



# TEXTO PARA DISCUSSÃO

ISSN 0103-9466

431

**Money as money vs. money as capital: distinguishing  
the roles of banks and non-bank financial institutions  
in Marx's conceptual framework**

**Bruno Höfig  
Leonardo Paes Müller**

**Maio 2022**



**ie** Instituto de  
economia

# Money as money vs. money as capital: distinguishing the roles of banks and non-bank financial institutions in Marx's conceptual framework <sup>1</sup>

Bruno Höfig <sup>2</sup>  
Leonardo Paes Müller <sup>3</sup>

## Abstract

Marx left the manuscripts for Capital, v. 3, and in particular the section on the credit system, in an underdeveloped stage. This paper carries forth the conceptual development initiated by Marx, focusing on the categories of money-dealing capital (MDC) and interest-bearing capital (IBC). It contributes to the literature in four ways. First, it demonstrates that Marx's conceptual framework not only is consistent with the fact that transactions in capitalist economies are usually mediated by bank-issued credit money, but also explains why credit money tends to displace commodity money from circulation as capitalism evolves. Second, it shows that, when fully developed, Marx's category of MDC allows for a rigorous understanding of the differences between banks and non-bank financial intermediaries. Marx introduced the category of MDC in the fourth chapter of his manuscript, that is, before the introduction of the credit system and IBC. However, the emergence of IBC introduces a distinction between the circulation of money as money and the circulation of money as capital, which in turn imposes the need to differentiate the MDCs that deal with the circulation of money as money from the MDCs which deal with the circulation of money as capital. As this paper shows, the internal differentiation of MDC establishes the conceptual foundations for the structural distinction between banks and non-bank financial intermediaries, uncovering the reasons why the latter tend to become increasingly important as capitalism evolves. Third, the paper demonstrates that, in Marx's conceptual framework, the net incomes of banks and non-bank financial intermediaries must take the form of profits, not that of interest. Building on this result, it contends that Marx's category of IBC does not refer exclusively to financial institutions; for, once the credit system has been introduced, *every* capital takes on the form of IBC. Using stylized balance sheets to describe the processes of credit money creation, circulation and accumulation, the paper identifies when and why capital's net income takes the form of profit and interest, unveiling the mechanisms through which the (socially valid) illusion that every capital bear interest is generated.

**Key words:** Credit money, Financial intermediaries, Money-dealing capital, Interest-bearing capital, Forms of income.

## Resumo

***Dinheiro como dinheiro vs. dinheiro como capital: distinguindo os papéis dos bancos e das instituições financeiras não-bancárias no arcabouço conceitual de Marx***

Marx deixou os manuscritos do livro 3 de *O Capital*, em particular a seção sobre o sistema de crédito, em um estágio não plenamente desenvolvido. Esse artigo desdobra o desenvolvimento conceitual iniciado por Marx, focando nas categorias de capital de comércio de dinheiro e de capital portador de juros. Ele contribui para a literatura de quatro modos. Primeiro, demonstrando que o arcabouço conceitual de Marx não apenas é consistente com o fato das transações em economias capitalistas serem geralmente mediadas por dinheiro de crédito emitido por bancos, mas também explica porque o dinheiro de crédito tende a deslocar o dinheiro mercadoria da circulação conforme o capitalismo se desenvolve. Segundo, demonstrando que, quando plenamente desenvolvida, a categoria de capital de comércio de dinheiro permite uma compreensão rigorosa das diferenças entre bancos e intermediários financeiros não bancários. Marx introduz a categoria do capital de comércio de dinheiro no quarto capítulo do manuscrito, isto é, antes da introdução do sistema de crédito e do

---

(1) The authors thank the member of the *Political Economy Research Group*, and in particular Leonardo Segura Moraes and Leonel Clemente, for holding a seminar on a previous version of this paper. The usual disclaimers apply.

(2) Research fellow at the Economics Department of the University of Campinas. E-mail: [bhofig@gmail.com](mailto:bhofig@gmail.com). ORCID: <https://orcid.org/0000-0002-5937-1522>.

(3) Visiting lecturer at BCE-UFABC. E-mail: [lapmuller@gmail.com](mailto:lapmuller@gmail.com). ORCID: <https://orcid.org/0000-0001-8934-8000>.

capital portador de juros. Contudo, a emergência do capital portador de juros (re)introduz a distinção entre a circulação do dinheiro enquanto dinheiro e a circulação do dinheiro enquanto capital, o que, por sua vez, impõe a necessidade de distinguir os capitais de comércio de dinheiro que lidam com a circulação do dinheiro enquanto dinheiro dos capitais de comércio de dinheiro que lidam com a circulação do dinheiro enquanto capital. Como esse artigo demonstra, a diferenciação interna do capital de comércio de dinheiro estabelece o fundamento conceitual para a distinção entre banco e intermediários financeiros não bancários, desvelando as razões para que o último venha se tornando progressivamente mais importante conforme o capitalismo se desenvolve. Terceiro, o artigo demonstra que, no arcabouço conceitual de Marx, os rendimentos líquidos dos bancos e dos intermediários financeiros não bancários devem assumir a forma de lucros, não de juros. Partindo desse resultado, o artigo defende que a categoria de capital portador de juros não se refere exclusivamente a instituições financeiras, pois, uma vez que o sistema de crédito foi introduzido, *todo* capital assume a forma de capital portador de juros. Empregando balancetes estilizados para descrever os processos de criação de dinheiro de crédito e de circulação e acumulação, o artigo identifica quando e como o rendimento líquido do capital assume a forma de lucro e de juros, desvelando o mecanismo através do qual a ilusão (socialmente válida) de que todo capital porta juros é gerada.

**Palavras-chave:** Dinheiro de crédito, Intermediários financeiros, Capital de comércio de dinheiro, Capital portador de juros, Formas de rendimento.

**JEL:** B51, E11, E40.

Heterodox economists have often criticized mainstream theories of banking and finance for overlooking the active role played by banks in determining an economy's money supply. As has long been noted by critics of the mainstream (Moore, 1988; Lavoie, 2015; Wray, 1990) and recently even by central bankers themselves (Jakab; Kumhof, 2015; McLeay; Radia; Thomas, 2014), banks are able to create deposits *ex nihilo* by making loans. Given that bank deposits constitute by far the largest share of instruments used to mediate purchases and payments among non-bank private agents,<sup>4</sup> the argument goes, one cannot fully account for the process of money creation without taking stock of the deposit-creating activities of banking institutions – which, in turn, implies that banks should be regarded as a *special* kind of financial institution, being resolutely distinguished from non-bank financial intermediaries.

One of the reasons orthodox theories of banking and finance fail to grasp the importance of bank money and the special role of banking activities in the process of money *creation* is that they usually see banks exclusively as intermediaries in money *circulation*. This is true for the two broad approaches one can find in the orthodox literature. The deposit multiplier or fractional-reserve theory of banking (Cecchetti; Schoenholtz, 2016, chap. 17), for instance, sees banks as intermediaries in the relationship between the central bank – the ultimate money creator – and the public, conceiving of the monetary base issued by central banks and the reserve requirement ratios imposed by the latter as the key determinants of the supply of broad money in the economy. This theory, it should be noticed, has been all but refuted by the events that followed the GFC (e.g. the failure of QE to promote the growth of broad money and inflation), which have shown that the assumption that money velocity (and thus the ratio of central bank money to broad money) is stable cannot be justified.

The financial intermediation theory of banking and finance, on the other hand, regards banks as institutions whose role is to intermediate the circulation of loanable funds, i.e. lend out savings (e.g. in the form of gold) from agents that are willing to postpone consumption to those who intend to invest or consume in the present. According to this view, banks can play a role in improving the

---

(4) In the UK, as of December 2013, 'bank deposits made up ... 97% of the amount [of broad money] in circulation' (McLeay; Radia; Thomas, 2014, p.15).

distribution of unspent income from savers to borrowers (particularly in the presence of asymmetrical information; see Stiglitz and Weiss 1981), lubricating the channels that connect savings and loans. Ultimately, however, they are mere intermediaries, and thus can play no active role in determining the supply of money in the economy. This is so because, according to this theory, new loans can only be issued after banks receive new deposits; and the latter, in turn, can only take place if non-bank agents choose to save some share of their income.

The financial intermediation theory has been embraced by many – if not most – orthodox economists of the present and the past (for critical reviews, see Jakab; Kumhof, 2015; Werner, 2016). Interestingly, however, it also seems to characterize the monetary ideas of one of the most radical *critics* of conventional economic thinking: Karl Marx. In *Capital* volume 3, for instance, Marx contends that banks (and the credit system more broadly) do help increase the amount of ‘money capital’ available to potential borrowers, but they do so by increasing the proportion of ‘all the [pre-existing] money savings of all classes of society’ which can be mobilized (Marx 2015, p. 465). This suggests that, like contemporary financial intermediation theorists, Marx believed banks can affect the amount of available money only by improving the latter’s circulation, which in turn precludes the view that banks can actively create monetary instruments by issuing deposits *ex nihilo*.

At first sight, this should not be surprising. The fact that money, for Marx, is ultimately a commodity (e.g. gold) seems to entail that financial intermediaries in general, and banks in particular can only issue new loans after collecting deposits, and thus take no part in the process of money creation. As we shall see in this paper, however, Marx was aware that claims on ultimate money which are traded at par and redeemable on demand can and usually do perform monetary functions, and that these forms of ‘*credit money*’ (Marx, 2015, p. 503) tend to displace the monetary commodity from the process of circulation. He also knew that banks were particularly well positioned to issue such instruments, and that they could – and often did – issue them in quantities that far surpassed the amount of ultimate money in their vaults. Most important, however, is the fact that Marx’s conceptual framework is particularly well-suited to single out precisely *why* banks are able to issue credit money; and that is so because, contrary to contemporary orthodox thinking, it acknowledges the importance of the *act of payment* and the institutions that organize the *network of payments* in actually existing capitalist economies. Hence, not only was Marx’s framework consistent with the fact that transactions in capitalist economies are often mediated by credit money issued by banks, but it also sets forth the conditions for an actual *explanation* of this fact.

To be sure, this dimension of Marx’s work has been generally overlooked by the literature (e.g. Itoh and Lapavistas 1999). This, however, is due not so much to the fact that Marx sees the general equivalent (the pinnacle of the hierarchy of monetary instruments) as being necessarily embodied in a product of human labor, but rather to the fact that the conceptual framework put forward by Marx in the manuscripts Engels later transformed into *Capital* vol. 3 was far from fully developed.<sup>5</sup> Marx takes account of money-dealing capital (MDC), i.e. the fractions of capital that become responsible for the ‘*technical operation[s]* of monetary payment and receipt’ (Marx, 2015, p. 422; emphasis in the original), in the fourth chapter of his manuscript, that is, before the introduction of the credit system and the category of interest-bearing capital (IBC). This means, first and foremost, that Marx could not (and hence did not) carry out a systematic analysis of *credit money*

---

(5) See Engels’s preface to *Capital*, v. 3.

in the chapter where the payment system – which, as we shall see, is precisely the site where credit money springs from – is first introduced. But, most importantly, it also means that the category of money-dealing capital, as it is presented in chapter 4 of the manuscript, is not yet fully developed. As Marx makes clear in the fifth chapter of his manuscript, the introduction of the credit system establishes an internal differentiation in the realm of monetary circulation: from now on, one must distinguish the circulation of money as money from the circulation of money as capital.<sup>6</sup> If this is so, then the introduction of the credit system also entails that MDC itself must be internally differentiated: it is necessary to distinguish capitals that deal with the circulation of money as money from those which deal with the circulation of money as capital. As we shall see in this paper, through this distinction one can operationalize within the Marxian framework the distinction between the activities related to the *management of the payments system*, usually performed by banks, and the operations associated with the *management of portfolios*, which in the past tended to be performed mostly by banks, but today are increasingly performed by other kinds of financial intermediaries.

