor.

will use as a formal definition of *finance capital*. According to Marx the M-M' form is fetichistic and fictitious because, as money-capital engendering money-capital, it is a mere anticipation of the real process of accumulation, for Marx this relation can reproduce itself only by latching on to another form of economic reproduction and diverting value from the other accumulation process. In precapitalist societies the M-M' form manifests itself as usury, in societies dominated by the capitalist mode of production the M-M' form is embodied and reproduced by the « credit system » as a specific commodity: as commodified money capital. In marxian terms this relation can be represented as $M_f \dots M-C-M' \dots M_f$, M_f meaning money belonging to finance capitalists and M_f' meaning money returning to finance capitalists in which $M_f < M_f'$, the three dots signify a rupture in the process, just as in the developed form of the original formula of capital $M-C \dots P \dots C'-M'$, P, the production process, which generates surplus value is buried under the apparent autonomous capacity of commodities to generate their own surplus value in the circulation process. The fetichism of the M-M' form is similar in nature but more pervasive: money capital appears as a commodity having the capacity to generate autonomously surplus value in the form of interest, without any reference to the « real » production process.

In $M \text{ -- } M'$ we have the meaningless form of capital, the perversion and objectification of production relations in their highest degree, the interest-bearing form, the simple form of capital, in which it antecedes its own process of reproduction. It is the capacity of money, or of a commodity, to expand its own value independently of reproduction -- which is a mystification of capital in its most flagrant form.

For Marx this fetichism is more pervasive because the surplus value generated by the use of lent money as capital is anticipated before any real production takes place as predetermined interest payments. The distribution of surplus value as interest, and assimilated forms of financial rent (dividends) is understood as the necessary retribution of money – capital objectified in the interest rate. M-M' is thus a very real constraint on individual non financial capitalists because it represents debt, *i.e.* the contractual obligation to make a defined amount of money payments in the future, in exchange for “money now” that can be mobilized as capital (spent) and invested in

wages, machines and commodities⁴. Because of its fictitious nature, this M-M' form has, according to Marx, no inner limitations, its limit can only manifest itself outside the credit relation as a financial crisis.

Our marxian notion of finance capital takes on a more refined form: M-M' can be understood as a two sided relation permitting the simultaneous mobilization of money as capital and the reproduction *and accumulation* of money as capital, as «self expanding value» and of capital as money, as the socially recognized means of payment, which means that though capital valorises itself, it ideally (and contractually) remains in a liquid form. As a social relation, it is the conflictual and contradictory unity of the *capacity*, in modern terminology, *to finance investment*, by creating debt, and the *capacity to appropriate and accumulate revenue in a money form*, before any productive activity has taken place, thus anticipating the surplus value that could be generated by money being effectively transformed into productive capital. It is thus at the same time a category referring to the forms of investment and category which corresponds to forms of distribution. Finally, because of its fetichisation as a commodity, finance capital, as M-M', mediates economic relations by obscuring its dependence on other forms of capital for its reproduction and expansion, it must present itself as self-expanding value, as autonomous accumulation, and eventually as the real form of capital against which all other forms must measure themselves.

It becomes a property of money to generate value and yield interest, much as it is an attribute of pear-trees to bear pears. And the money-lender sells his money as just such an interest-bearing thing. But that is not all. The actually functioning capital, as we have seen, presents itself in such a light, that it seems to yield interest not as a functioning capital, but as capital in itself, as money-capital.⁵

A social concept of finance capital must take into account these two sides of the relation and question on the one hand the social process of institutionalisation of the capacity to mobilize

⁴ In the manuscripts that have been published as Book three of Capital, Marx spent quite a few pages analyzing the contradictions arising from the differential relationship of lending capitalists and borrowing capitalists to the mobilization of money as capital on the one hand, and to the reproduction of capital as money through production on the other hand.

⁵ Marx, Capital, book III, Chapter 24.

money as capital, on the other the social process of institutionalisation of the distribution and accumulation of surplus value as self-expanding money, without obscuring the contradictory unity of these two tiers of finance capital or the mode of articulation of this unity to the more general economic reproduction process and the way this articulation's reality is reified by finance capital's fetichistic quality.

As was said earlier one can represent in a marxian graphical form finance capital as M-M' somehow articulated to capitalist accumulation M-C-M'. But the linear version of the marxian graphical form of finance capital, Mf ... M-C-M' ... Mf', Mf, is inadequate because it obscures the unity between the two constitutive moments of finance capital. A better rendition would be to add a vertical dimension to the graphical form and present *finance capital* as it is presented in figure 1⁶. The numbers in diagram refer to the basic social relations which form the structure of finance capital as outlined above, relations 1 and 2 refer to the specific modes of articulation of finance capital to economic reproduction, whereas 3 refers to finance capital as an autonomous unified sphere of economic activity:

- 1.being the relations that command the financing of capitalist investment, what in marxian terms was presented as the social process of mobilisation of money as capital;
- 2.being the relations that command the distribution of revenue in a financial form, what in marxian terms was presented as the accumulation of capital as money;
- 3.being the relations that unify finance capital as the social process of *mobilisation* of money as capital and of *accumulation* of capital as money. One of the most simple and basic expressions of this unity is the interest rate, more complex forms are financial markets, institutions and instruments. It is these relations that form the basis for an autonomous sphere of financial circulation of commodified (or liquid) money capital and from which originates the fetichistic power of finance capital (its ideological dimension) as self expanding value. It is also through these relations that the general articulation of financial circulation to industrial and commercial circulation is determined⁷.

⁶ See annex for figures 1 through 3.

⁷ One can find a detailed institutional analysis of this in Keynes' Treatise, more on this in the next section.

A final note, this unity is contradictory in the sense that the relations that structure one pole (1 or 2) can be antithetical to those that structure the other pole (1 or 2), for example a high interest rate might favor the accumulation of capital as money but disfavor the investment of money as capital and vice versa. More profoundly the contradictory nature of the unity stems from the fact that the *effective* unity of finance capital depends on the actual capacity to reproduce money capital from points 1 to point 2, whereas the unity created through financial circulation is an abstract unity that anticipates (and is mediated by) this effective unity, in this sense finance capital can be considered « fictitious ». Financial crisis and speculative bubbles are the ultimate expression of this mediation of the abstract by the effective.

All the elements contained in the above definition of finance capital can be found in Marx and in marxist literature such as Hilferding's *Finance Capital*. The major difference between the perspective we are trying to develop and a marxian perspective is that the unity of the two tiers of the finance relation is understood in the marxian tradition through a loanable funds approach while we think a regulationist or postkeynesian endogenous money approach is more appropriate. We already anticipated this problem at the very beginning of this section when we underlined the absence in Marx's capital and in marxian analysis in general of a thorough and plausible account of the social process of by which the money that can be mobilized as capital is created and distributed, as was said: throughout *Capital* Marx assumes that his capitalist, «Mr Moneybags», has money in his pockets before he enters the sphere of circulation in search of free wage labor. Where does this money come from, how is it created, through what social process is this capacity to create money institutionalized? Embarrassed Marx admits that he has no satisfactory answer to these questions when he states in, chapter two "On Exchange", the logical impossibility to derive money form pure exchange relations⁸:

In their difficulties our commodity owners think like Faust: "Im Anfang war die That." They therefore acted and transacted before they thought. Instinctively they conform to the laws imposed by the nature of commodities.

⁸ On this see Jean Cartelier, 1989, "Marx's Value, Exchange and Surplus Value Theory: A suggested interpretation", *Working Paper no. 26, Jerome Levy Economics Institute*, New York, Bard College

And thus money is presented as a «crystal» spontaneously forming itself in exchange relations out of the substance of an «excluded» commodity: gold. The social creation of money as capital is thus reduced to the transformation of an existing stock of precious metals into coin and the mobilisation of this commodity money as finance capital is the process by which idle coin is loaned to enterprising industrial and commercial capitalists and «put to work». Banks arise as intermediaries whose social functions are the collection and centralisation of idle money which is thereafter loaned out to industrial capitalists at a market rate which represents the relative economic power of a «monied» interest and an industrial interest inside the capitalist class. At its worst the Marxian loanable funds approach ends up reconfiguring the class struggle as a struggle between rival factions of the bourgeoisie, high finance versus hard headed industrialists, for the control over a preexisting stock of the means of payment. At its best Marx's approach shows how the development and expansion of the credit system, and thus the growing centrality of finance capital as a necessary mediation of industrial capitalism's economic reproduction, profoundly alters the most basic and fundamental institutional characteristics of capitalism. We shall, further on, as we study Minsky's various financial regimes (Commercial and Finance capital), present and integrate Marx's and Hilferding's insights on these major institutional transformations.