The distinction between money-as-money dealing capital (MMDC) and money-as-capital dealing capital (MCDC) sets forth the conditions for important developments in the field of Marxian political economy. First, it allows for an identification of the reasons why banks, which usually centralize the operations through which the circulation of money as money is carried out, are in a unique position to issue instruments (e.g. deposits) that perform monetary functions. Second, it allows for a deeper understanding of the differences between banks and non-bank financial institutions, setting forth the conditions for a detailed Marxian analysis of the contemporary historical constellation, and in particular of what has been recently dubbed asset-management capitalism (Haldane, 2014).<sup>7</sup> Third, it allows for a more thorough understanding of the nature of Marx's category of IBC, which has been often understood in the Marxian literature as framing all kinds of financial intermediaries, both banks and non-banks (e.g. Chesnais, 2006). As we shall see in this paper, neither banks nor non-bank financial institutions can be framed as IBC; rather, these intermediaries are responsible for managing the *allocation* of IBC (i.e., money that circulates as capital). It should be pointed out, however, that even the latter formulation is still lacking in determination. For, as Marx points out, once the credit system is fully developed and the lending out of money as capital becomes a part of daily life, *every* capital takes on the form of IBC. This is so even when capitalists invest their own capital, in which case it appears as if the capitalist lends money to herself, and thus must discount from her profits the interest she owes to herself. Using stylized balance sheets to describe the

---

(6) This difference is first articulated by Marx in *Capital*, v. I: 'The first distinction between money as money and money as capital is nothing more than a difference in their form of circulation' (Marx, 1990, p. 247). This paper articulates this difference in the more concrete level of determination of MDC.

(7) The growing differentiation and specialization of financial institutions in contemporary advanced capitalist economies has often been framed by historically oriented economic analysts as a move from a bank-based to a market-based finance. Many analysts have seen in this process a crucial step in the development of a new type of capitalism, in which short term considerations increasingly outweighs concerns over the long-term performance of economic enterprises (although it must be remarked that the recent growth of the investment firms knowns as the "Big Three" (BlackRock, Vanguard and State Street) and their increasing role as universal owners of financial assets may alter this aspect (see Condon, 2020; Fichtner; Heemskerk, 2020)). This is also the view of several economists working under the Marxian paradigm (e.g. Duménil; Lévy, 2013; Sauviat, 2004), for whom the internal differentiation of financial institutions and the growing importance of asset managers set the conditions for the emergence of the unstable and profoundly unequal pattern of capitalist reproduction which has predominated in advanced economies in the past four decades. These issues will be explored in another paper.

processes of credit money creation, circulation and accumulation, this paper manages to single out the precise mechanism through which such (socially valid) illusions arise.

This paper is divided in 6 sections, besides this introduction. Section 1 demonstrates that Marx's contention that ultimate money must be a commodity does not preclude the issuance and widespread use of credit money by formally depicting how commercial credit can displace the money commodity from the role of means of purchase. Section 2 fleshes out how the mediation of the purchases and payments of non-financial corporations and workers<sup>8</sup> by money-dealers (at this stage, simply banks) puts the latter in a unique position to issue credit money, displacing both commercial bills of exchange and commodity money from the roles of means of purchase and payment. Section 3 introduces IBC and develops the distinction between the circulation of money as money and the circulation of money as capital, establishing the distinction between MMDC and MCDC. Section 4 shows why the net income of both MMDC and MCDC must be conceptually framed as a form of profit, not interest; in so doing, it also explains why the capitalist enterprises responsible for managing the circulation of money (both money-as-money and money-as-capital) should be distinguished from IBC proper. Finally, section 5 shows that, once the credit system is fully developed, even those sums of money that are directly invested by their owners, and thus never circulate *effectively* as capital, still circulate *ideally* as capital; this, in turn, explains why the development of the capitalist mode of production tends to create the (socially objective) appearance that interest accrues to all capitals, both borrowed and non-borrowed, and that interest therefore constitutes a cost bore by capitalists (see both the neoclassicals and Keynes), and not a share of the surplus extracted from workers. The paper ends with a brief conclusion.

## 1. From commodity money to commercial credit

The first thing to notice regarding Marx's approach to money is that, in direct opposition to both the classical and the neoclassical traditions, Marx considered his theory of money to be an integral part of his theory of value. Contrary to classical economists, Marx maintained that value is not a material property of goods and services: '[c]onsidered in itself, in isolation', a product 'is not a value' (Marx, 1983, p. 22, our translation); 'as values', goods and services 'are something absolutely different from their "properties" as "things"' (Marx, 2008, p. 127). On the other hand, contrary to the neoclassical school (which, it must be reminded, was unknown to Marx himself), Marx did not regard value as a subjective phenomenon; rather, he conceptualized value as an objective *social form*, a 'social characteristic, which things obtain' under certain social conditions. A good's or service's 'objectivity as value [*Wertgegenständlichkeit*]', in Marx's view (1990, p. 159, p. 149) is its 'purely "social existence": a thing's 'existence as value [*Wertsein*] does not arise from nature, but rather from society' (Marx, 1976, p. 91); 'like language, the determination of the objects of use as value is [a] social product' (Marx, 1990, p. 167, translation modified).

To be sure, not all kinds of society managed to transform multidimensional goods and services into one-dimensional values. Rather, only those societies where the connection between production and consumption is generally mediated by market exchange constitute goods and services

---

(8) Marx himself did not consider that workers would carry out payments through a bank's balance sheet, as most workers in his time were unbanked.

as values;<sup>9</sup> and these, in turn, are precisely the ‘societies in which the capitalist mode of production prevails’ (Marx, 1990, p. 274). The reason why only such societies can transform use values into values is that, according to Marx, the substance of value is abstract labor. It is only through the equalization of different use values in exchange that the reduction of different concrete labors to equal abstract labor can take place; as he puts it in the French edition of *Capital*: ‘only exchange produces this reduction, by bringing the products of the most diverse kinds of labor into relation with each other on an equal footing’ (Marx, 1969, p. 70).<sup>10</sup> And, in Marx’s view, it is only in societies where labor power has been transformed into a commodity owned by the worker herself that goods and services are generally produced for exchange.

It should be pointed out, however, that exchange as such cannot carry out the social process from which abstract labor results; rather, the process of real abstraction which Marx has in mind can only take place through *monetary* exchange. In order to promote the reduction of concrete labors into abstract general labor, the exchange relation must be able, at one and the same time, to directly equalize the labors contained in the two exchanged commodities and indirectly perform the social and universal equalization of the labors contained in all the members of the world of commodities. This, however, can only be done if one of the commodities involved in the dyadic relation of private act of exchange acquires social validity as ‘the immediate existence of value [*Wertdasein*]’, that is, if the ‘concrete, useful labour contained in the use-value’ of a particular, privately owned commodity is socially posited as ‘its own opposite’, i.e. as ‘the mere form of realization of *abstract* human labour’ (Marx, 1976, p. 21-22, translation modified, emphasis in the original). This, according to Marx, is precisely what happens to monetary objects when they are socially positioned as *general equivalents*. Insofar a monetary object performs the role of general equivalent, commodities relate to it ‘as its *qualitatively equal*, as *value-thing* [*Wertding*]’; and, by universally relating to the general equivalent as their qualitatively equal, commodities posit the latter as the ‘autonomous [*selbständige*]’, immediate ‘figure of value [*Wertgestalt*]’, i.e., ‘as the sole figure of value or unique adequate [mode of] existence [*Dasein*] of exchange value’ (Marx, 1990, p. 240, p. 234, p. 227, translation modified). In doing so, they relate to money as the ‘direct incarnation of all human labour’ (Marx, 1990, p. 187) or ‘immediate materialization [*Materiatur*] of abstract human labour’, thus positing the concrete labor contained in the monetary object ‘as the immediate form of realization [*Verwirklichungsform*] of abstract human labour’, i.e., the ‘*mode of objectification* [*Vergegenständlichungsweise*] of human labour in general’ (Marx, 1976, p. 20-21, emphasis in the original, translation modified). In short, by relating to a monetary object as their general equivalent, commodities equalize the concrete labors contained in them to the labor contained in the monetary object. In doing so, they give the concrete labor contained in the monetary object the character of abstract human labor. This, in turn, reflexively reduces the diverse concrete labors contained in each regular commodity to abstract human labor, thus giving the useful things in which labor is embodied the character of *values*.

---

(9) ‘[V]alue’ “implies” in fact “exchanges” (Marx, 2008b, p. 127, our translation): ‘[o]utside of their relationship to each other [as carried out by exchange]’, goods and services ‘possess no *value-objectivity* [*Wertgegenständlichkeit*]’ (Marx 1983, 30, emphasis in the original, our translation).

(10) Note, however, that it is not a particular act of exchange, but rather the exchange system through which the many commodities in an economy circulate that reduces the manifold concrete labours to abstract general labour: ‘abstract universal social labour [...] is brought about by the *universal* alienation of individual labour’ (Marx, 1989, p. 296-297, emphasis added).

One can now understand why Marx considered that goods and services can only acquire the character of values by taking part in a system of *monetary* exchange. It is now also clear why he considered that the general equivalent should be embodied in a product of human labor: were this not the case, then the process of real abstraction through which the substance of value (abstract labor) is constituted could not be carried out, which then would preclude the transformation of use values into values.

Whether the social processes through which concrete labor is transformed into abstract labor can indeed only be carried out when the general equivalent form is embodied in a product of human labor, or whether Marx's monetary theory of value does not actually require ultimate money to be a commodity is a topic that has been heavily debated in the Marxian scholarship.<sup>11</sup> This paper does not engage with this literature. Rather, it merely accepts Marx's reasoning and starts from the latter to posit a different question, to wit: *does the fact that the general equivalent needs to be a product of labor entail that only products of labor can perform monetary functions?*

Marx himself did not think this was the case. Already in *Capital*, v. 1 (1990, p. 223-225) he points out that, although the general equivalent must be embodied in a commodity such as gold, 'the circulation of money itself' tends to split 'the nominal content of [monetary objects] away from their real content', dividing 'their metallic existence from their functional existence' and creating 'the possibility of replacing metallic money with tokens made of some other material'. Thus, with the development of monetary exchange, '[t]he metallic content of tokens' tends to become 'arbitrarily determined by law', until the point where '[r]elatively valueless objects [...] such as paper notes' start serving 'as coins in place of gold'. For Marx, therefore, 'inconvertible paper money issued by the state and given forced currency emerges directly out of the circulation of metallic money' and tendentially displaces the latter from the realm of daily monetary transactions (*ibidem*).

Hence, Marx, believed the commodity which embodies the form of the general equivalent need not mediate exchange 'in its own body'; rather, it can do so 'through a representative' (1990, p. 227) such as notes issued by the state (or, better yet, its central bank). But that is not all. As Marx highlights already in the first part of *Capital*, v. 1, with the development of exchange relations, even the paper money issued by the state tends to be displaced from circulation, as 'commercial credit' (Marx 1990, chapter 3) becomes increasingly important in mediating commodity circulation. As pointed out by Marx, over the development of capitalist relations of exchange, commodities are increasingly exchanged neither for the money-commodity nor for state-money, but rather for bills of exchange issued by the private participants of trade networks. If privately issued bills serve as means of purchase, then the money-commodity (or its representative, state notes) only 'actually steps into circulation' when 'payment falls due'— i.e., not anymore as a means of exchange, but as 'means of payment' (Marx, 1990, p. 234).<sup>12</sup> According to Marx, therefore, both the money-commodity and its

---

(11) For the view that Marx's theory of value does require money to be a commodity (coupled with a critique of Marx's theory), see Bellofiore (2009) and Bellofiore and Riva (2015). For the view that Marx's theory of value does not require money to be a commodity, and that Marx's claim on the contrary is actually the product of a mistaken inference, see (Heinrich 2014, p. 233-240).