Finance and Endogenous Money, the Keynesian Circuit Perspective

Having outlined a basic structure for a social concept of finance capital we must now push our inquiry beyond the marxian horizon and explore the relationship between finance capital and endogenous money as an institutional form typical of capitalist economies. We have turned to Minsky's «keynesian» perspective as an outline of the structural relationships between finance capital, investment and accumulation in a non-loanable funds approach. The endogenous approach inherent to the keynesian perspective seeks to explain how money as a social institution is *created and destroyed, rather than presupposed*, by the financing process of capitalist accumulation. It involves the analysis of banks as a particular economic institution endowed with the capacity to create legally binding means of payments, i.e. bank money. This means that attention will shift from *finance capital* as an elementary social relation towards its general institutional infrastructure: *capitalist finance*. We shall see that the task of mobilising money as capital is a task first and foremost monopolised by banks who have the socially recognized capacity to create bank money by drawing debts on themselves and ceding these debts to other economic actors as socially acceptable means of payments.

According to Marc Lavoie the endogenous approach to money is built on three essential propositions which directly oppose it to the loanable funds approach of neoclassical and even marxist economic analysis: loans make deposits, deposits make reserves, and money demand induces money supply⁹. If there is general agreement among economists that banks are the central institutions of capitalist finance, the endogenous approach specifies that it not as financial *intermediaries* who recycle and put to work idle funds that have been saved by thrifty individuals, it is because banks can initiate the accumulation process by extending credit created *ex-nihilo*. Created credit becomes deposits which, as Lavoie points out, constitute the banks' reserves. The credit extended by banks is therefore not a fraction of before held reserves, « savings aren't multiplied as loans », savings as we shall see are the end result of the financial

⁹ Marc Lavoie, 1985 cited in Randall Wray, 1990, Money and credit in capitalist economies, Cheltenham UK, Edward Elgar, p. 73.

process not its condition of possibility. Savings have thus more to do with income distribution than with investment, in fact they are a central determinant of income distribution in a financial form. From this it follows that money as a stock, as a specific measurable quantity, is not an effective mediation of the economic process, put more simply money is not a scarce resource that different investment projects must compete for. The exhortation of thrift and saving among would be «small time» rentiers and investors which has dominated economic and policy discourse for the past twenty years is thus an ideological phenomenon with no effective economic founding but with deep and important political and ethical consequences and which are ultimately grounded in a transformation of the social stratification process induced by a financialisation of the income structure. What is determining for capitalist investment is not access to a pre-existing stock of idle money, but rather access to lines of credit extended by banks at terms which permit profitable investment, in a word access to endogenous bank money as flow of credit not as stock of funds. This means, as suggested by Cartelier¹⁰, that we can recast Marx's class distinction between capitalist and worker, in an endogenous money - Kaleckian approach, as a distinction between those social actors that have access to bank credit for investment purposes (i.e. as Kaleckian spenders) and those that have only access to banks as users of income deposits (i.e. as Kaleckian earners)¹¹. We shall see that as capitalism evolves the dominant figure of the social actors which present themselves before banks as capitalists change from individual entrepreneurs to large and impersonal corporations.

A defining principle of modern capitalist financial systems is thus that the creation of money has been attributed to banks as economic institutions who have the socially recognised, and politically enforced, capacity to draw debts on themselves and transfer these debts as means of payments to be used by third parties in their transactions. The specific sociohistoric process by which banks have gained this capacity cannot be examined here. The most we can say for the

10 In Jean Cartelier, 1989.

11 This, we think, will be a very fecund interpretive reformulation for the understanding of the polarisation of political debate around the social function of Banks. It should help to clarify the question of the emergence of free banking movements in nineteenth century industrialising North America as a struggle against a banking

moment is that this capacity is intimately linked to the development of the central bank and its function of lender of last resort. Our working hypothesis is that by freeing individual banks from their embeddedness in a community of stock holding notables as lenders of last resort, it freed banking from dependence on personal bourgeois relationships, and favoured the consolidation from the seventeenth to the nineteenth centuries of truly national payment and financial systems structured around a public «national» debt and a quasi-public central bank¹². We will superficially examine these questions when we review and expand Minsky's typology of financial systems in the next section of this paper.

If Schumpeter was among the first of twentieth century economists to underline the essential role played by banks in capitalist economies it was Keynes' who developed, in his *Treatise on Money*, a conceptual apparatus which implies endogenous money created by banks as the corner stone of capitalist financial systems. We have thus turned to the *Treatise* to get a basic understanding of this process. The material drawn from the *Treatise* will prepare our discussion of Minsky's approach to finance capital and capitalist finance. One could object to our using the *Treatise* by arguing that the analysis it contains is rooted in a specific and dated institutional setting, which since, has evolved, and that this historical process invalidates Keynes institutional work (without invalidating his mathematical developments). We contend that the institutional analysis contained in the *Treatise* effectively reflects a specific institutional context (similar to the one which confronted Hilferding when he was writing *Finance Capital* and Veblen as he wrote his *Theory of Business Enterprise*, but each in a different national context) and that it is precisely in this context that the basic structure of twentieth century capitalist finance was institutionalised. We also not only believe that contemporary transformations of capitalist finance still participate in this basic institutional reality but we also think that these transformations are

system entrenched in the interpersonal relations of an eastern commercial aristocracy (Montreal and Halifax merchants in the case of Canada and New England in the case of the US).

12 In this sense our approach could be qualified as « inverse » chartalism, it is the financing of the public debt which unifies the payment system and imposes a national currency rather than the positive side of fiscal policy : tax collection. The empirical elements which lead us to formulate this hypothesis are drawn from Kindleberger, Dickson and from canadian financial history. The cultural and ideological importance of the national public debt

all the more intelligible when interpreted against the backdrop of early twentieth century capitalist financial structure.

Banks are defined in the *Treatise* as type of economic institution which: (...) *creates claims against itself for the delivery of money, i.e. what hereafter we shall call Deposits, in two ways. In the first place it creates them in favour of individual depositors against value received (...) this corresponds to a bank's familiar role as an institution which manages savings, but continues* Keynes :

(...) there is second way a bank may create a claim on itself (...) it can authorise the creation of a deposit in its books entitling the customer to draw cash or to transfer his claim to the order of someone else (...).¹³

[A]nd provided that they move forward in step (...) there is no limit to the amount of bank-money which the banks can safely create¹⁴.

Keynes further argues that banks create money endogenously in *two* distinct ways:

[A Bank] may (...) purchase assets, i.e. add to its investments, and pay for them, in the first instance at least, by establishing a claim against itself. Or the bank may create a claim against itself in favour of a borrower, in return for his promise of subsequent reimbursement; i.e. it may make loans or advances.¹⁵

Contemporary developments of the endogenous approach to money have mostly explored the latter channel of monetary creation, i.e. loans that become business deposits which are eventually launched into circulation as socially acceptable means of payments. We will study this channel as analysed by the « circuit » approach before turning to the other channel which is the one that concerned Minsky. Following Keynes' terminology in the *Treatise* we will call the loan channel *creation of money destined for « industrial circulation »* and the first channel *creation of money destined for « financial circulation »*, this distinction is a first formulation of the well known

in forming the basis for a unified «commercial society» is stressed by J. A. Pocock in *The Machiavellian Moment*. In the course of our thesis we will explore in depth this question using Canadian historical data.

13 John Maynard Keynes, *Treatise on Money*, London UK, Macmillan, 1958, p.24

14 John Maynard Keynes, *Treatise on Money*, London UK, Macmillan, 1958, p.26

15 John Maynard Keynes, *Treatise on Money*, London UK, Macmillan, 1958, p.24.

enterprise/speculation dichotomy used in the chapter 12 of the *General Theory*. In the *Treatise* the link with bank money creation is much more obvious, this is why we have chosen this reference over the other better known one.

Industrial circulation is defined by Keynes as:

(...) the business of maintaining the normal process of current output, distribution and exchange and paying the factors of production their incomes for various duties which they perform from the first beginning of production to the final satisfaction of the consumer.¹⁶

Whereas *financial* circulation is:

(...) the business of holding and exchanging existing titles to wealth (other than exchanges resulting from the specialisation of industry), including Stock Exchange and Money Market transactions, speculation and the process of conveying current savings and profits into the hands of entrepreneurs.¹⁷

This dichotomy in the forms of monetary circulation reflects itself, according to Keynes, in the creation of different types of bank deposits: rounding out the edges we can define the deposits created for industrial circulation as the stock of income deposits (held by individual wage earners and used to store current income) and business deposits (held by firms and used to pay out current expenses), while financial circulation reproduces savings deposits used to interact in and with financial markets.

In book two of the *Treatise* the distinction between industrial and financial circulation is used by Keynes to differentiate two complementary but also contradictory functions of banks. As this institutional view of banks will be one of the central keynesian contributions to our reformulation of the concept of finance capital, we will cite Keynes at length:

In actual fact the banking system has a dual function - the direction of the supply of resources for working capital through the loans which it makes to producers to cover their outgoings during period of production (an no longer), and of the supply *pari passu* of the current cash required for use in the Industrial

¹⁶ Keynes, *Treatise* I, p. 243.

¹⁷ Keynes, *Treatise* I, p. 243.