(12) 'The money no longer mediates the process. It brings it to an end by emerging independently, as the absolute form of existence of exchange-value, in other words the universal commodity' (Marx 1990, p. 234).



representative (i.e. tokens issued by the state) tend to be increasingly displaced as mediators of exchange relations by IOUs issued by private agents.

Let us see in more detail how this works.<sup>13</sup> Consider a capitalist economy with two sectors. Sector 1 produces consumption goods and sector 2 produces means of production (see Figure 1). The enterprises belonging to both sectors (E1 and E2) start with means of production worth 80 units of gold.<sup>14</sup> They then hire workers (W1 and W2) issuing bills of exchange<sup>15</sup> that are redeemable against 100 units of gold by the end of the period, and put together the previously owned means of production and the newly acquired labor power to produce goods worth 200 units of gold. W1 and W2 (who have not yet received any actual money), in turn, issue bills of exchange redeemable against 100 units of gold to purchase consumption goods from E1. Simultaneously, E1 issues another bill redeemable against 100 units of gold and acquires means of production (which it plans on using in the next period) from E2, and the latter “purchases” from itself the remaining means of production.<sup>16</sup> By the end of the period, both W1, W2, E1 and E2 have claims on others and against themselves redeemable against 100 units of gold – claims whose issuance and acceptance sufficed to allow for the circulation of goods and labor power.<sup>17</sup> If workers and enterprises find a way to net these claims out, by the end of the period the capitalist economy will have managed to carry out the process of expanded reproduction<sup>18</sup> *without using any actual gold*. ‘To the extent that they ultimately cancel each other out by the balancing of debts and claims, the privately issued IOUs function absolutely as money, even though there is no final transformation into money proper’ (ibid., p. 501-502).

Figure 1

| Enterprise I                  |                             | Enterprise II                 |                             | Workers I                     |             | Workers II                    |                             |
|-------------------------------|-----------------------------|-------------------------------|-----------------------------|-------------------------------|-------------|-------------------------------|-----------------------------|
| ASSETS                        | LIABILITIES                 | ASSETS                        | LIABILITIES                 | ASSETS                        | LIABILITIES | ASSETS                        | LIABILITIES                 |
| Means of production 80        | Equity 80                   | Means of production 80        | Equity 80                   | 0                             | 0           | 0                             | 0                           |
| Means of production 80        | Bills to W <sub>1</sub> 100 | Means of production 80        | Bills to W <sub>2</sub> 100 | Bills from E <sub>1</sub> 100 | Equity 100  | Bills from E <sub>2</sub> 100 | Equity 100                  |
| Saleable goods 200            | Equity 100                  | Saleable goods 200            | Equity 100                  |                               |             |                               |                             |
| Saleable goods 200            | Bills to W <sub>1</sub> 100 |                               |                             | Bills from E <sub>1</sub> 100 | Equity 100  | Bills from E <sub>2</sub> 100 | Bills to E <sub>1</sub> 100 |
| Bills from W <sub>2</sub> 100 | Equity 100                  |                               |                             |                               |             |                               | Equity 100                  |
| MP 100                        | Bills to E <sub>1</sub> 100 | MP 100                        | Bills to W <sub>2</sub> 100 |                               |             |                               |                             |
| Bills from W <sub>2</sub> 100 | Equity 100                  | Saleable goods 200            |                             |                               |             |                               |                             |
|                               |                             | Bills from E <sub>1</sub> 100 | Equity 100                  |                               |             |                               |                             |
| MP 100                        | Bills to E <sub>1</sub> 100 | MP 100                        | Bills to W <sub>2</sub> 100 |                               |             | Bills from E <sub>2</sub> 100 | Bills to E <sub>1</sub> 100 |
| Bills from W <sub>2</sub> 100 | Equity 100                  | Bills from E <sub>1</sub> 100 | Equity 100                  |                               |             |                               |                             |

\*Rate of profit (total social capital) =  $40/360 = 11\%$ .

(13) Note that our depiction abstracts from notes issued by the state, so as to make the relationship between privately issued IOUs and the money commodity clearer. It also abstracts from the role of capitalists as consumers, as this makes our exposition simpler (without however affecting its substance).

(14) For simplicity, we assume there is no fix capital.

(15) To simplify, we assume that workers are paid in the beginning of the period.

(16) Given that we have aggregated all the enterprises in sector 2, this latter purchase seems to make no sense. But something akin to that would happen in case we disaggregated sector 2.

(17) “By and large, money now functions only as means of payment, i.e., commodities are not sold for money, but for a written promise to pay at a certain date” (Marx 2015, p. 501).

(18) E1 and E2 start with 80 and end with 100 in means of production and equity.

Two difficulties might prevent this idealized example from actually occurring. First, market participants may refuse to accept the bills issued by their trading counterparties. Second, there is always the risk that the bills may not cancel out (for instance, E1 may invest less than 100, or workers may consume less than 200), which entails that a share of the claims might actually end up being redeemed against gold by the end of the period. As a consequence, market participants, and in particular E1 and E2, might find it wise to build up a *reserve fund* (of, say, 10 units of gold each), which represents a cost of circulation and thus reduces their individual rates of profit, as well as the rate of profit of the capitalist economy as a whole (see Figure 2).

Figure 2

| Enterprise I                            |                                       | Enterprise II                           |                                       | Workers I                               |                       | Workers II                              |                                       |
|---|---------------------------------------|---|---------------------------------------|---|-----------------------|---|---------------------------------------|
| ASSETS                                  | LIABILITIES                           | ASSETS                                  | LIABILITIES                           | ASSETS                                  | LIABILITIES           | ASSETS                                  | LIABILITIES                           |
| Means of production 80                  |                                       | Means of production 80                  |                                       | 0                                       | 0                     | 0                                       | 0                                     |
| Gold 10                                 | Equity 90                             | Gold 10                                 | Equity 90                             |   |                       |   |                                       |
| <del>Means of production 80</del>       | <del>Bills to W<sub>1</sub> 100</del> | <del>Means of production 80</del>       | <del>Bills to W<sub>2</sub> 100</del> | <del>Bills from E<sub>1</sub> 100</del> | <del>Equity 100</del> | <del>Bills from E<sub>2</sub> 100</del> | <del>Equity 100</del>                 |
| <del>Saleable goods 200</del>           |                                       | <del>Saleable goods 200</del>           |                                       |   |                       |   |                                       |
| <del>Gold 10</del>                      | <del>Equity 110</del>                 | <del>Gold 10</del>                      | <del>Equity 110</del>                 |   |                       |   |                                       |
| <del>Saleable goods 200</del>           | <del>Bills to W<sub>1</sub> 100</del> |   |                                       | <del>Bills from E<sub>1</sub> 100</del> | <del>Equity 100</del> | <del>Bills from E<sub>2</sub> 100</del> | <del>Bills to E<sub>1</sub> 100</del> |
| <del>Bills from W<sub>2</sub> 100</del> |                                       |   |                                       |   |                       |   | <del>Equity 100</del>                 |
| <del>Gold 10</del>                      | <del>Equity 110</del>                 |   |                                       |   |                       |   |                                       |
| <del>MP 100</del>                       | <del>Bills to E<sub>1</sub> 100</del> | <del>MP 100</del>                       | <del>Bills to W<sub>2</sub> 100</del> |   |                       |   |                                       |
| <del>Bills from W<sub>2</sub> 100</del> |                                       | <del>Saleable goods 200</del>           |                                       |   |                       |   |                                       |
| <del>Gold 10</del>                      | <del>Equity 110</del>                 | <del>Bills from E<sub>1</sub> 100</del> |                                       |   |                       |   |                                       |
|   |                                       | <del>Gold 10</del>                      | <del>Equity 110</del>                 |   |                       |   |                                       |
| <del>MP 100</del>                       | <del>Bills to E<sub>1</sub> 100</del> | <del>MP 100</del>                       | <del>Bills to W<sub>2</sub> 100</del> |   |                       | <del>Bills from E<sub>2</sub> 100</del> | <del>Bills to E<sub>1</sub> 100</del> |
| <del>Bills from W<sub>2</sub> 100</del> |                                       | <del>Bills from E<sub>1</sub> 100</del> | <del>Equity 100</del>                 |   |                       |   |                                       |
| <del>Gold 10</del>                      | <del>Equity 110</del>                 | <del>Gold 10</del>                      | <del>Equity 110</del>                 |   |                       |   |                                       |

\*Rate of profit (total social capital) = 40/380 = 10,5%.

## 2. From commercial credit to credit money

These difficulties might be partially overcome if there exists a third enterprise (let's call it the bank) which specializes in evaluating credit, and thus is willing to endorse E1's, E2's, W1's and W2's bills of exchange, which are thereby transformed into cheques redeemable against ultimate money by the bank itself. Since the bank specializes in evaluating credit, its endorsement might increase the other agents' willingness to accept the bills issued by the non-bank agents. Not only that: the fact that all the claims are settled by the bank allows the latter to maintain a gold fund that is considerably smaller than the sum of the funds maintained by E1 and E2 in the case depicted in Figure 2. To understand why, consider the following example. Suppose E2's assessed probability that E1 will acquire means of production worth 100 is 90%, and that E2 believes there is a 10% probability that E2 will only purchase goods worth 90 gold units. Suppose also that E1's assessed probability that the workers will acquire means of production worth 200 is 90%, and that there is a 10% assessed probability that they will only purchase goods worth 190 units of gold. In such conditions, both enterprises might find it wise to maintain a fund of 10 gold units, which means that, from the perspective of total social capital, there are 20 units of gold allocated to reserve funds. Now suppose all the claims are settled by the bank, and that the latter attaches the same probabilities as E1 and E2 to the possible states of the world. In this case, the assessed probability that 20 gold units will be

required to settle accounts is only 1%, and the bank may consider it safe to build reserves somewhat lower than 20 units of gold. In other words, the centralization by the bank of the process of netting out claims from and on each non-bank agent allows for a considerable reduction in the amount of gold reserves in the economy, and thus also for an increase (*ceteris paribus*) of the economy's rate of profit.<sup>19</sup>

Figure 3

| Bank    |             | Enterprise I                  |                             | Enterprise II                 |                             | Workers I                     |             | Workers II                    |                             |
|---------|-------------|-------------------------------|-----------------------------|-------------------------------|-----------------------------|-------------------------------|-------------|-------------------------------|-----------------------------|
| ASSETS  | LIABILITIES | ASSETS                        | LIABILITIES                 | ASSETS                        | LIABILITIES                 | ASSETS                        | LIABILITIES | ASSETS                        | LIABILITIES                 |
| Gold 12 | Equity 12   | Means of production 80        | Equity 80                   | Means of production 80        | Equity 80                   | 0                             | 0           | 0                             | 0                           |
|         |             | Means of production 80        | Bills to W <sub>1</sub> 100 | Means of production 80        | Bills to W <sub>2</sub> 100 | Bills from E <sub>1</sub> 100 | Equity 100  | Bills from E <sub>2</sub> 100 | Equity 100                  |
|         |             | Saleable goods 200            | Equity 100                  | Saleable goods 200            | Equity 100                  |                               |             |                               |                             |
|         |             | Saleable goods 200            | Bills to W <sub>1</sub> 100 |                               |                             | Bills from E <sub>1</sub> 100 | Equity 100  | Bills from E <sub>2</sub> 100 | Bills to E <sub>1</sub> 100 |
|         |             | Bills from W <sub>2</sub> 100 |                             |                               |                             |                               |             |                               | Equity 100                  |
|         |             | MP 100                        | Bills to E <sub>1</sub> 100 | MP 100                        | Bills to W <sub>2</sub> 100 |                               |             |                               |                             |
|         |             | Bills from W <sub>2</sub> 100 | Equity 100                  | Saleable goods 200            |                             |                               |             |                               |                             |
|         |             |                               |                             | Bills from E <sub>1</sub> 100 | Equity 100                  |                               |             |                               |                             |
| Gold 12 | Equity 12   | MP 100                        | Bills to E <sub>1</sub> 100 | MP 100                        | Bills to W <sub>2</sub> 100 |                               |             | Bills from E <sub>2</sub> 100 | Bills to E <sub>1</sub> 100 |
|         |             | Bills from W <sub>2</sub> 100 | Equity 100                  | Bills from E <sub>1</sub> 100 | Equity 100                  |                               |             |                               |                             |

\*Rate of profit (total social capital) =  $40/372 = 10,75\%$ .