Circulation; and, on the other hand, the direction of the supply of resources which determines the value of securities through the investments which it purchases directly and the loans which it makes to the Stock Exchange and to other persons who are prepared to carry securities with borrowed bank-money, and of the supply *pari passu* of the savings-deposits required for use in the Financial Circulation to satisfy the bullishness or bearishness of financial sentiment.¹⁸

We will now examine and propose a sequence of typical interrelations between the money creation process for industrial circulation and financial circulation, our proposal draws together insights on industrial circulation by the circuitist approach and Minsky's theory of financial circulation in a idealtype of capitalist finance built on our marxian framework of finance capital.

Let us thus start by examining the circuit of industrial circulation. We have used as a basic illustration of industrial circulation postkeynesian Louis Phillippe Rochon's reinterpretation and synthesis of french and italian theory of the « keynesian » circuit which segments the process of creation, circulation and destruction of credit money in five distinct stages. The circuit is initiated by firms deciding on production levels and realisable investment projects, this decision is taken in the context of « fundemental uncertainty » and influenced by the state short term and long term expectations¹⁹. The second stage is the provision of initial finance to firms by banks through the endogenous creation of money. According to Rochon the central elements of this stage of the circuit correspond to Keynes' « finance motive». A main argument is that the credit allocated by banks to cover the needs of firms does not in any way correspond to or depend on prior saved funds. The money is created ex-nihilo by the banks and used by firms to finance their current production costs (inputs + wages). The question of how fixed investment is financed remains ambiguous in Rochon's exposé, he seems to assimilate their financing to that of current production all the while stating that there is a possible struggle of interests and a trade off between agents needing long term finance and those needing short term finance.²⁰ A last

18 Keynes, Treatise II, p.347.

19 Louis-Philippe Rochon, *Credit Money and production, an alternative postkeynesian approach*, Cheltenham, UK, Edward Elgar, 1999, p. 20.

20Rochon, 1999, p.26

important remark, though credit may be extended to firms either in the form of once and for all loans, or as credit lines, as long as there is no expenditure on their part, the money created exists as «deposits» in the banking system, in this sense the credit has created its own reserves and the banks «balance sheets are in equilibrium»²¹.

The third stage is initiated as money is spent by firms in the production process and income flows are generated. Income flows take either the form of wages or expenditure on investment goods²². In the *Treatise* Keynes shows how this is mainly an interbank affair, the income flows are actually transfers from one agent's account to another. This leads directly to the fourth stage where money returns to the active firms in the form of receipts as wage earners buy consumption goods and firms buy capital assets. Stage four begins the reflux mechanism where created money returns to banks and is destroyed as firms use the proceeds from sales to reimburse their debts. If the production cycle is to be renewed credit must also be renewed, bank credit can thus be pictured as a «revolving fund». The circuitists as Rochon shows, assume that firms do not hold on to proceeds, but use all earned income to pay off bank debt, there is thus no trade off between paying back bank debts, and carrying over debts into a new period by holding on to proceeds as internal funds a firm is free to allocate. This assumption is very unrealistic and its case is very badly defended by Rochon, in fact the problem is related to the ambiguous treatment of long term investment finance and short term production finance mentioned earlier:

Firms, he writes, will want to reimburse the banks since their initial finance is costing them dearly in terms of interest payments. Reimbursing the banks therefore allows firms to avoid any unnecessary costs. Similarly, banks will insist on getting reimbursed since this represents for them an income. Firms will need to reapply for credit, even if their level production has remained constant. The finance motive is far from temporary.²³

The actual cost of debts is related to a fluctuating interest rate, and firms may wish to hold liquid cash as deposits for precautionary motives rather than reimburse banks, in this case they are

21 Rochon, 1999 p.31

22 These income flows can be represented in Kaleckian fashion, more on this later when discussing Minsky's basic model of corporate capitalism.

buying liquidity by paying interest and this may be worthwhile, finally if banks are creating overdraft facilities rather than once in for all termed loans, the rolling over, from one period to another, of outstanding debt is an automatic process and banks evaluating firms are concerned less with total reimbursement as with sustainable debt levels. As we shall see in our concluding remarks on the circuitist representation of industrial circulation, its main flaw is assume away uncertainty inside the circuit at very specific and important moments.

Uncertainty does appear at the reflux stage of the circuit in the form of household saving decisions. The part of wage income which will not be spent but saved by households and the type of saving is unknown to firms at the moment of the formulation of their investment and production plans. Savings represent a drain on firm proceeds because they divert generated income flows from consumption. This means that a portion of initial financing will not be validated through the wage income - firm income flow channel. At this point Rochon, synthesizing the circuitist position, introduces a distinction between two, macroeconomically significant, types of household savings:

(...) households will use a portion of their saving to increase their liquid balances -hoarded savings deposited in households' savings accounts. On the other hand, they will use the remaining portion to purchase debts on firms: new securities. This can be labelled financial saving.²⁴

The first type of saving, the transformation of a part of the wage income flow into a stock of money held in savings accounts, is function of the households liquidity preference. In this sense money is held as an asset to meet uncertainties.²⁵ Rochon notes that:

The decision by households to demand money as an asset will be met by the banks' decision to supply money. Hence, both at the beginning (...) as at the end of the circuit, the demand for «money» (..) will create the necessary supply: the endogeneity principle operates in each case. (...) the demand for money is an *ex post* notion, that is *ex post* to credit demand and production decisions.²⁶

23 Rochon, 1999, p. 32

24 Rochon, 1999, p.33.

25 Rochon, 1999, p.33.

26 Rochon, 1999, p.33.

The other type of saving, financial saving, is the demand for money to be spent for speculative purposes, it consists in the purchase of securities²⁷. In Rochon's account of the circuit, firms create securities to recapture a part of the wage-income that is diverted from consumption by savings in order to pay back bank loans, this view is backed by Keynes in his analysis of the finance motive²⁸.

The conclusion which can be drawn here is that Keynes - and circuitists- does not see the role of financial markets as supplying fresh finance or financing investment, but rather as closing the circuit. The financial market allows firms to recapture some household savings, and supplies them with additional funding - final finance - with which to pay back loans. As such, the consumer goods market and the financial market play similar roles.²⁹

Financial savings is thus never a means to raise initial finance, or as Rochon forcefully puts it: never can a household portfolio decision lead to the financing of investment.

The allocation of household savings between finance and money is a liquidity preference decision determined by:

the discrepancy between the rate of return on money and the rate of return on other assets (for simplicity, let us assume new securities), as well as uncertainty, either of the future or of the future value of the return on other assets.³⁰

This leads Rochon to propose a liquidity preference ratio r_s/r_d where r_s is the rate of return on securities and r_d the rate of return on savings deposits. From this one could conclude that what is destabilising for the financial system is not an excessive rate of return on securities, in the circuitist scenario this means financial markets are acting efficiently as channels for the return of

27 In Rochon's presentation of the circuit the only existing financial instruments are firms' securities, there aren't any public securities, actually the state as an economic actor is notably absent from the circuit. Integrating the state would imply to distinguish between « inside » and « outside » credit money, one created to finance firms the other created to finance the state.

28 Rochon, 1999, p.34. Note that the thrust of Keynes' argument that securities and consumption are both mechanisms by which firms recapture liquid funds is opposite to the way it is portrayed by Rochon, Keynes issue is to justify the function of consumption as a way to restore liquidity in a context where restoration of liquidity through financial markets is seen as obvious.

29 Rochon, 1999, p.34

30 Rochon, 1999, p.34

wage-income to firms³¹, it is the opposite case, a high return on deposits which attracts an ever greater amount of income into « sterile » savings accounts.

It is therefore the increase in bank deposits which poses a problem for the closure of the monetary circuit: hoarded saving represents a leakage. Liquidity preference represents a problem for the closure of the system.³²

The non closure of the circuit, caused by the existence of savings deposits³³, brings us to its last stage. As we have just seen, the return of income flows from wage earners to firms and then on to banks results in the destruction of credit money by the reimbursement of initial financing debts. But the saved money that is hoarded by households in savings accounts corresponds to a portion of short term bank debt that firms cannot reimburse. It is at this stage that banks become active again³⁴, they find themselves with a stock of savings deposits which correspond to a stock of unpaid short term industrial debt. They thus engage in the conversion of the unpaid short term industrial debt by pledging the accumulated savings of households as long term credit, this can be done either by buying up securities or by providing long term loans to indebted firms. The circuit is thus closed and a new phase can be begin.

The circuit can be represented by figure #2 (where it is compared to the marxian linear circuit): (1)Firms determine investment and production (exogenous) = *credit demand* ⇒(2) banks provide short term finance = *business deposits* ⇒(3) firms engage in production = income flows as *wages* and *business incomes* ⇒(4) money is destroyed as recaptured income flows are used by firms to reimburse debt, uncaptured income is saved = here begins the *reflux* and *financial and deposited savings* **P(5)** saved income is used by banks to transform left over short term debts into long term debts through securitization = cycle ends in an accounting equilibrium. The reflux

31 One wonders how the destabilising effects of financial market bubbles are explained by the tenets of circuitist approach.

32 Rochon, 1999, p.35

33 The appearance of massive Savings deposits of wage earners is a fairly recent historical phenomenon related to fordist accumulation. One is tempted to ask where instability came from before this. See on this Michel Aglietta, *Macroéconomie financière*, paris, La Découverte, 1995.

mechanism is traced by the letters at points A (wages to firms), B (firms to banks), C (financial reflux).

As is shown the figure resembles the linear presentation of the « financialized » marxian accumulation process, stages 1 to 2 corresponding to the initial $M_f - M$, 3 being the accumulation process itself $M - C - M'$ and 4 and 5 corresponding to financial accumulation $M' - M_f'$. And, among other things it shares its same basic problem, a problem Keynes himself was well aware of: there is no room for the unity of finance capital, or for a dynamic coupling of financial circulation to industrial circulation. In the above figure, financial circulation is residual, the possible conflict between the credit needs of industrial circulation and those of financial circulation is evacuated *apriori* by an equilibrium perspective. Uncertainty seems fundamentally limited, banks create money by moving « forward in step » yet what would happen if they didn't, what would happen if banks decided, as capitalist enterprises, to speculate on financial markets instead of simply using them as a compensatory mechanism between short and long term debt, why don't firms also have liquidity preferences, couldn't firms use financial markets for something other than the recapturing of income flows (stocks are in effect property titles and can be used to structure intercapitalist property relations), and finally and most fundamentally can long term investment finance really be assimilated to short term production finance? All these questions point to the problematic institutional assumptions made by the keynesian circuit approach.

One could say that these institutional assumptions correspond to a very specific form of capitalism and a very specific regime of capitalist finance: namely a fordist growth regime coupled to Minsky's managerial regime of capitalist finance where long term investment is funded by public debt rather than private debts circulating in financial markets. Where income flows are mainly wages destined to support mass consumption. Where wage income and productivity levels are structurally coupled to one another in a non-contradictory way. Where

34 One could argue that in the circuitist perspective it is at this stage and only at this stage that banks are really active, since in the first stage they act as passive purveyors of short term credit for investment and productive purposes.

destabilising financial markets are effectively neutralised by, on the one hand, a tight functional compartmentalisation of financial institutions shielding commercial banks from speculative financial pressures, and on the other, high levels of freely circulating public debt that can be used as a non-speculative compensatory mechanism between short and long term debts. These institutional assumptions of the keynesian circuit are not those of Keynes nor of Minsky.

Keynes hoped for a euthanasia of the rentier and the neutralisation of the speculators grip, through the stock exchange, on long term investment decisions. And Minsky theorized a financial system in which short term debt created to support production and long term investment debt belonged to different circuits, each with their own price setting mechanisms allocating in a distinct and sometimes contradictory fashion income flows. Both considered the interaction between banks and financial markets as non residual, both considered that firms had liquidity preferences that lead them to hold cash income (proceeds) not only for precautionary motives but also for speculative purposes³⁵, as we said earlier, to interact with and in financial markets (whether this interaction be profit or control oriented does not matter for the moment).

Bringing financial circulation back in: towards a minskian synthesis of Finance Capital and Capitalist Finance

The keynesian circuit approach, as presented by Rochon, has given us a figure of the mobilisation of money as capital as an endogenous process to industrial circulation in a financial system where commercial banks can legitimately create money as credit. This involves an economy where initial financing is exclusively assured by short term bank credit. Such an economy leaves little room for speculative financial behaviour on the part of firms and also banks, which seem as financial profit seeking private enterprise, rather passive. Financial circulation in such a system is purely residual and is limited to an equilibrium enhancing mechanism. We have turned to Minsky's *financial theory of investment* to correct and complete the one-sidedness of the keynesian circuit, Minsky will help us « bring financial circulation back in» with all its

35 For a discussion of this see Hyman Minsky, Keynes, New York, Columbia University Press, 1975, p.73-77.

destabilising non-equilibrating potential. Minsky's approach will provide us the elements to fully develop a keynesian concept of capitalist finance, and to be able to link it up with the elements we retained from the marxian concept of finance capital.

This will be done in the same fashion as was done with Marx at the very beginning of the paper, the linear depiction of the circuit can be « unfolded » into a more complex hierarchical figure allowing for an autonomous level of interaction between finance as investment and finance as speculative rentier income accumulation, the unity of this level will be the unity of finance capital: a fetishistic process by which financial commodities are *seen as* and *presents themselves as* self-engendering value. The end result, by the way, fits rather nicely with Keynes' analysis of the *conventionalist* social structure of financial markets which determines long term expectations in chapter 12 of the General theory. Figure three is an attempt to «unfold» the keynesian circuit with the help of Minsky and presented so that it corresponds and incorporates the structure of finance capital developed in the last section.

Figure 3 is tentative presentation of such an unfolding as the «minskian figure of the unity of finance capital and capitalist finance». A basic premise is that the initial credit relation between banks and firms can take either the form of short term « business account» debt or of long term securitized debt (point 4). The creation of long term securitized debt does not necessarily imply an orthodox causality between savings and investment. As Keynes states in the *Treatise*, banks can create money by buying securities (financial assets) as much as by making business loans. They can either buy and hold the securities themselves for speculative or for financial position making reasons, or they can act as brokers and sell the securities to a third party. This sale is often accompanied by a loan to the security buying client. Firms, on their part, might prefer for various reasons the sale of debentures or of stock instead of the negotiation of bank loans. The general point we are trying to make, which is one of Minsky's basic tenets, is that the initial financing decision is a *portfolio decision* as much from the firms perspective as the banks perspective. And this is perfectly compatible with an endogenous money approach.

In our economy money is created as bankers acquire assets and is destroyed as debtors to banks fulfill their obligations. Our economy is a capitalist economy with long-lived and expensive capital assets and a complex, sophisticated

financial structure. The essential financial processes of a capitalist economy center around the way investment and positions in capital assets are financed. To the extent that the various techniques used to finance capital asset ownership and production lead to banks acquiring assets, money is an end product of financial arrangements.³⁶

Thus the initial financing decision, specially when it involves the production or acquisition of capital assets, sets off industrial circulation *and* financial circulation. The institutional roots of financial circulation are the capacity to create financial instruments which correspond to anticipated capital asset income and the existence of organized markets for the trade of these instruments, in other words the existence of the corporation and of the stock exchange (+ derived financial exchanges).

The capacity to create financial instruments that anticipate capital asset income involves not only a transformation of capitalist property from individual proprietorships to corporate forms³⁷ it also implies the capacity to effectively transform anticipated income flows into a commodity embodying what Minsky calls « a money now money later » relation, what we earlier defined as finance capital. We shall study this final point as it is presented by Minsky in his interpretation of chapter 17 of the *General theory*. This discussion of the central argument of Minsky's chapter on *Capitalist Finance* in his 1975 work “Keynes” will provide us the last elements needed for this first exploratory inquiry into the concept of finance capital.

In chapter 17 of the *General Theory*, «The Essential Properties of interest and Money», Keynes discusses the relative price of assets, in particular capital assets and compares their characteristics to those of money *as an asset*. Keynes develops three basic categories which define the price forming mechanism of assets and more generally characterise assets in a capitalist economy, in marxian terminology one could say they characterize capital in general and permit a

³⁶ Hyman Minsky, *Inflation recession and economic policy*, Brighton UK, Wheatsheaf books, 1982, p.17

³⁷ On this see tables in the next section.

differentiation of forms of capital according to their specific properties or as Keynes called them attributes. These categories are presented by Keynes as follows (quoted from Minsky):

« Some assets produce a yield or output, q »; «Most assets except money suffer some wastage, or involve some cost through the mere passage of time (...) they involve a carrying cost, c »; and « Finally the power of disposal over an asset during a period may offer a potential convenience of security (...) The amount [in foregone cash flows] which they are willing to pay for the potential convenience or security given by this power of disposal we shall call its liquidity premium, l . »³⁸

The total return of an asset is thus equal to the sum of q , l minus c ($= q - c + l$). This immediately leads to Keynes differentiating forms of capital according to this relation, « instrumental and consumption capital » are those where q is greater than c and l is near to negligible, whereas money has no yield, its carrying costs negligible and its liquidity is high. The relation $q - c + l$ is used by Keynes to describe the demand price of the different capital assets:

Inasmuch as l is an income in kind and $q-c$ is a money flow, it is a combination of explicit and implicit cash flows that is capitalized at a common rate to yield the demand price for q yielding capital assets. However, the ratio of q to the demand price will vary inversely with the implicit yield l of the asset.³⁹

One could thus distribute the different assets according to their l ratio and capitalized q yield, i.e. according to their prospective capitalized yield and their degree of liquidity. The degree of liquidity being the capacity to generate a cash flow through the sale of the capital asset knowing that only money as the socially recognized means of payment, can always generate a cash flow in favor of the selling holder. The relation $q-c+l$ is thus not only a representation of the basic price fixing mechanism of capital assets, it also defines the specific liquidity of these assets as the potentiality to socialize, so to speak, its cash flow through sale.