The examples above show that the circulation of liabilities issued by enterprises and workers that are endorsed by the bank allows for a considerable decrease in the stock of money-commodities required by the process of expanded reproduction. The mass of gold necessary for the settlement of mutual claims might decrease even further if, instead of merely endorsing the liabilities issued by enterprises and workers, the bank itself starts to issue the liabilities by means of which workers and enterprises trade with one another. In this case, instead of swapping IOUs among themselves, non-bank agents swap IOUs directly with the bank, and the latter's liabilities (i.e. bank deposits promising redemption against the money-commodity<sup>20</sup>) are used as the actual means of purchase in the transactions between W<sub>1</sub>, W<sub>2</sub>, E<sub>1</sub> and E<sub>2</sub>. Consider for instance the following case (see Figure 4 below):

- E<sub>1</sub> and E<sub>2</sub> start with means of production worth 80 units of gold;
- E<sub>1</sub> and E<sub>2</sub> borrow each from the bank deposits redeemable against 100 units gold. Such deposits are created by the bank *ex nihilo*;
- E<sub>1</sub> and E<sub>2</sub> hire W<sub>1</sub> and W<sub>2</sub> paying 100 in deposits each, and produce goods that are worth 200 units of gold;

(19) Marx, it should be noted, considered such developments as intrinsic to the capitalist mode of production. As he pointed out, '[w]ith the concentration of payments in one place, special institutions and methods of liquidation develop spontaneously', and the bills issued by the myriad transacting parties 'have only to be brought face to face in order to cancel each other out, to a certain extent, as positive and negative amounts' (1990, p. 232), rendering the mass of gold necessary for the settlement of payments increasingly smaller. This is exactly what happens with the introduction of the bank into our base case.

(20) A more complete exposition would consider that bank liabilities are redeemable at par and on demand against liabilities of the central bank, and the latter are then redeemable against gold. As noted above, however, this paper abstracts from state money.

Money as money vs. money as capital: distinguishing the roles of banks and non-bank financial institutions in Marx's...

- W1 and W2 purchase all the consumption goods produced by E1, which now owns deposits worth 200 units of gold;
- E1 purchases means of production worth 100, and E2 “purchases” the same amount of means of production from itself;
- E1 and E2 repay their loans to the bank.

Figure 4

| Bank                      |                            | Enterprise I                      |                     | Enterprise II                     |                     | Workers I    |             | Workers II   |             |
|---------------------------|----------------------------|-----------------------------------|---------------------|-----------------------------------|---------------------|--------------|-------------|--------------|-------------|
| ASSETS                    | LIABILITIES                | ASSETS                            | LIABILITIES         | ASSETS                            | LIABILITIES         | ASSETS       | LIABILITIES | ASSETS       | LIABILITIES |
| Gold 5                    | Equity 5                   | Means of production 80            | Equity 80           | Means of production 80            | Equity 80           | 0            | 0           | 0            | 0           |
| Loan to E1 100            | Deposits W1 100            | <del>Means of production 80</del> | Loan 100            | <del>Means of production 80</del> | Loan 100            | Deposits 100 | Equity 100  | Deposits 100 | Equity 100  |
| Loan to E2 100            | Deposits W2 100            | Saleable goods 200                | Equity 100          | Saleable goods 200                | Equity 100          |              |             |              |             |
| Gold 5                    | Equity 5                   |                                   |                     |                                   |                     |              |             |              |             |
| Loan to E1 100            | Deposits E1 200            | <del>Saleable goods 200</del>     | Loan 100            |                                   |                     | Deposits 400 | Equity 400  | Deposits 400 | Equity 400  |
| Loan to E2 100            |                            | Deposits 200                      | Equity 100          |                                   |                     |              |             |              |             |
| Gold 5                    | Equity 5                   |                                   |                     |                                   |                     |              |             |              |             |
| Loan to E1 100            | Deposits E1 100            | Means of production 100           | Loan 100            | Means of production 100           | Loan 100            |              |             |              |             |
| Loan to E2 100            | Deposits E2 100            | Deposits 100                      | Equity 100          | <del>Saleable goods 200</del>     |                     |              |             |              |             |
| Gold 5                    | Equity 5                   |                                   |                     | Deposits 100                      | Equity 110          |              |             |              |             |
| <del>Loan to E1 100</del> | <del>Deposits E1 100</del> | Means of production 100           | <del>Loan 100</del> | Means of production 100           | <del>Loan 100</del> |              |             |              |             |
| Loan to E2 400            | Deposits E2 400            | Deposits 400                      | Equity 100          | Deposits 400                      | Equity 100          |              |             |              |             |
| Gold 5                    | Equity 5                   |                                   |                     |                                   |                     |              |             |              |             |

\*Rate of profit (total social capital) =  $40/365 = 10,95\%$ .

Note that, in Figure 4, the amount of gold reserves necessary for the expanded reproduction of the system has fallen even further – which, concomitantly, raised the rate of profits of the economy as a whole. Given that the bank’s liabilities are more widely accepted as means of purchase than the bills issued by either E1, E2 or the workers, any party who eventually reduces its expenditures and ends up with a surplus of banks deposits might decide *not to redeem the later against gold* by the end of the period, thus displacing (even if temporarily) the money commodity from the roles of means of payment and hoarding.

Hence, the introduction of, first, commercial credit, and second, credit money proper, displaces gold from the realm of circulation, giving rise to a hierarchy of monetary instruments. Within this hierarchy, gold still features as the measure of values, and standardized amounts of gold (denominated here as gold *units*)<sup>21</sup> function as price standard,<sup>22</sup> whereas claims on gold issued by the bank (i.e. bank deposits) serve the role of means of purchase<sup>23</sup> and payment, and even that of means of hoarding (if, as in our last example, savers choose to retain their non-spent income in the form of claims on gold issued by the bank, rather than converting them into gold itself).

(21) The gold unit may be equivalent, for instance, to 1/35 of an ounce of gold – which, in the Bretton Woods system, would make the gold unit equivalent to one dollar.

(22) For Marx (1990, chap. 3), gold tends to retain the role of measure of values, whereas the claims on gold issued by the central bank tend to set the price standard. In this paper, however, we abstract from central bank liabilities.

(23) ‘[Money] functions ... first as a measure of value in the determination of the price of the commodity sold; the price fixed by contract measures the obligation of the buyer, i.e. the sum of money he owes at a particular time. Secondly it serves as a nominal means of purchase. Although existing only in the promise of the buyer to pay, it causes the commodity to change hands’ (Marx 1990, p. 233-234).

The stages of development presented above fit Marx's conceptual framework to a remarkable degree. According to Marx, the 'reciprocal advances' by non-bank agents 'form the real basis of credit', and 'their instrument of circulation, the bill of exchange, forms the basis of credit money proper' – which in Marx's writings takes the form of '*banknotes*' (Marx, 2015, p. 503, emphasis in the original), and here that of bank *deposits*. This, indeed, is what we saw above, where the development of commercial credit prompted the rise of credit money issued by the bank.

In Marx's view, what allowed bank liabilities to progressively displace not only gold, but also claims on gold issued by non-banks from the realm of circulation was the fact that banks are a form of money-dealing capital (MDC), i.e. 'a particular part of the total capital' which 'separates off' and concentrates the '*technical operation[s]* of monetary payment and receipt' and of 'drawn[ing] up and balanc[ing]' (Marx, 2015, p. 422) the accounts of non-bank agents. Insofar as they take in and pay out money on behalf of capitalists and workers and settle their claims on and from one another, MDCs are in a privileged position not only to evaluate credit, but also to substitute claims on gold for actual gold, and thus also to manage the whole circulation of money in the economy. Indeed, by the time we get to Figure 4, *all the payments in the economy take place within the bank's balance sheet, which thus becomes the social site where the process of money circulation takes place.*

According to Marx, the reason why non-banks are willing to submit this kind of control to money-dealers is that, by concentrating the technical operations related to the processes of purchase and payment, MDC allows for a reduction of the 'section of capital [that] must always be present ... as a reserve of means of purchase and payment' (Marx, 2015, p. 426).

[T]he reserve fund of means of purchase and payment, if managed on behalf of the capitalist class as a whole, does not need to be as great as if each capitalist had to administer his fund separately [...] Money-dealing mediates the settlement of accounts, in so far as money functions as means of payment, and by the mechanism it creates for these settlements it reduces the quantity of money these require (ibidem, p. 426-427).

By reducing the necessary amount of gold reserves, the MDC's management of the process of money circulation also leads to an increase in the general rate of profit. It should be noted, however, that the greatest possible decrease in the reserve fund was obtained when the bank not only 'mediate[d] the settlement of accounts', but also *issued* the liabilities by means of which non-bank agents settled their accounts. In other words, the greatest possible decrease in the reserve fund (and thus also the highest possible total rate of profit) was achieved through the development of institutions that, unlike E1, E2, W1 and W2, *specialize* in issuing credit instruments that function as means of purchase and payment (see Figures 2, 3 and 4). The emergence of such institutions, however, coincides with the emergence of the credit system; the latter, however, had not yet been introduced by Marx when the category of MDC was first analyzed. In order to fully develop the category of MDC, therefore, we must now turn to the credit system.

### **3. The circulation of money as money and the circulation of money as capital**

In comparing the nature of credit relations in non-capitalist and capitalist societies, Marx notices that, in the former, what is usually sought for by a borrower 'is not capital but rather money

as money' (2015, p. 697).<sup>24</sup> By contrast, in capitalist economies, the 'figure of the borrower who confronts the money-lender' is 'totally transformed' (ibidem, p. 699): here, money is frequently 'borrowed to expand accumulation for which a return with profit is anticipated' (Fine 2013-14, p. 49).

Such transformation is not caused by mere changes in the mindset of potential borrowers. Rather, it expresses 'the changed conditions under which [money] functions', i.e. the differences 'between [the] social modes of production and the social arrangements' (Marx, 2015, p. 697) that correspond to capitalist and non-capitalist economies. As argued by Marx (ibidem, 444-5, emphases in the original):

On the basis of the capitalist mode of production, money (i.e., money taken as the independent expression of a sum of value, whether this actually exists in money or in commodities) can be transformed into capital, and through this transformation it is turned from a given, fixed value into a self-valorising value, capable of increasing its own value. It becomes a producer of profit, i.e., it enables the capitalist to extract from the workers and to appropriate for himself a certain quantity of unpaid labour, surplus product and surplus-value. In this way the money receives an additional use-value, besides the use-value it possesses as money, namely the ability to function as capital. Its use-value here consists precisely in the profit that it produces when transformed into capital. In this capacity of potential capital, as a means for the production of profit, it becomes a commodity, but a commodity of a special kind. Or, and this comes to the same thing, capital as capital becomes a commodity.

Because labor power – the commodity from whose consumption surplus value springs – is available at the labor market, money, in capitalist economies, can always be converted into capital. In other words, money, in capitalist economies, is always *potential* capital. In this capacity of potential capital, money can be converted into a *sui generis* commodity: one whose 'use value [...] is itself to produce a profit' (Marx, 2015, p. 459).

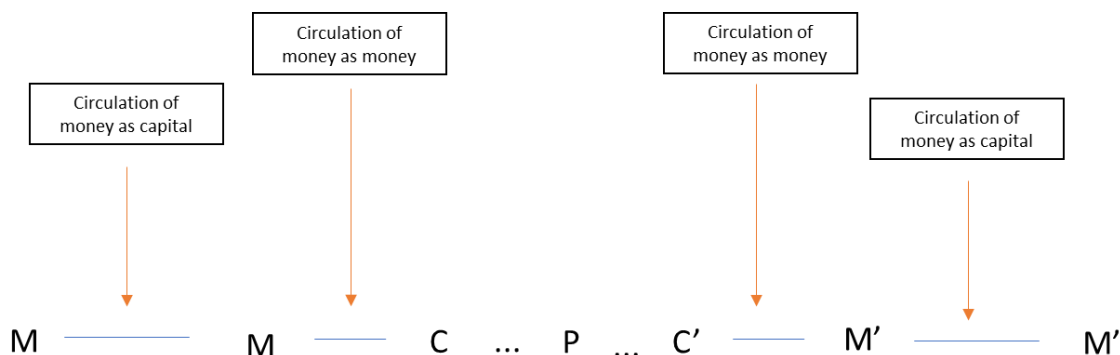
This peculiar commodity must be alienated in a peculiar manner: contrary to ordinary commodities, money-as-capital can only be put into circulation as potential capital by being lent. Now, when a sum of money is lent out as capital, its '[o]wnership is not surrendered, since no exchange takes place and no equivalent is received' (Marx, 2015, p. 452). In other words, the circulation of money as capital corresponds to no metamorphosis of value. Yet, insofar as the money was advanced as capital, it must also 'return as capital'; and, '[i]n order to [do so], the advanced money must not only have maintained itself in the movement, but also *valorized itself*' (ibidem, p. 455, emphasis in the original). In other words, the money that circulates as capital must eventually be transformed into *actual* capital; and this, in turn, requires that it circulates *as money*, i.e. as the *means of purchase* of the means of production and the labor power from which surplus value can be extracted. After that, money needs to circulate as money yet again, so that the extracted surplus value can be realized. Only then is the money that was originally lent as capital free to circulate as capital once again, as the borrower returns it to the original lender – not as the same original value, but rather as an increased monetary sum.

---

(24) On the reasons why individuals borrow money in non-capitalist societies, see Millett (2002), Finley (1981) and Migeotte (2009).

At the end of the day, the circuit covered by the money alienated as potential capital is the following:

Figure 5



As Figure 5 makes clear, whereas in the first and last phases of the circuit the money circulates as capital, in the intermediate phases – in which it serves first as a means of acquisition of labor power and means of production, and then as the means of purchase of the commodity these inputs produced – it circulates only as money. Paradoxically, therefore, the money circulates as capital exclusively in the phases of the circuit where it does not function as capital, and functions as capital exclusively in the phases where it circulates as money.

To single out the role of money dealers in this circuit, let us compare Figure 5 with the previously developed balance sheets. Consider the evolution of E2’s balance sheet in Figure 4. Notice, first, that the sequences represented in Figures 4 and 5 are not perfectly analogous, since in Figure 4 the means of production used in the current period had been acquired in the previous period, whereas the means of production acquired in the current period will only be used in the following one. This, however, does not prevent us from identifying, in the evolution of E2’s balance sheets, the precise moments in which money circulates as capital, and those in which it circulates as money.

Figure 6

|                 |  |  |  | Enterprise II                     |                     |
|-----------------|--|--|--|-----------------------------------|---------------------|
|                 |  |  |  | ASSETS                            | LIABILITIES         |
| <b>Phase 1:</b> | Loan (M-M)                               |  |  | Means of production 80            | Loan 100            |
|                 | <i>* Circulation of money as capital</i> |  |  | Deposits 100                      | Equity 80           |
| <b>Phase 2:</b> | Acquisition of labor power (M-C)         |  |  | Means of production 80            | Loan 100            |
|                 | <i>* Circulation of money as money</i>   |  |  | Disposable labor power 100        | Equity 80           |
| <b>Phase 3:</b> | Production (C...P...C')                  |  |  | <del>Means of production 80</del> | Loan 100            |
|                 | <i>* No circulation</i>                  |  |  | Saleable goods 200                | Equity 100          |
| <b>Phase 4:</b> | Realization of surplus value (C'-M')     |  |  | Means of production 100           | Loan 100            |
|                 | <i>* Circulation of money as money</i>   |  |  | <del>Saleable goods 200</del>     |                     |
|                 |  |  |  | Deposits 100                      | Equity 110          |
| <b>Phase 5:</b> | Loan repayment (M-M')                    |  |  | Means of production 100           | <del>Loan 100</del> |
|                 | <i>* Circulation of money as capital</i> |  |  | <del>Deposits 100</del>           | Equity 100          |

As can be seen in Figure 6, the moments in which money circulates as capital coincide with those in which E2 transacts *directly* with the money dealer (the bank), i.e., phases 1 and 5 of the circuit (loan extension and repayment). Note, however, that the bank is not *absent* from the other phases (except for phase 3, when there is no circulation). As Figure 6 makes clear, E2 purchases labor power and then sells its products by transferring and receiving bank deposits. In other words, even the transactions from which the bank is absent as a direct counterparty are still performed *through the bank's balance sheet*.

It might thus seem that money circulates as money when non-banks transact with one another, and that it circulates as capital when non-banks transact directly with the bank. Things, however, are more complicated than that. Suppose that, after selling its product to W1 and W2 and repaying its debt to the bank, E1 decides it does not want to spend the remaining deposits (worth 100 gold units) in purchasing the means of production supplied by E2; instead, it saves deposits worth 10 gold units. This means, first, that E2 won't be able to sell all its output and will have to retain goods worth 10 gold units in its inventory. Most importantly, however, it also means that E2 will not be able to fully repay its loan to the bank.

One way out of the situation is that the bank refinances the loan, hoping E2 will be able to clean out its inventory in the following period and repay the debt. But there are other solutions. Suppose E1 decides to use its unspent deposits to acquire a share in an investment fund, and that the latter uses that money to purchase a security issued by E2. This means that E2 can now repay its loan to the bank. But, most importantly, what this operation shows is that money (i.e. bank deposits) can circulate as capital even in transactions in which the bank is not a direct counterparty. Insofar as it collects saved deposits and uses them to purchase financial assets, the investment fund can also act as money-as-capital dealer.

This shows that, once non-banks start saving part of their monetary income, banks are subject to losing absolute control over the money-as-capital dealing business. The same, however, does not apply to the money-as-money dealing business. True: the investment fund now manages part of the money that circulates as capital. It can only do so, however, by moving around bank deposits! In order to manage the circulation of money as capital, the investment fund must first *acquire deposits* by selling out shares, and then *dispose of those deposits* as a means to acquire financial assets (such as E2's securities). Put differently, *all the transactions the money-as-capital dealer performs must still be carried out through the money-as-money dealer's balance sheet*. In short, for as long as bank deposits are the instruments used to mediate purchases and payments, non-banks cannot displace banks from their role as MMDCs. We thus have a mutually reinforcing relationship, in which the fact that the bank deals in money-as-money (i.e., it manages the payments and settling of accounts of non-bank agents) allows it to issue credit money, whereas the fact that it issues credit money grants it virtual monopoly of the money-as-money dealing business.

Note, however, that *individual banks* can still be sidestepped in their role as MMDCs by *other individual banks*. If there is more than one bank in the economy, then a bank's deposit can always be converted into deposits issued by another bank. It follows that, even in economies where bank deposits have in fact monopolized the performance of the monetary functions of means of purchase and payment, individual banks are (at least in theory) still subject to the forces of competition. And this, as we shall see in the following section, has important implications for the way income is distributed across society.



#### 4. The incomes of MMDCs and MCDCs and the tendency toward the internal differentiation of MDC

Let us now see how the bank can profit from its privileged position in the money-dealing business. As is well known, banks charge interest when they make loans. Yet, the fact that a bank faces competition in its role as MCDC imposes constraints on the interest rate it is able to charge. Most importantly, the fact that it also faces competition in its business as money-as-money dealer entails that any individual bank is subject to the possibility of losing out deposits to other banks. If we assume that there is no interbank credit, then any loss of deposits entails that the bank is forced to redeem its liabilities against gold. Recall, however, that the bank's "historical task" (i.e. the way it contributes to an increase in the economy's rate of profit) was precisely to reduce the amount of gold that was necessary for the process of expanded reproduction; and that it did so by raising the ratio of deposits to gold in its balance sheet. Put differently, *the bank is structurally unable to redeem all its deposits* (in Figure 4, for instance, only 1 out each 40 deposit units can be redeemed against gold). Hence, the bank must retain as many deposits in its balance sheet as possible – and, if possible, even attract deposits from other banks. And the primary way it can do so is by paying out interest on deposit accounts.

With these considerations in mind, let us analyze how the bank makes an income from its activities. Figure 7 introduces the category of interest and aggregates all the sectors in the economy (including the banking sector, which was previously presented as a single bank) to focus on the relationship between non-banks and banks:

Figure 7

| Banks  |          |             | Enterprises       |                     |                  | Workers       |                    |             |                       |
|--|----------|-------------|-------------------|---------------------|------------------|---------------|--------------------|-------------|-----------------------|
| ASSETS   |          | LIABILITIES | ASSETS            |                     | LIABILITIES      | ASSETS        |                    | LIABILITIES |                       |
| Gold   | 5        | Equity      | 5                 | Means of production | 160              | Equity        | 160                | 0           |                       |
| Loan to E  | 200      | Deposits W  | $200 + Y/3$       | Means of production | 160              | Loan          | 200                | Deposits    | $200 + Y/3$           |
| Interest receivable  | $X/3$    |             |                   | Saleable CG         | 200              | Owed interest | $X/3$              | Equity      | $200 + Y/3$           |
| Gold   | 5        | Equity      | $5 + X/3 - Y/3$   | Saleable MP         | 200              | Equity        | $200 - X/3$        |             |                       |
| Loan to E  | 200      | Deposits W  | $Y/3$             | Saleable CG         | 200              | Loan          | 200                | Deposits    | $200 + Y/3$           |
| Interest receivable  | $2X/3$   | Deposits E  | $200 + Y/3$       | Deposits            | $200 + Y/3$      | Owed interest | $2X/3$             | Equity      | $Y/3$                 |
| Gold   | 5        | Equity      | $5 + 2X/3 - 2Y/3$ | Saleable MP         | 200              | Equity        | $200 + Y/3 - 2X/3$ |             |                       |
| Loan to E  | 200      | Deposits W  | $Y/3$             | Deposits            | $200 + 2Y/3$     | Loan          | 200                | Deposits    | $(Y/3)*[(1+Y/2)/3]$   |
| Interest receivable  | X        | Deposits E  | $200 + 2Y/3$      | Saleable MP         | 200              | Owed interest | X                  | Equity      | $(Y/3)*[(1+Y/2)/3]$   |
| Gold   | 5        | Equity      | $5 + X - Y$       | Means of production | 200              | Equity        | $200 + 2Y/3 - X$   |             |                       |
| Loan to E  | 200      | Deposits E  | $200 + 2Y/3$      | Deposits            | $200 + 2Y/3$     | Loan          | 200                | Deposits    | $(Y/3)*[2*(1+Y/2)/3]$ |
| New loan to E  | $X-2Y/3$ | Deposit W   | $Y/3$             | Means of production | 200              | New loan      | $X - 2Y/3$         | Equity      | $(Y/3)*[2*(1+Y/2)/3]$ |
| Gold   | 5        | Equity      | $5 + X - Y$       | Equity              | $200 - X + 2Y/3$ |               |                    |             |                       |
| <b>Comments:</b>   |          |             |                   |                     |                  |               |                    |             |                       |
| 1. To simplify, we assume there is no compound interest.   |          |             |                   |                     |                  |               |                    |             |                       |
| 2. X is the interest charged on a 200 loan for the whole period. Y is the interest paid on a 200 deposit for the whole period      |          |             |                   |                     |                  |               |                    |             |                       |
| *Hence, the rate of interest banks charge on loans is $(X/2)\%$ , whereas the rate deposit holders are paid is $(Y/2)\%$           |          |             |                   |                     |                  |               |                    |             |                       |
| 3. The bank's net income is $(X - Y)$ , which is different from the interest charged (X).  |          |             |                   |                     |                  |               |                    |             |                       |
| 4. In equilibrium, the rates of profit of the enterprises and the bank must be the same, i.e., $[(X-Y)/5] = [(40 - X + 2Y/3)/360]$ |          |             |                   |                     |                  |               |                    |             |                       |
| * Given that there is no natural rate of interest, we can solve for any exogenously determined X.                                  |          |             |                   |                     |                  |               |                    |             |                       |
| For instance, suppose the rate of interest charged on loans is 5%. Then $X = 10$ , $Y = 9.91$ and the rate of profit is 1.66%      |          |             |                   |                     |                  |               |                    |             |                       |
| Or suppose the rate of interest charged is 3%. Then $X = 6$ , $Y = 5.48$ , and the rate of profit is 10.45%                        |          |             |                   |                     |                  |               |                    |             |                       |
| Suppose, finally, that the rate charged is 2%. Then $X=4$ , $Y=3.47$ and the rate of profit is 10.64%                              |          |             |                   |                     |                  |               |                    |             |                       |

Notice, first, that although the banks do extract interests from enterprises, their *net* income is not equal to interest as such, but rather to the spread between the interest they charge on loans and

the interest they pay out to depositors. *This spread constitutes the banks' profits,*<sup>25</sup> and the banking sector's rate of profit, as can be seen in Figure 7, is *the same as the rate of profit the enterprises obtain from their investments.* Note, moreover, that *even though the banks absorb part of the surplus value extracted from workers by the enterprises, the banking sector's operation can still increase the enterprises' rate of profit of,* depending on the prevailing interest rate. Since there exists no natural rate of interest (see Marx 2015, chap. 5), we can find the rates of profit that result from each exogenously determined interest rate (given, of course, the rate of surplus value). For instance: if the rate of interest is 2%, then the rate of profit is 10.64% – that is, more than was obtained in Figure 2, when enterprises did not share the extracted surplus value with the banking sector, but were forced to retain a relatively large amount of gold in their vaults. On the other hand, if the rate of interest is 3%, the rate of profit is only 10.45% – i.e., less than would have been obtained in an economy without banks.

It is by now clear that the net income of banks – which, as seen in the previous section, act as both MMDC and MCDC – has the form of *profits*, not that of interest. But how about other the financial intermediaries, which can act solely as MCDCs?

Recall that, contrary to banks, which act as MMDCs, MCDCs cannot create new deposits; hence, they can only deal in deposits that have already been created by the banking sector. Put differently, the very existence of non-bank MCDCs presupposes that a share of the credit money created by banks is not destroyed by means of loan repayments. Suppose, for instance, that the enterprises decide to use part of the money they received for selling finished goods to buy back some of their own shares (see Figure 8). This introduces a new set of agents into our model: the capitalists (as opposed to the enterprises themselves).<sup>26</sup> The buying back of shares prevents the enterprises from fully repaying their bank loans.<sup>27</sup> What can they do not to default? They may refinance their loans directly with the banking sector, which then retains the enterprises' debts in its balance sheet and continues to charge interest on them. Another way out is for the enterprises to issue and sell securities to the capitalists, and use the newly acquired deposits to pay back their debts to the banks.<sup>28</sup> The capitalists may purchase these securities directly, in which case they are responsible for managing their own portfolio. Alternatively, they may use their newly acquired deposits to buy shares from an investment fund, which then purchases the enterprises' securities on the capitalist's behalf – i.e., the fund lends the capitalists' money (buys securities) and collects principal and interest for them. In this case, the investment fund acts as the manager of the capitalists' portfolio, helping the latter put their unspent monetary income into circulation *as capital*.<sup>29</sup>

---

(25) This is so because gold does not depreciate, and, by assumption, the banks used all their equity to acquire gold. Had the banks acquired variable capital or other forms of (depreciable) constant capital, then their profits would be smaller than the spread, and they would need to charge an even larger spread so as to achieve the average rate of profit.

(26) Of course, capitalists were already implicitly present as shareholders.

(27) To a very small extent, this was already the case Figure 7, where the enterprises were not able to fully repay the interest they owed the banks.

(28) In both cases, the buying back of shares will have ultimately lead to an increase in the enterprises' degree of leverage.

(29) Note that, if there exists a secondary market for securities, the fund may collect principal before the security issuer has effectively redeemed the loan. Note moreover that, besides debt securities, the investment fund may also promote the circulation of money as capital by acquiring other types of financial assets, such as stocks.

Figure 8

| Banks         |                |        | Enterprises             |                |                         | Capitalists  |            | Investment Fund  |              |
|---------------|----------------|--------|-------------------------|----------------|-------------------------|--------------|------------|------------------|--------------|
| Loan to E 200 | Deposits E 200 | Gold 5 | Saleable CG 200         | Loan 200       | Deposits 200            | Shares E 200 | Equity 200 | Equipment 0.2    | Equity 0.2   |
|               | Equity 5       |        | Means of production 200 | Equity 200     |                         |              |            |                  |              |
| Loan to E 200 | Deposits E 100 | Gold 5 | Deposits 100            | Loan 200       | Means of production 200 | Shares E 100 |            | Equipment 0.2    | Equity 0.2   |
|               | Deposits C 100 |        |                         | Equity 100     |                         |              |            |                  |              |
|               | Equity 5       |        | Means of production 200 | Equity 100     | Deposits 100            | Equity 200   |            |                  |              |
| Loan to E 200 | Deposits E 100 | Gold 5 | Deposits 100            | Loan 200       | Means of production 200 | Shares E 100 |            | Equipment 0.2    | Equity 100.2 |
|               | Deposits C 100 |        |                         | Securities 100 |                         |              |            | Securities E 100 | Equity 100.2 |
|               | Equity 5       |        | Means of production 200 | Equity 100     | Shares F 100            | Equity 200   |            |                  |              |

\* To simplify, the figure abstracts from interest payments.

What kind of income can the fund make out of this operation? If enterprises had to pay more interests on their securities than on a bank loan, they would never issue securities in the first place (supposing, of course, that the banks are willing to refinance the enterprises' loans); hence, the rate of interest enterprises pay on their securities cannot be higher than the interest rate charged by banks. On the other hand, if the rate of return the investment fund offers were not at least as high as what they would receive from deposits, capitalists would never acquire the fund's shares in the first place. In fact, given that the fund's shares are less liquid than deposits (since, contrary to the latter, they are not convertible into ultimate money at par and on demand), the fund's shares must yield *more* on average than the bank's deposits. It is clear, then, that whatever net income the fund obtains does not have the form of interest; rather, like the banks', the fund's net income takes on the form of *profit*. What is still not clear, however, is *how the fund can make a rate of profit that is as large as the bank's, while at the same time collecting the same rate of interest and paying its investors a rate of return that is higher than the rate banks pay out on deposits*.

The answer to this conundrum is that, contrary to the banks', the fund's liabilities are not redeemable in ultimate money at par and on demand;<sup>30</sup> for that reason, the fund does not need to build up a gold reserve, and can operate with an initial capital base that is even thinner than the banks'. Consider, for instance, that before issuing new shares to the capitalists, the investment fund had a capital base of 0.2 gold units, which was wholly invested in the equipment required for the fund's operation. It then sold new shares to the capitalists and converted the collected deposits into securities issued by the enterprises (see Figure 8). Recall that, when the rate of interest charged by the banks is 2%, the average rate of profit in the economy is 10.64%. In this context, the investment fund can match the required rate of profit with a net income of merely 0.0266 gold units.<sup>31</sup> Given the size of the portfolio it manages on behalf of the capitalists (i.e., 100 gold units), and assuming that the fund's equipment is wholly depreciated and replaced in a single period,<sup>32</sup> our hypothetical investment fund

(30) In contemporary capitalism, money market mutual funds constitute a (partial) exception to this rule. Their liabilities are redeemable at par and (practically) on demand against bank deposits, which in turn are redeemable at par and on demand against ultimate money (i.e. central bank liabilities).

(31) Actually, the introduction of this new capital worth 0.2 gold units raises the stock of capital in the economy, thus reducing the average rate of profit. But the overall effect is negligible, and will be abstracted from in this paper.

(32) This raises the questions of who produces the equipment and where it comes from. One solution would be to have E2 producing further means of production worth 0.2 gold units. This, however, would alter the picture of the economy as a whole and distract us from the problem of where the fund's profits come from. Hence, the origins of the fund's equipment will be abstracted from in this paper.

can obtain the required net income by posting a spread of only 0.226% – i.e., less than the bank's spread of 0.265%.<sup>33</sup> Put differently, the fund can offer its shareholders a rate of return of 1,77%, which is more than the 1,73% banks can pay out to depositors, while at the same obtaining the same rate of profit as the banks and the enterprises. Alternatively, it can pay e.g. 1,75% to its shareholder, and charge the enterprises a rate of 1,98% – which might explain why the bank chose to refinance via capital markets instead of rolling over its debt with the banks.