³⁸ Hyman Minsky, *Keynes*, 1975, p.81, Keynes quotation from *General Theory*, p. 225-226.

³⁹ Hyman Minsky, *Keynes*, 1975, p.81, Keynes quotation from *General Theory*, p. 225-226

In the *General theory* Keynes uses these attributes of assets to differentiate specific but independent forms of capital: q is assimilated to the physical capital assets (instrumental capital) generating through production and sale a cash flow (minus user costs) as a quasi rent. C was assimilated to merchandise such as wheat where the price is directly function of carrying costs and l as discussed above was equivalent to money. Minsky's argument is that a transformed version of the q - c - l relation which examines in a unified way the forms of capital can be applied to describe a modern capitalist economy with a developed financial system and with the generalisation of the corporate form of property: « (...) q , the quasi-rent, is a cash flow that is independent of the liability structure of the producing unit. (...) [and] Extending Keynes, q - c is the quasi-rents minus the carrying costs. For a set of assets collected in a firm, c is most importantly the cash flow set up by the liability structure. »⁴⁰

Q - c is thus transformed into the balance sheet of a firm, and where c is transformed into a fixed commitment of cash outflow as interest payments, just as q is an anticipated fixed inflow of cash receipts into the firm. The result is that the Minskian version of the q - c - l relation identifies the basic institutional dynamics of financial circulation in an essentially uncertain and speculative environment. This is where l comes in. A unit that has a liability structure that can't be validated by incoming cash flows is forced to find a source of cash, this can be done either by selling q generating capital assets which depends on their specific l (for example a successful spin off), or by rolling over debt and refinancing. The refinancing scenario is the one envisaged by the keynesian circuit approach. But a firm can also anticipate a long term incapacity to validate necessary costs by incoming cash flows, this is typical of firms investing in capital intensive production: by emitting « debt which carries cash-flow commitments that are synchronized with the expected cash receipts, or quasi-rents »⁴¹. This means launching into financial circulation securities the holding of which will be financed by bank loans as part of their brokering role. This is another way to boost l , either by raising cash through the sale of securities (which further

⁴⁰ Minsky, 1975, p.85

⁴¹ Minsky, 1975, p. 88

boosts “C”) or more importantly by directly using its securities as cash. Minsky shows that firms necessarily, because of fundamental uncertainty, make constant portfolio decision which modifies these financial parameters:

The returns to q are the returns to enterprise [in industrial circulation]. The proportion of the returns committed by liabilities c and the proportion of assets owned that yield a return in the form of liquidity l are due to speculative decisions [in financial circulation]. Investment is the production allocation which increases the q yielding assets in an economy; the investing firm acquires these assets by putting out its liabilities, which increases the c it is committed to pay, or by decreasing its l assets.⁴²

These speculative decisions are directly affected by a last institutional form mobilized by Minsky in his reinterpretation of Chapter 17, the stock exchange. Minsky postulates that actors in the stock exchange evaluate and anticipate modifications of q , this can then lead to a positive reevaluation of the firms equity and securitised debt in terms of liquidity and q to c ratio. A raising of l and a drop in c then creates a speculative opportunity for further investment, purchase of q . This can lead to further widening the gap between q and c in monetary terms (as bank debt augments) even as the gap appears smaller in financial terms, i.e. if securities are used as means of payments⁴³. The stock exchange by lowering c and raising l has the same effect as if q had risen⁴⁴: Minsky contends that this unstable structure typically results in merger manias linked to stock market booms, and is extremely volatile since linked to conventions about the future prone to “sudden and violent changes”. It is all the more unstable because firms typically raise their q - c ratio by holding and trading in other firms securities. The whole results in a complex web of growing financial interdependencies used to restructure the allocation and control of productive capital assets, raising monetary c to q ratio and thus an economic dynamic turned to the support of the financial liquidity growth. This speculative structure illustrates in a Minksian fashion how

⁴² Minsky, 1975, p.89

⁴³ « This means that during a stock market boom, the price of capital assets and investment output may have fallen in the currency used in their purchase, even though their money price may have risen.” Minsky, 1975, p.90.

⁴⁴ This is a plausible explanation of what happened to Canadian Telecom company Nortel

a growing economy can shift progressively from a hedge to a speculative posture, and allowing for a sudden reversion of expectations end up in a ponzi position as *financial* means of payments meltdown and lose their liquidity.

If we incorporate this Minksian interpretation of the capital asset pricing mechanism into our figure of financial capitalism we can better synthesize our marxian and keyensian views on finance capital and expand our analysis of the basic institutional relations of capitalist finance.

a) We can define the q-c relation as relevant to the level of industrial circulation, since l isn't a problem at this level, all payments being monetary payments and most of the financing being short term income generating self-liquidating debts. The q-c level determines anticipation of the long term financing possibilities, the possible new debt that can be created.

b) Financial circulation is structured at one end by the creation of long term investment debts that correspond to long term projected cash receipts and incorporate this projected cash flow as an annuity into a financial commitment. The creation of these commitments is an outcome of Bank (or near bank) - firm relation. (Point 4 in our figure 3).

c) These debts are potentially liquid and can be used to acquire cash or used *as cash by banks or firms*. This means that they acquire the capacity to circulate as socially recognized means of payments that incorporate a "c" relation to a defined q. (Point 1 in figure 3)

d) The stock exchange is the institutional structure that *reproduces* the liquidity of these financial means of payment "l" and that redistributes "c" income from q outside of industrial circulation. (Point 2 in figure 3)

e) Both l and c, the liquidity or the interest level of a financial asset are tools used for pure financial accumulation. This forms the basis for a fetichistic unification of financial circulation as l and c modify the initial q-c+l ratio existing at the beginning. (Point 3 in figure 3)

By bringing financial circulation back in our presentation of capitalist finance, the unity of finance capital as complex effective social and economic force can be understood in an

institutionalist and sociohistorical perspective. Finance capital rests on an socioeconomic foundation consisting in three basic and powerful capitalistic institutions: the corporation, banks and the stock market. Finance capital's social and economic power stems from a defined set of the structural relationships between these institutional forms that organise the dominance of financial circulation over industrial circulation. Most theories of finance capital have focused solely on the relationship between two of the above mentioned institutional forms. Finance capital is thus not the fusion of banking and manufacturing interests as Hilferding contested, it is not the transition from bank centred financial systems to stock market centred financial systems, nor is it solely the result of the development of "institutional investors" who have centralised savings and thus control investment, it is a particular institutional configuration of capitalist finance involving all three institutional forms. Finally Finance capital appears as a particular historical regime of capitalist finance, one which developed in the early twentieth century and collapsed in the crash of 1929, and one which has reappeared in North America in the guise of a what Minsky has called "Money-manager capitalism".

In its first version finance capital organized the domination of financial circulation over industrial circulation to favour empire building "Captains of industry". The whole mechanism was thus structured from the investment decision process (Point 4 of figure 3), financing was used to merge and reconfigure industry. Contemporary finance capital is radically different, its organizing principal is the valorisation of "savings", financial circulation is thus constructed from point 2 of figure 3, it is the opposite of an investment decision in the true sense of the word that structures this regime. The decisive question faced by a mutual or pension fund money manager is how to transform savings into financial instruments that can capture the greatest income flows from industrial circulation, this does not in any way imply real business investment as a counterpart, ie the spending of money on capital assets and on wages of workers producing capital assets. The theoretical task before us is thus to develop an ideal type of the structural relationships inherent to this new institutional configuration of capital finance.

III

The Sociohistorical Genesis of Finance Capital

To conclude our inquiry we would like to explore and discuss the sociohistorical genesis of finance capital using as a general framework Minsky's typological work on financial regimes. The idea is to bring out the sociohistorical processes behind the formal analytical figures which we presented in the paper. We will focus solely on the genesis of finance capital in its first form, this will give us methodological model for work on the genesis of contemporary money manager capitalism.

As we saw earlier the keynesian circuit approach, and in a different manner Marx's analytical work, are built on certain institutional assumptions particular to a historical form of capitalism. Minsky explicitly dealt with institutional assumptions when developing his keynesian financial theory of investment. During the nineties he proposed a historical typology of *regimes* of capitalist finance. *These regimes present the institutional configurations that structure the financial relations of successive historical forms of capitalism.* Minsky's financial regimes must thus be understood as money and payment system regimes which produce specific institutional forms of money. Minsky distinguished four (sometimes five) historical regimes of capitalist finance⁴⁵ each corresponding to a more global form of capitalism: Commercial capitalism,

45 During the mid-nineties this typology was exposed in many papers, and there have been some minor conceptual variations from paper to paper, we have chosen for reasons of clarity as a base reference for this typology the version developed in the following papers: Minsky, Hyman, 1990, «Schumpeter: Finance and Evolution» In *Evolving Technology and Market Structure: Studies in Schumpeterian Economics*, Arnold Heertje and Mark Perlman, eds. Ann Arbor, Mich., The University of Michigan Press, 1993 «Schumpeter and Finance.» In *Market and Institutions in Economic Development: Essays in Honor of Paulo Sylos Labini*, Salvatore Biasco, Alessandro Roncaglia, and Michele Salvati, eds. New York: St. Martin's Press and have resorted also used data in the following paper «Reconstituting the United States financial Structure» Jerome Levy Working Paper 69, 1992. Charles J. Whalen, who worked with Minsky in the mid-nineties has discussed at length this aspect of Minsky work in the following paper «Hyman Minsky's Theory of Capitalist Development» Jerome Levy Working Paper No. 277, 1999. Our own interpretation of Minsky's work on capitalist development is partially inspired by this paper, but we have decided to concentrate our attention on Minsky's own writings on the subject. One could consider a good part of what is developed here as answer to one of Whalen's suggestions, towards the end of the aforementioned paper, for further research «Minsky made it clear that for each stage we should ask what is the distinctive activity being financed, what is the pivotal source of financing, and what is the balance of economic power between those in business and banking/finance. He also suggested that we strive to identify the essential

Finance capitalism, managerial capitalism and money-manager capitalism. The general characteristics of Minsky's regimes of capitalist finance are summarized in table 1. We have expanded Minsky's typological work with elements from Keynes to render more explicit the forms of money inherent to the successive regimes, this can be seen in table 2. And finally, we have also developed the forms of capitalist property that also corresponds to the regimes, this done in table 3.

According to Minsky the emergence of Finance capital and its link on the one hand to the contradictions of the financial regime of commercial capitalism and on the other with the development of the corporate form of capitalist property. The institutional features of this capitalism laid the groundwork for the successive financial regimes of managerial capitalism and present day financialised «money manager» capitalism, these institutional features are: industrial corporations that act as essentially financial organisations, commercial and investment banks and highly developed stock exchanges and other financial markets. We have tried to show how the transformations of capitalist property relations during this important period were decisive innovations in the development of corporate capitalism's typical finance relations, double price system and semi-autonomous financial circulation.

Commercial Capitalism

The financial regime of *Commercial capitalism* started initially as the financing of wholesale long distance trade by merchant bankers. Debts were thus created and destroyed as commodities circulated in the world markets. Credit creation, financing, was based upon personal relationships between economic actors, between merchant-adventurers and merchant bankers, between different merchant bankers and eventually between competing brokers trading commercial bills in the large London, Paris or Amsterdam exchanges. These private and personal relationships gave rise to a financial system formed of a "hierarchy of contingent commitments", of which the system of endorsed bills of exchange is a typical illustration. Investment in the commercial

financial, business, and policy institutions of each era. There is still much room for scholarship on these topics and on the inter-relations of finance and business within each stage. ».

capitalism stage is thus primarily investment in circulating commodities and accumulated inventories, Minsky explicitly associates this form of financing with a monetary production economy dominated by what the regulationist school has called extensive accumulation: « when production is by labour and tools rather than by machinery and labour. ⁴⁶».

This financing of commodity circulation is the source of an endogenous flow of money as « means of payments » are created as the volume of commercial capital increases and destroyed as it decreases. These means of payments are either created by banks as they endorse bills or discount bills in exchange for bank notes, or they are directly created in intercapitalist relationships (trade) as one capitalists' promise to pay is launched in circulation by another. It is this form of intercapitalist credit which permits the gradual extension of financing from the sphere of circulation to the sphere of production, from circulating commodities to durable capital assets used in production:

An indirect financing of durable capital assets arises when banks finance durable capital as it is produced: the inventories and shipments of capital goods producers are eligible for commercial credit. (..) The demand for finance increases during an expansion phase of an investment cycle and, with the money being endogenously determined, this leads to an increase in the money supply.⁴⁷

This particular money - trade cycle of commercial capitalism gives rise, in Keynesian⁴⁸ terminology to a dichotomous and contradictory existence of money either as public state money (sovereign coin commodity money or fiat paper currency, ie acknowledgement of public debt) or as private bank money (acknowledgement of private debt) and various assimilated means of payments (bills etc). The dynamics of creation, circulation and destruction of the latter rests on the expectations relative to the state of commercial circulation and on the capacity to realize profits by liquidating accumulated commodities (inventory). As Keynes suggests there is no need

⁴⁶ Minsky, 1993, p. 108. One can find an illustration of this type of capitalist production in Marx's analysis of the « factor » controlled woolen cottage industries during the phase of primitive accumulation in sixteenth and seventeenth century rural England. Closer to us in Canada, our eighteenth and nineteenth century staple capitalism is a typical case of commercial capitalism and of its financial capitalist institutions.

⁴⁷ Ibid, p.108.

⁴⁸ See Keynes, J. M. *A Treatise on Money*, Volume 1. London, Macmillan and co, 1958, Chapter 1, p. 3-22.

to theoretically presuppose a formal link between commodity money and banking money, in such an institutional arrangement the latter is not a multiple of the former. The creation of bank money is the product of the endogenously formed expectations on the state of commercial circulation. The link between the two forms of money manifests itself, in a contradictory way, when expectations collapse and the base on which rests the value of the commercial form of bank money melts. This leads to the familiar boom and bust cycle combining commercial and monetary crisis, where the manifestation of one leads to the other, these crises are affected by the particular institutional nature of bank money in commercial capitalism, the fact that it emerges and circulates in private face to face relationships. The whole results in, as Marx underlined, a massive destruction of commodities accompanied by a massive destruction of fictitious capital and a rush from various forms of bank money towards money proper in the form of commodity money and at times fiat money.

The transition to Minsky's second form of capitalist financial regime, finance capitalism per se, rests on two institutional developments that result from the contradictions of commercial capitalism. These two developments are the transition from state managed fiat money to a mixed system of state and bank managed money by central bank intervention as a response to the contradictory dynamics of bank money and money proper, and secondly the emancipation of investment decisions from the private sphere of interpersonal relations with the emergence of the corporate form of capitalist property, this permitting the extension of credit to finance the needed development of durable and expensive capital assets in a systematic and credible way. This meant the creation and social recognition through market circulation or through the banking system, of long term debt which does not exist as a discrete unit corresponding to a particular quantity of commodities.

These two institutional developments, the emergence of the private business corporation and of the modern hierarchical and centralised banking systems as systems of publicly managed money, form the foundation of Minsky's finance capitalism, and if one adds the development of stock exchanges linked to industrial capital (which for Minsky is implicit to the development of the corporation) of modern regimes of capitalist finance in general. Our overview of this regime will

focus on the development of these the first of these institutional innovations, since the system of banking that was born from the contradictions of the dual form of money in commercial capitalism, endogenous bank money linked to short term industrial debt, has been already treated in the previous section.

Finance Capital

The dominant forms of business organization in Minsky's commercial capitalism are privately held companies, partnerships and state sanctioned quasi public corporations (the great commercial and financial monopolies of seventeenth and eighteenth century capitalism such as the Bank of England and the South Sea company to name two well known rivals). One of the major institutional innovations of nineteenth century capitalism in business organization was the development of the corporation as a form of capitalist property. This, Minsky argues, was necessary to finance a burgeoning capital intensive industrial capitalism.

The key element that the corporation brought into play was the independence of the organisation as a financial entity. Not only was the liability of the owners of the corporation limited to their investment in the corporation, but the corporation's life was not linked to the biological lives of either the management or the owners.⁴⁹

This being said, the actual development of the corporate form of capitalist property was a complex and many-faceted process which participated in the differentiation of national forms of capitalisms which live on today in the simplistic opposition of bank centered vs financial market centered capitalisms. If the pre-corporate form of business organisation rests on a strict separation between credit and capitalist property relations, the major institutional feature of the corporation was initially to link a credit\investment relation with a property relation, by the creation of a security, stock, representing a property entitlement. This coupling of credit and property has had several important institutional consequences, most of which had been anticipated by Marx in the manuscripts forming the second part book three of *Capital*, as a process leading to the *socialization of capital on a private capitalistic basis*. The process of socialization means that

capital presents itself as a totality confronting individual capitalists, rather than as their private property and that this reification of capitalist property takes on the commodity form as circulating financial titles. This leads to the following consequences : 1. the assimilation of the capitalist to the rentier; 2. the emergence of the manager, formally a non proprietor, as the deciding day to day entrepreneur; 3. the possibility of distinct price forming dynamics for financial assets in financial markets and for commodities in consumer and producer markets. This third consequence will bring us back to the problem we left behind when analysing endogenous money in the keynesian circuit.