This example suggests that the very fact that banks function as MMDC may be detrimental to their ability to act as MCDC: because they need to retain assets in the form of gold reserves, the banks can only achieve the average rate of profit by posting spreads that are larger than the ones with which non-bank financial intermediaries operate. This explains why, as capitalism evolves, MDC tends to become increasingly internally differentiated: whereas depository institutions, whose liabilities are redeemable against ultimate money at par and on demand (which, in turn, allows bank deposits to function as money), tend to monopolize the role of dealers in money-as-money, other non-depository institutions, whose liabilities are not redeemable at par and on demand, tend to acquire an increasingly important role as dealers in money-as-capital, i.e. as managers of the capitalists' portfolios.<sup>34</sup> This, indeed, is what took place in most advanced capitalist economies in the last few decades, in which non-bank asset managers have concentrated a rising share of the business of money-as-capital dealing (Haldane, 2014).<sup>35</sup>

The example above also shows that, in the hypothetical economy depicted above, it is not the banks (or for that matter the investment fund), but rather the capitalists who benefit from eventual increases in the rate of interest. For instance: when the rate of interest charged on borrowers is 5%, capitalists are paid a rate of interest of 4.95% over their deposits (and slightly more on their fund shares), and the banks obtain a rate of profit of 1.66%, just like the enterprises and the investment fund; on the other hand, when banks charge 2% on loans, capitalists receive 1.73% on their deposits, and the banks themselves obtain a rate of profit of 10.64%. This begs the question of why banks in actual capitalist economies are often willing to raise the rate of interest on their loans (as long as they can find demand for the latter). The answer is that, in actual capitalist economies, new investors often face barriers to entry, and especially so in the banking sector, which is usually more regulated than other sectors. In other words, higher bank profits do not necessarily attract competitors. It follows that, by increasing the spread between the rate of interest they charge on loans and the rate they pay out to depositors, banks may be able to consistently absorb a larger share of the total surplus value than would be expected given the relative size of their capitals. They can do so either by raising the rate of interest they charge on loans – in which case they absorb part of the profits which, in competitive conditions, would be pocketed by the enterprises – or by reducing the rate they pay out on deposits – in which case they absorb part of the interest income capitalists would have received in

---

(33) Notice that, contrary to the investment fund, the bank in our example operates with no equipment. Had it been (realistically) assumed that the bank invested not only in gold reserves, but also in equipment, then the bank would have needed to establish an even larger spread so as to achieve the average rate of profit.

(34) Of course, investment funds can still belong to bank-holding companies, as often happens in contemporary capitalism.

(35) We intend to explore this topic in a future paper.

more competitive conditions.<sup>36</sup> Doing this, however, may prove more difficult with the development of non-bank financial intermediaries, which, as seen above, can operate with a lower spread than the banks', and thus are structurally well positioned to compete with the latter in the money-as-capital dealing business (which, again, may help explain the emergence of market-based finance out of the heavily regulated bank-based financial system that prevailed in developed capitalist economies in the decades following World War II).

## 5. IBC revisited

Section 2 of this paper showed that the category of MDC, as presented by Marx in chapter 4 of the manuscripts later transformed into *Capital*, v. 3, is not yet fully developed. As seen above, MDC can only fulfill its "historical mission" of raising the economy's average rate of profit by engaging in credit operations, whereas the credit system itself had not yet been introduced at the stage of the presentation in which Marx derived the category of MDC. Section 3 introduced the credit system and analyzed how the rise of the latter reshapes the category of MDC. It was shown that the introduction of the credit system establishes an internal differentiation in the sphere of monetary circulation, imposing the need to distinguish the circulation of money as money from the circulation of money as capital. This, in turn, implies that MDC too must be internally differentiated, leading to the distinction between MMDCs and MCDCs. Finally, section 4 demonstrated that, in consonance with Marx's own view that MDCs net income takes on the form of profit (2015, chap.4), the net income obtained by both MMDCs and MCDCs does not have the form of interest, but rather that of profit.

This begs the question: if the net income of financial institutions such as banks, pension funds, hedge funds, etc. should be framed as profits, just like that of industrial and commercial capitals, then what should one make of Marx's category of IBC? Put differently, to what forms of capital (if any) does the latter apply? To answer this question, we need to go back to the circuit of capital first analyzed in section 3:

Figure 9

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

As this circuit makes clear, the alienation of money as capital can only be regularly followed by the reflux of an augmented amount of money because the borrowed money is employed in the production and extraction of surplus value. In other words, money can only circulate as capital because it actually functions as capital. Yet, as pointed out above, the borrowed money circulates as capital exclusively in the phases of the circuit where it does not function as capital, and functions as capital only in the phases where it circulates as money. Consequently, the circulation of money as

---

(36) On the other hand, in actual capitalist economies, banks often lose money when interest rates are too low. The reason is that, if interest rates are too low, banks will only be able to achieve the average rate of profit by paying negative rates on deposits – which, however, may be resisted by bank depositors and regulators. Notice, however, that contrary to the gold reserves in our example, bank reserves in contemporary advanced capitalist economies do pay interest, which in turn might partially compensate for the decreases in the spread.

capital appears to be independent from its actual functioning as capital. More precisely, the circulation of money as capital appears to be:

simply the result of a legal transaction between the owner of the capital and [another] person. It therefore also appears, as far as the relations between the moneyed capitalist and the productive capitalist go, as no more than a loan of money ... and a repayment of the money that has been borrowed ... Everything that happens in between is obliterated (Marx, 2015, p. 454).

The process of valorization takes place exclusively between the original alienation of money and its reflux to the hands of the original owner. *As capital*, however, the money realized a different, shortened movement (M – M'). It follows that, on the surface of the capitalist mode of production, the money advanced as capital appears to exist as two different and independent capitals: it 'appears in a double determination [*Bestimmung*], as loanable capital in the hands of the lender, and as industrial or commercial capital in the hands of the functioning capitalist' (Marx, 2015, p. 467).

For the parties involved in the circuit described above, therefore, it is as if the same money-capital existed in two different forms at the same time: under one of them, it is capital as *property*; under the other, it is capital as *function*. Far from constituting a mere subjective illusion, this misrepresentation has a socially objective character. For, even when the lent money-capital is in the hands of the borrower, the lender, 'who has not ceased to be [its] legal owner' (Marx, 2015, p. 447), carries in her pocket a title that can be discounted at the secondary markets at any time.<sup>37</sup> Hence, the alienation of money as capital *necessarily* produces the duplication of capital in the representation of agents: having been lent and employed as capital, money will be represented by the agents as two different capitals, as if it existed not only in its actual circuit as industrial capital, but also in an ownership title whose price responds to laws that are completely different from those that regulate the value of capital.

If the representation of the money-capital is duplicated, then so must be the representation of the income it generates. Accordingly, the surplus-value produced in the circuit depicted above appears as divided in two different rubrics: on the one hand, as the income that is due to capital as property, i.e. *interest* (received mainly by the capitalists, and occasionally even by workers – see Figure 7); on the other, as the income generated by the functioning capital, i.e. *profit of enterprise*. These two forms of income differ in two manners. First, in contrast to the profit of enterprise (whose magnitude varies with the idiosyncratic process of production and circulation of each particular enterprise), the rate of interest is uniform for all capitals advanced in the same conditions at the same point in time. Second, contrary to the profit of enterprise, which appears at the surface of the system as a residual, the rate of interest is contractually defined as the lending relation is established, that is, before the money advanced as potential capital is actually realized as capital. Hence, even though the actual '*manner of its return* is ... determined in each case by the actual cyclical movement of capital as it reproduces itself and its specific varieties', for the money's original owner (either the bank who issued the deposit or another agent who prevented the deposit's extinction by saving), 'the return takes the form of a *repayment*, because the advance, the alienation of the loan capital, has the form of a *loan*' (Marx 2015, 450, emphases in the original). Therefore, interest, in contrast to the profit of enterprise, interest appears as independent from the vicissitudes of the processes of production and circulation of capital. Consequently, although the category of interest presupposes the availability of the commodity labor

---

(37) This applies even to bank loans – which, as the 2007-8 financial crisis reminded us, can also be securitized.

power and its capacity to generate a surplus value,<sup>38</sup> *interest, paradoxically, tends to appear on the surface of the system as a form of income that money can generate in and of itself*, independently from the actual process of production and realization of surplus value.

By means of a socially objective illusion,<sup>39</sup> ‘money [appears as] capital *in itself*’ (Marx, 2015, p. 459, emphasis in the original), and ‘interest appears as the mere fruit of property in capital, of capital in itself, abstracted from the reproduction process of capital’ (Marx, 2015, p. 476).

The thing ... is now capital as a thing, and capital appears as a mere thing; the overall result of the processes of production and circulation appears as a property inherent in the thing itself, and it is up to the possessor of money, i.e., of the commodity in its ever-exchangeable form, whether he wants to spend it as money or hire it out as capital. In interest-bearing capital, therefore, this *automatic fetish* is elaborated into its pure form, self-valorising value, money that makes (breeds) money, and in this form it no longer bears any marks of its origin. The social relation is consummated in the relationship of a thing (money) to itself (ibidem, 492-493, emphasis in the original).

With the development of the capitalist credit system, there emerges the appearance that it is ‘as completely the property of money to create value, to yield interest, as it is the property of pear trees to produce pears’ (Marx, 2015, p. 493). And, once this socially objective illusion is reified by its repeated validation in the sphere of circulation – where unspent deposits can always earn an interest –, an additional transformation takes place: *the severing, in the agents’ conscience, of the connection between interest and the act of lending*. As pointed out by Marx, although ‘the rate of interest would not exist’ (ibidem, p. 485) in the absence of loans, the development of the capitalist mode of production creates the appearance that the phenomenon of interest *precedes*, and therefore is *independent from* the act of lending. Under capitalism, therefore, interest appears as a form of income that belongs to money-capital *in itself*, regardless of whether ‘it is lent, or else available to the reproduction process’ – in which case ‘it yields interest to the functioning capitalist as its owner, separate from industrial profit’ (ibidem, p. 494).

Interest, then, [appears as] the net profit yielded by property in capital as such, whether to the mere lender, who remains outside the reproduction process, or to the owner of the capital, who himself employs it productively (ibidem, p. 481).

To illustrate this point, let us go back to E2’s balance sheet in Figure 6. Suppose E2 acquired its first means of productions (worth 80 gold units) through the process of primitive accumulation, in which workers were displaced from their previous livelihood conditions and separated from the means of production (Marx, 1990, chap. XXX). E2 then borrowed 100 from the bank, hired labor, and so on. Hence, the constant and variable capitals put to work by E2 add up to 180 gold units, 100 of which were borrowed from the bank. The integral rate of profit (i.e. the ratio of surplus value to the sum of constant and variable capital) is 11,11%, and, with a rate of interest of 3%, the rate of profit after interest is 10.45% (see Figure 7). Notice that, by adding the rate of interest to the post-

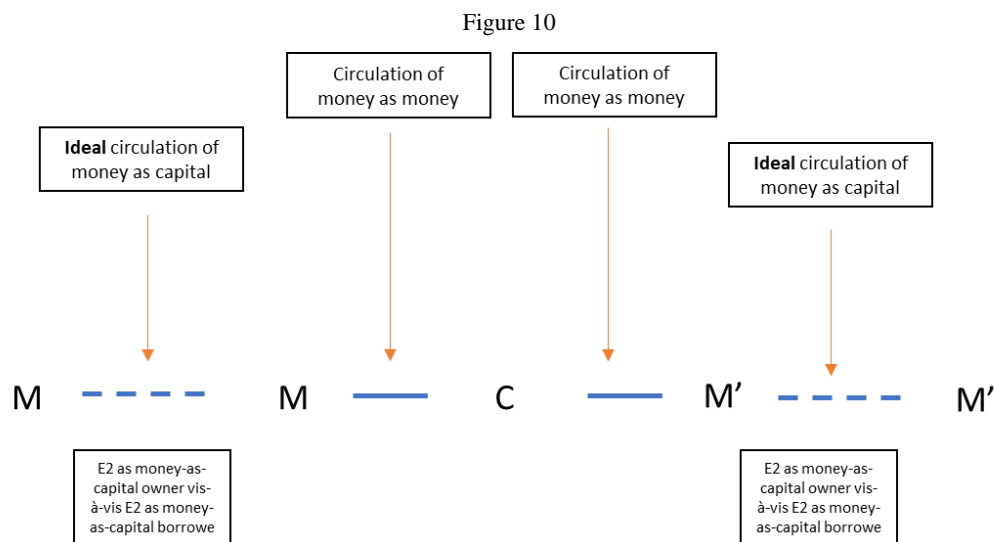
---

(38) ‘Interest in itself expresses precisely the existence of the *conditions of labour as capital*, in their social antithesis to labour and their metamorphosis into personal powers vis-à-vis labour and over labour’ (Marx, 2015, p. 484, emphasis in the original).