The first consequence means, in marxian terminology, that the process of mobilisation of money as capital forcloes itself on the process of reproducing capital as money, an institutional framework is created so that mobilised money capital, from the point of view of the capitalist, rather than transforming itself into productive capital, retains a liquid quasi-money form as circulating property titles. The money capital mobilized in the process does transform itself into durable capital assets, the property titles are thus a form of long term debt, which permit and stimulate capital intensive investment. The value (not the price) of these titles ideally corresponds to the anticipated long term profitability of this investment, the titles are thus commodities in their own right which generate a form of revenue, dividends which end of nineteenth century analysts and economic actors assimilated to interest. The price of these titles, and the possibility of capital gains, is another matter.

The capitalist is transformed into a rentier because, with the development of the corporation, his relation to the property of capital is mediated by this commodity, the financial title. The capitalist as rentier is proprietor of a title, a financial commodity, which represents the property of invested productive capital through its value and generated revenue (dividends). He is not directly a proprietor of productive capital, his relationship to productive capital is « financialized » in the sense that productive capital appears as commodified financial capital and the revenue generated by corporate productive capital appears to the capitalist, qua rentier, as a stream of financial

payments, comparable and assimilated to interest payments. From his socioeconomic position profit, per se, is not an immediately appropriable form of income. This mediation of a capitalist's relationship to the property of productive capital by financial commodities also means that capitalist property relations appear and are structured as financial relations, and more specifically, as *financial commodity relations*. Thus, it is not only investment, but also, the transformation and organization of capitalist property relations which become a process of transformation and organization of financial commodities in a particular sphere of circulation. This process exerts a profound transformational force on the institutions and structure of the finance regime inherited from commercial capitalism⁵⁰.

The second consequence is the autonomisation of the management of productive capital from property of productive capital. This is the venerable property/control problem, the corporation institutionalises the separation of property and control, and bequeaths control of productive capital to salaried directors and managers. These economic actors, though they hold the function of industrial entrepreneurs, do not exercise this function as capitalistic property holders. Without going into the principal/agent debate, this leads us to suppose that they orient the economic activity of the industrial corporation so as to increase *its capacity of accumulation as a capitalistic organisation* (an « ongoing concern » in the vocabulary of Weber and the early American Institutionalists) rather than to increase the capacity of accumulation of entrepreneurs as « individuated persons ». Investment and expansion is thus investment in and expansion of the organizational capacity of economic reproduction of the corporate entity as capitalist enterprise.

The period of finance capitalism is the stage of institutionalisation of corporate autonomy, the transformations which result in corporate autonomy are parallel and linked to the ones which give rise to an autonomous sphere of financial circulation and commodification of capitalist property relations. In this stage the autonomisation of productive capital and the mediation of capitalist property relations by the circulation of financial commodities appear as interlinked forces which

50 Transformations analyzed *in vivo* by authors such as Veblen and Hilferding at the turn of the twentieth century. A detailed contemporary analysis of this transformation in the US can be found in William Roy, *The Socialization of Capital*, Princeton, Princeton University Press, 1997.

permit individual industrial and finance capitalists to control and direct the centralization, concentration and massification of capital, linked to the development and consolidation of intensive accumulation, in their own personal interest. The corporate form of capitalist property and its financial regime appear initially as tools in the hands of Veblen's « Captains of industry » and of Hilferding's « Finance capitalists », the higher members of the capitalist class busy expropriating the lower members still hanging on to the antiquated institutions of commercial capitalism.

Paradoxically the end of Finance capitalism and the transition to managerial capitalism will mean the marginalization of these active entrepreneurial finance capitalists as significant economic actors. In a characteristically dialectical manner the social forces that they unleashed will be the very ones which will result in their marginalization. I will limit myself to a quick illustration of this process. In the U.S. and Canada, the “Captains of Industry” systematically exercised economic power as minority but « controlling » stock holders to merge corporations into holdings after unsuccessful attempts to concentrate capital through « trusts ». The first effect of this was to transform the merger process into one of dispersal of ownership and multiplication of cross-ownerships. This dispersal was not a gradual and natural outcome of the democratic potential of corporate capitalism, nor did it result in a smoothing and equalisation of the ownership of stock among an emerging North American middle class as Berle and Means had suggested (and hoped for) in their writings on the development the corporation. The ownership of stock was highly asymmetrical and polarized, between at one end a sea of small passive purely rentier investors and at the other end an active minority of financial capitalists with strategic control oriented portfolios and in the middle a complex and growing web of intercorporate stock ownership. The process which lead to this structure was far from gradual and smooth, it took the form of sharp and sudden merger booms and stock market busts. The merger process was also and most importantly a judicial process which saw the accelerating reinforcement of corporate personality and autonomy at the expense of stockholder rights as property owners. The strategy was to prevent, for example, a coalition of non controlling minority stockholders, thus transformed into a majority, from dissolving a corporation and « cashing in » through the sale of its assets as

response to the intergration, by the captain of industry, of the productive unit into his industrial holding.

Over a period of forty years, roughly from the mid 1890's to the mid 1930's corporate personality was reinforced to a point where courts interpreted the publicly held corporation as a person *quasi proprietor of itself as productive capital* and the stockholder was transformed into a stakeholder, a rentier owning but a right to receive a share of the profits of the corporation in as much as this did not affect the corporation's capacity to reproduce itself as an economic entity⁵¹. The finance capitalist « captain of industry » had virtually expropriated himself, all his hope was now placed in the rent and capital gain produced by the new commodity he had gained in the process. This leads us to the third consequence of the development of the corporate form of property, the institutionalisation of a distinct sphere of circulation with its own price forming mechanism. As we have shown earlier the basic feature of a corporate economy is the existence of financial commodities circulating in a financial sphere and priced according to a distinct mechanism than other commodities. As Minsky notes: *The legal form that business takes determines the debts that can be used to finance ownership of capital assets*⁵². We now can understand the sociohistorical development which laid the ground work for such a form of financial circulation and for the unity of finance capital and capitalist finance.

51 For an indepth analysis of this process see William Roy, *Socializing Capital* and Horwitz, *The transformation of American Law*, 1870...

⁵² Hyman Minsky, 1982, p. 19.

IV

General conclusion

This essay has explored the relationship of finance to capitalist accumulation from the perspective of postkeynesian and regulationist institutional macroeconomics and sociohistorical interpretation and hopes to show the continued relevance of certain basic observations made by Marx, Keynes and Minsky on the institutional structure of financial systems. Three postulates differentiate this perspective from neoclassical and new keynesian approaches: 1. capitalism is immediately analysed as a monetary production economy (as opposed to a barter economy), 2. the relationship of finance to capitalist accumulation is considered first and foremost as a historically produced institutional structure, there are thus as many *regimes* of capitalist finance as there are varieties of historical capitalisms, 3. the structure of typical twentieth century regimes of capitalist finance, as was shown as early as 1910 by Hilferding in his *Finance capital*, emerges in the institutional field created by the interactions of *Banks*, *Stock markets* and *Corporations*. It is our belief that the works of Keynes and Minsky contain major and essential insights on these institutional foundations of capitalist finance. In the keynesian system *Banks* are defined by their capacity of monetary creation rather than by their role as intermediaries between savers and borrowers. Money is thus created endogenously and liquidity depends on banking activity. The development of the *Corporation* is understood as institutionalising a separation between industrial and finance capital which stimulates the development of financial markets centralising the circulation of financial titles. As exposed in the 12th chapter of the *General Theory* the dynamics of this centralised financial circulation in the *Stock market* is determined by «conventions». These financial market conventions are the results of the anticipations and of the interactions of managers (entrepreneurs), rentiers and the banking system which must assure liquidity. It is in the *Treatise on Money* that we can find the most important analyses of these interactions and, by the distinction that is drawn between industrial and financial circulation, of their impact on capitalist accumulation. The global macroeconomic model, which is thus characterised by two distinct price forming mechanisms, forms the basis of Minsky's work on the inherent instability of financial activity. An instability that translates itself into the political necessity of the institutionalisation of a compromise between finance capital's private and social finalities, as suggested in the concluding chapter of the *General Theory*.

These theoretical elements drawn from Marx, Keynes, Minsky, and to a lesser degree from Hilferding, lay the foundations for the development of a critical analysis of certain of the fundamental features of our contemporary regime of capitalist finance. A critical analysis which should question not only the economic viability of the current regime in terms of its fragility or its capacity to generate growth, but also the social and normative dimension of the development of Finance capitalism.

Table 1: Minsky's financial Regimes

<i>Regimes</i>	<i>Approximate period¹</i>	<i>Dominant form of external finance and of financial instrument</i>	<i>Activity which is financed (dominant form of accumulation)</i>
Commercial Capitalism	1700 - 1810	Merchant banking Bill of exchange	Wholesale trade
Finance capitalism (Sometimes split in two periods: - Industrial capitalism 1810-1870 and Finance capitalism 1870-1930)	1810 - 1930	Investment banking and industrial stock exchanges Private stock and bank debt	Industrial development, long term capital development
Managerial Capitalism	1930 - 1975	Public finance Public debt	Government expenditure
Managed Money Capitalism	1975	Institutional investors Managed funds	Value of stock in speculative financial markets

1 This is the least precise part of Minsky's analysis. Dates aren't given for each period in his papers on the subject and sometimes the periodization refers to American capitalism other times to capitalism in general. We therefore propose periods of our own drawn from Minsky's descriptions, from Walen 1999 and from our own research work on the process of institutionalisation of the forms of capitalist property in the United States, Canada and Europe in relation to the forms of the state, 1800 - 2000 in the following working paper, Pineault, Eric, *Corporation, propriété et capitalisme :Le procès d'institutionnalisation politique et économique de la corporation*. Document de travail, GRADiP, UQAM 2000, part of which has been published in the following article: Bourque, Gilles, Jules Duchastel et Eric Pineault, "L'incorporation de la citoyenneté", *Sociologie et sociétés*, vol. 31, no. 2, 1999, p.41-64.

Table 2: Expanding the Minskian typology to the endogenous forms of money inspired from Keynes' forms of Money (Treatise)

<i>Regimes</i>	<i>Approximate period</i>	<i>Forms of money</i>	<i>Transformational force</i>
Commercial Capitalism	1700 - 1810	Contradictory existence of Bank money (a) and State money (b) (a) corresponds to a distinct quantity of commodities in circulation (b) fiat money corresponds to state debt + commodity money as sovereign coin	Extension of financing from commodities, to stocks, to durable capital assets
Finance capitalism (Sometimes split in two periods: - Industrial capitalism 1810-1870 and Finance capitalism 1870-1930)	1810 - 1930	Gradual articulation of bank money (a) to managed state money (b) (a) corresponds to permanent revolving industrial credit (b) corresponds to state debt + coin held by central bank and treasury as ultimate guarantee, monetary management is passive	Emergence of the stock exchange as a credit creating mechanism linked to bank money
Managerial Capitalism	1930 - 1975	Strict articulation of bank money (a) to managed state money (b), activist management elimination of coin as guarantee	Fordist inflationary pressures
Managed Money Capitalism	1975	Same as above but management subservient to growing financialized activity (private non-bank monies ?)	Emergence of new stock exchange oriented financial intermediaries (mutual funds) and practices

Table 3: Expanding the Minskian typology II, the institutional forms of capitalist property relations

<i>Regimes</i>	<i>Approximate period</i>	<i>Dominant form of capitalist property</i>	<i>Relationship to finance</i>
Commercial Capitalism	1700 - 1810	Personal enterprise, partnerships and state sponsored commercial monopolies	Commercial partnerships linked personally to merchant bankers
Finance capitalism (Sometimes split in two periods: - Industrial capitalism 1810-1870 and Finance capitalism 1870-1930)	1810 - 1930	Corporate form adopted in industrial sector as tool for personal accumulation by captains of industry	Tightly and intensively linked to investment or universal banks intervening in stock exchange through personal relations (class based)
Managerial Capitalism	1930 - 1975	Corporate form emancipates itself from personal accumulation, separation of management and stockholders	Loosely linked to domesticated and compartmentalized financial institutions through bureaucratic relationships, dominated by banks
Managed Money Capitalism	1975	Stock holders as rentiers regain power over corporation, but as power delegated to money managers	Tightly linked to overly dynamic and fluid global financial markets

Finance Capital and the institutional foundations of capitalist finance: theoretical elements from Marx to Minsky

Figures 1 to 3

Figure 1

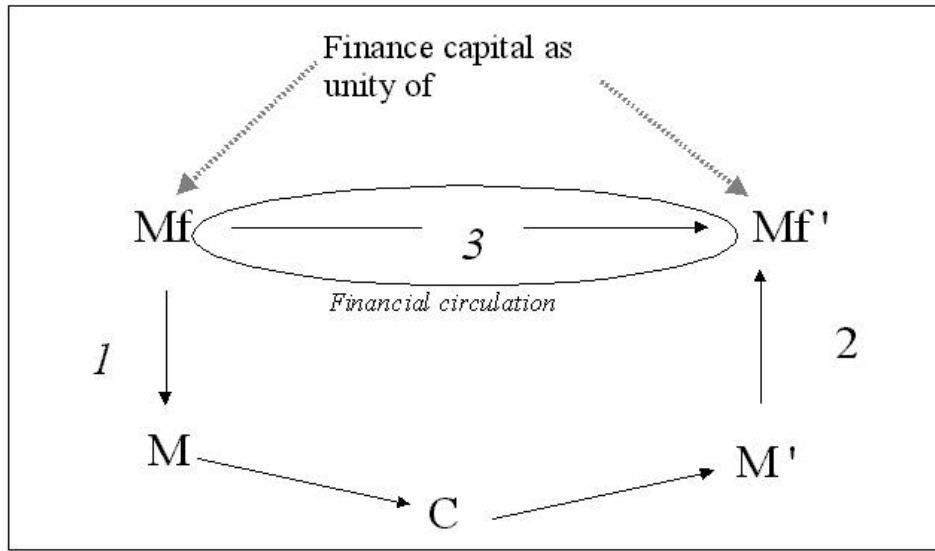
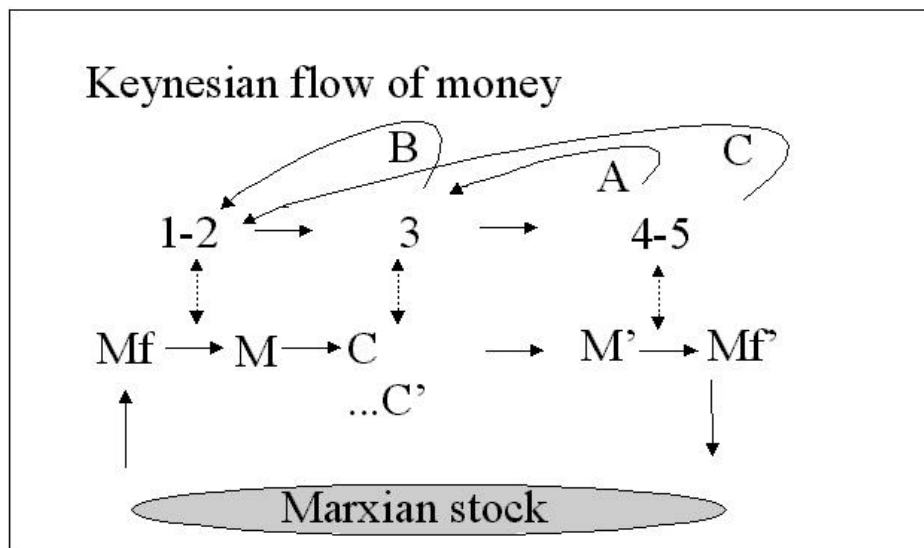
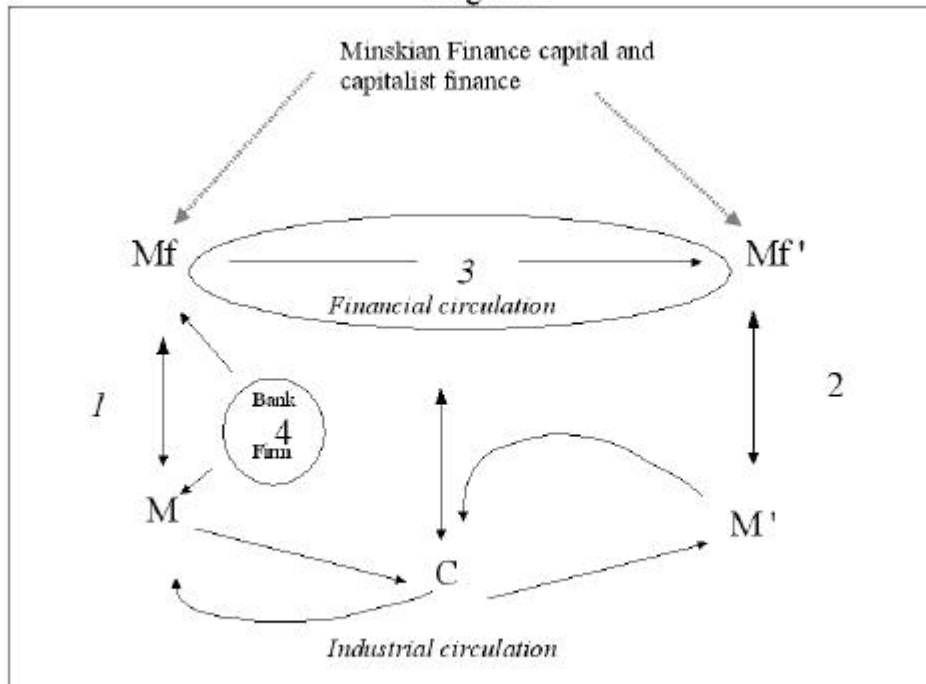


Figure 2



Keynesian and marxian circuits

Figure 3



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