(39) ‘It rests on *objective facts*, for the *interest* flows towards the moneyed capitalist, the lender, who is simply the *owner of the capital* and thus represents nothing but *property in capital* before the production process and outside the production process’ (Marx, 2015, p. 477, emphases in the original).

interest rate of profit, we get to a number that is higher than the integral rate of profit. The reason is that E2 only pays interest on the variable capital, and not the constant capital. If E2 were to *impute* an interest of 3% over its original capital, however, it would then obtain a post-interest rate of profit of precisely 8.11%. In other words, if the “cost” of interest is imputed back to the original capital, E2 obtains a post-interest rate of profit which, once added to the rate of interest, is actually equal to the integral rate of profit.

Marx’s claim is that this process of imputation is carried out on a daily basis by the agents enmeshed in the capitalist relations of production and circulation regardless of whether the capital they use to acquire means of production and labour power was borrowed or not. Why is that so? The first reason is that the *individual* enterprise could always have sold the means of production it obtained through the process of primitive accumulation and received interest from the resulting deposits (supposing, of course, that the means of production have been marked to market). The second and most important reason is that, after the process of primitive accumulation is concluded, every *new* acquisition of means of production entails an opportunity cost: as can be seen in Figure 7, to invest in new means of production worth 100 units of gold, E2 had to forego the interests that would have accrued its deposits at the bank. Once the credit system is consolidated, therefore, the production of new surplus value always entails an opportunity cost, regardless of whether the money used to acquire labor power and means of production is borrowed or not. It follows that, *although the money used by E2 to purchase the new means of production has not been borrowed,<sup>40</sup> and thus did not actually circulate as capital, it still circulated ideally as capital, as if E2 had lent the money to itself* (Figure 9). In the terms proposed in this paper: when capitalists employ their own capital, they ideally perform the function of MCDC of their own capital.<sup>41</sup>



(40) Note that, after selling finished goods, E2 has 200 in deposits, and a loan of 100 to repay.

(41) The third and final reason for the imputation of interest over non-borrowed money-capital (which cannot be adequately developed in this paper) is that, with the development of the capitalist mode of production, enterprises tend to take on the form of share-issuing corporations (Marx, 2015, chap. 5). Shareholders are expected to be paid dividends; and dividends, according to Marx, are merely a form of interest. In short, as capitalism develops, enterprises increasingly take on the form of corporations, and the latter are required to pay interest on their own equity in the form of dividends.



Hence, once the capitalist relations of production and circulation are fully established, the enterprise ‘always appears in a dual role ... as [both the owner and] the debtor of [its] own capital’ (Marx, 1990, p. 1054) – which, as Marx points out (*ibidem*), is precisely how things appear on the enterprise’s balance sheet, where capital is registered on the liability side alongside debts. If the enterprise borrowed from itself, then it must also pay interest to itself: ‘Even when [it] operates with [its] own capital, [its] profit is divided into interest and profit of enterprise’ (Marx, 2015, p. 478). Marx’s contention is that this applies to *all capitals, regardless of the type of business they are invested in*. And, precisely because interest ‘appears as the specific and characteristic product of [every] capital’ (Marx, 2015, p. 488), regardless of the kind of business it is invested in, the introduction of the category of interest also entails that the notion of surplus tends to be effaced from the conscience of agents (including economists) living under capitalist conditions. For, as seen above, interest appears on the surface of the capitalist mode of production as a cost, and not as part of the surplus value.<sup>42</sup> But, going a step further, the fact that interest appears as the form of income produced by capital in and of itself also entails that the other part of the surplus value, i.e. the profit of enterprise, ‘appears in contrast [to interest] as a wage independent of capital’ (Marx, 2015, p. 488), i.e. as the form of income that remunerates the entrepreneur for her work. And this, in turn, ends up hindering the fact that capital’s income is derived from a process of surplus extraction.

In short, contrary to MMDC and MCDC, which constitute particular functional forms of capital whose net income takes on the form of profit, Marx’s category of IBC applies not to specific fractions of capital, but rather to all individual capitals in a fully developed capitalist economy. Precisely for that reason, Marx’s theory of interest reveals why, despite being part of the surplus value, interest appears on the surface of the capitalist mode of production as a *cost*. And this, in turn, explains why the very notion of surplus tends to be effaced from the conscience of agents living under the conditions imposed by the capitalist relations of production, distribution and circulation – and, consequently, also from the theories these agents develop to make sense of such conditions.

## 6. Conclusion

Marx left the manuscripts for *Capital*, v. 3, and in particular the section on the credit system, in an underdeveloped stage. This paper carried forth the conceptual development initiated by Marx, focusing on the categories of money-dealing capital (MDC) and interest-bearing capital (IBC). It demonstrated, first, that Marx’s conceptual framework not only is consistent with the fact that transactions in capitalist economies are often mediated by bank-issued credit money, but also explains why credit money tends to displace commodity money from circulation as capitalism evolves. It also showed that, when fully developed, Marx’s category of MDC allows for a rigorous understanding of the differences between banks and non-bank financial intermediaries, and thus also for a deeper understanding of the configuration of contemporary financial systems.

As seen above, Marx introduced the category of MDC in the fourth chapter of his manuscript, that is, before he dealt with the credit system and IBC. The latter’s emergence, however, imposes the need to distinguish the circulation of money as money and the circulation of money as capital. This, in turn, sets forth a distinction between the MDCs that deal with the circulation of money as money from the MDCs which deal with the circulation of money as capital, establishing the conceptual

---

(42) This, indeed, is how interest is conceptually articulated by both the neoclassical and the Keynesian schools.

foundations for a structural differentiation between banks and non-bank financial intermediaries. Through the distinction between MMDC and MCDC, one can understand why non-bank financial institutions tend to acquire an increasing share of the portfolio management business, as they are structurally able to charge lower spreads on their customers while achieving the same rate of profit as the banks.

This led us to the problem of the specific form taken by the net income made by banks and non-bank financial intermediaries. Using stylized balance sheets to describe the processes of credit money creation, circulation and accumulation, the paper demonstrated that the net incomes of banks and non-bank financial intermediaries take the form of profits, not that of interest. Building on this result, the paper contended that Marx's concept of IBC addresses not only banks and other financial institutions, but rather every capital in a fully developed capitalist economy. In developing this argument, the paper explained when and why a capital's net income takes the form of profit and interest, unveiling the mechanisms through which the (socially valid) illusion that every capital bear interest is generated and demonstrating that, in consonance with Marx's dialectical method, the emergence of IBC – one of the last categories introduced by Marx – reflects back on all previously developed categories, which in this manner are reconfigured and further concretized.

## References

- BELLOFIORE, Riccardo (2009). A Ghost Turning into a Vampire : The Concept of Capital and Living Labour. In RE-READING Marx : New Perspectives after the Critical Edition. Basingstoke: Palgrave Macmillan. p. 178-194.
- BELLOFIORE, Riccardo; RIVA, Tommaso (2015). The Neue Marx-Lektüre Putting the Critique of Political Economy Back into the Critique of Society. *Radical Philosophy*, Jan. p. 24-36.
- CECCHETTI, Stephen; SCHOENHOLTZ, Kermit (2016). *Money, Banking and Financial Markets*. 5. ed. Dubuque: Mcgraw-Hill Education.
- CHESNAIS, François (2006). O Capital Portador de Juros: Acumulação, Internacionalização, Efeitos Econômicos e Políticos. In: CHESNAIS, F. (Ed.). *A Finança Mundializada*. São Paulo: Boitempo Editorial. p. 35-67.
- DUMÉNIL, Gérard; LÉVY, Dominique (2013). *The Crisis of Neoliberalism*. Reprint Edition. Cambridge, Mass.: Harvard University Press.
- FINLEY, Moses I. (1981). *Economy and Society in Ancient Greece*. Chatto & Windus.
- HALDANE, Andrew (2014). The Age of Asset Management? - Speech By Andrew Haldane | Bank of England. Available at: <http://www.Bankofengland.Co.Uk/Publications/Pages/Speeches/2014/723.aspx>.
- HEINRICH, Michael (2014). *Die Wissenschaft Vom Wert: Die Marxsche Kritik Der Politischen Ökonomie Zwischen Wissenschaftlicher Revolution Und Klassischer Tradition*. 5. Auflage. Münster: Westfälisches Dampfboot.
- ITOH, M.; LAPAVITSAS, C. (1999). *Political Economy of Money and Finance*. Palgrave Macmillan Uk. Available at: <https://Doi.Org/10.1057/9780230375789>.

JAKAB, Zoltan; KUMHOF, Michael (2015). *Banks are not Intermediaries of Loanable Funds – And Why This Matters*. Ssrn Scholarly Paper Id 2612050. Rochester, Ny: Social Science Research Network. Available at: <https://Papers.Ssrn.Com/Abstract=2612050>.

LAVOIE, Marc (2015). *Post-Keynesian Economics: New Foundations*. Cheltenham, Uk; Northampton, Ma: Edward Elgar Pub.

MARX, Karl (1969). *Le Capital*. Paris: Garrier-Flammarion.

MARX, Karl (1976). The Commodity. Chapter One, Volume One, of the First Edition of Capital. In: DRAGSTEDT, A. (Ed. / Trad.). *Value: Studies by Karl Marx*. London: New Park Publications.

MARX, Karl (1983). *Das Kapital: Kritik Der Politischen Ökonomie. Erster Band, Hamburg 1872*. Edited By Willi Bang, Joachim Conrad, Friedrich Engels, Edgar Klapperstück, And Eike Kopf. De Gruyter Akademie Forschung.

MARX, Karl (1989). A Contribution to the Critique of Political Economy. In: KARL Marx, Frederick Engels: *Collected Works: 29*. Moscow: International Publishers Co Inc.,U.S. p. 258-420.

MARX, Karl (1990). *Capital: Critique of Political Economy, v. 1*. Translated By Ben Fowkes. London ; New York, N.Y: Penguin Classics.

MARX, Karl (2008). *Mew Bd.26/3, Theorien Über Den Mehrwert*. Berlin: Dietz Verlag.

MARX, Karl (2015). *Marx's Economic Manuscript of 1864-1865*. Leiden ; Boston: Brill Academic Pub.

MCLEAY, Michael; RADIA, Amar; THOMAS, Ryland (2014). Money Creation in the Modern Economy. Ssrn Scholarly Paper Id 2416234. Rochester, Ny: Social Science Research Network. Available at: <https://Papers.Ssrn.Com/Abstract=2416234>.

MIGEOTTE, Léopold (2009). *The Economy of the Greek Cities: From the Archaic Period to the Early Roman Empire*. Translated By Lady Janet Lloyd. Berkeley: University of California Press.

MILLETT, Paul (2002). *Lending and Borrowing in Ancient Athens*. Cambridge: Cambridge University Press.

MOORE, Basil J. (1988). *Horizontalists and Verticalists: The Macroeconomics of Credit Money*. Cambridge England ; New York: Cambridge University Press.

STIGLITZ, Joseph E.; WEISS, Andrew (1981). Credit Rationing in Markets with Imperfect Information. *The American Economic Review*, v. 71, n. 3, p. 393-410.

WRAY, L. Randall (1990). *Money and Credit in Capitalist Economies: The Endogenous Money Approach*. Aldershot, Hants, England ; Brookfield, Vt., Usa: Edward Elgar Pub.