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**FINANCE AND INDUSTRIAL EVOLUTION:
INTRODUCTORY NOTES ON A KEY RELATIONSHIP
FOR THE CAPITALIST ACCUMULATION**

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INTRODUCTORY NOTES ON A KEY RELATIONSHIP
FOR THE CAPITALIST ACCUMULATION**

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ABSTRACT

This paper discusses the role of credit in the capitalist accumulation. It presents Hilferding's analysis of the financing of corporations and of the role of stock exchange as an agent of the mobilization of capital. Theoretical and historical elements are deployed to support a conjecture about the changing relationship between fictitious and real capital and its relevance for the theoretical analysis of contemporary capitalism.

Key words: finance capital; promoter's profit; fictitious capital; Rudolf Hilferding.

JEL classification: B24; B50; G30

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INTRODUCTION

The socialist circles greeted the publication of *Finance Capital* in 1910 as a great achievement. According to Hilferding, the objective of his book was “to bring these characteristics [i.e., the economic characteristics of the latest phase of capitalist development] within the theoretical system of classical political economy which begins with William Petty and finds its supreme expression in Marx. The most characteristic features of modern capitalism are those processes of concentration which, on the one hand, ‘eliminate free competition’ through the formation of cartels and trusts, and on the other, bring bank and industrial capital into an ever more intimate relationship.” (Hilferding, 1981, p. 21).

The book received a warm welcome in Austria and in Germany. Otto Bauer and Karl Kautsky pointed that the book could be seen as a continuation of the three volumes of *Capital*. Both of them considered that Hilferding had successfully applied the Marxist method to the investigation of the peculiar phenomena of the final phases of capitalist development. These phenomena had been only pointed or anticipated by Marx in the last chapters of his work, written during the 1860s, but only published in 1894. Later, Hilferding's reputation was consolidated, and he influenced the works of Lenin and Bukharin, who acknowledge his contributions on their own conceptions on imperialism (Bottomore, 1981, pp. 1-2).

In fact, the influence of Hilferding's analysis on Marxist economic thought should not be underestimated: “*Finance Capital* has proved to be the most influential book in the entire history of Marxian political economy, only excepting *Capital* itself. (...) Hilferding provided not only new concepts, new analyses, and a new vocabulary, but an attempted synthesis” (Howard & King, 1989, p. 100).

Since the first edition of *Finance Capital*, the importance of its major themes has been increasing. The size and economic power of big corporations, the deepening of the relationships between the banking and the industrial capital, and the intermittent financial crises of capitalism are subjects with enough importance to keep alive the interest for the book. Nevertheless, the current reception of Hilferding's work by the contemporary economic theory is far from the deserved. As Brewer (1983, p.103) already said, “a classic is, of course, a work that is cited but not read; *Finance Capital* fits the description better than most”. Even the publication of an English version in 1981 was unable to reverse this situation.¹ *Finance Capital* is still a widely neglected book, an indication of the fate of Marxist economic thought among the economists of the English-speaking countries.²

On the other hand, among those that had discussed Hilferding's elaboration, the analyses have been restricted to some aspects as the concepts of finance capital and imperialism. Furthermore, he has been criticized for his monetary theory as well as for his theory of crises³ and for attributing a dominant role to the bank capital in the capital concentration process, extrapolating in the theoretical

¹ A search with the key word “Hilferding” in the titles and abstracts of articles published between 1981 and 2001 and included in EconLit's database resulted in only 9 journal articles in economic journals and 3 articles in collective volumes.

² In the conventional books on history of economic thought there are few mentions to Hilferding's work. These references frequently quote Hilferding's answer to Böhm-Bawek criticisms to the Marxist theory of value (see, for instance, Blaug, 1985, p. 289).

³ Brenner writes (1983, p. 103): “It is difficult to see what the section on money is intended to show (...). The chapters on crisis flirt almost every conceivable theory of cycles without combining them into any coherent story.”

level a feature that was typical and specific of the Austrian and German experiences.⁴ Schumpeter's evaluation is illustrative: "whatever may be thought of the rather old-fashioned monetary theory of the first chapter and the monetary theory of crises of the fourth, its central thesis (that banks tend to gain control over industry at large and to organize the latter into monopolistic concerns that will give increasing stability to capitalism), though a hasty generalization from a phase of German developments, is interesting and original..." (Schumpeter, 1986, p. 881).

This paper points the up-to-date nature of the approach presented in *Finance Capital* for the understanding of contemporary capitalism. This paper stresses one less familiar feature of Hilferding's work: the financing of corporations and the concept of fictitious capital. We suggest that Hilferding's approach has enough elements to support a theoretical reflection on finance capital without a strict and complete connection between this concept and a specific institutional form (the institutional form that corresponds to the dominance of the banks over industry). Hence, we suggest that the concept of finance capital supports an articulation between, on the one hand, the development of financial markets and the various forms of credit and, on the other hand, the changes in industrial structure and organization.

This step hints a way for overcoming theoretical flaws in non-mainstream approaches. For example, while the Neo-schumpeterian elaboration has improved the understanding of the dynamics of industry and innovation, it has paid little attention to the links between innovation and finance. In fact, finance-related topics are not among the major contributions of this agenda (Freeman, 1994). Closer inspection to this subject, however, would detect lines of research that indicate the importance of this relationship.⁵ These scattered (although important) lines, however, have not originated a persistent effort of investigation on the complex relationship between finance and innovation.

Chesnais & Sauviat (2001), for example, suggest an interpretation of the present phase of capitalist development: a new "finance-dominated accumulation regime". Among the distinctive characteristics of this new regime, they identify a transition from "set-ups where 'finance is in support of industry' to ones where 'industry is required to support finance'" (p. 5).

Chesnais & Sauviat investigate the specificities of this new phase of capitalist accumulation in the framework of "accumulation regimes". They introduce the paper with an indication of the scarce attention that has been paid to the finance-related subjects in the literature on the economics of innovation.

This paper conjectures that there might be a more complex and changing interaction between the financial and the real capital dimensions than the one suggested by Chesnais & Sauviat. The point is very simple: without the financial innovations that flourished during the capitalist development, the

⁴ See, for instance, Heimann (1971, p. 169).

⁵ These lines may be summarized in four topics: 1) Co-evolution between financial and technological institutions: Freeman & Perez (1988) discuss the key characteristics of the five long waves of capitalist development, pointing the co-evolution of financial institutions and the structure of firms; 2) Financial institutions as components of the National Systems of Innovation: Christensen (1992) surveys the diversity of ways that financial institutions can display as components of the NSIs;⁵ Nelson (1993) comparative analysis of National Systems of Innovation stresses the different arrangements involving finance and long-term investments that supports innovative activities; and Pavitt & Patell (1994) compare NSIs including the influence of different financial structures upon the overall system performance; 3) The financial nature of private investments in R&D: Rosenberg (1990) shows how the basic research could be seen as a long-term investment; 4) Globalization: Chesnais (1994, 1996) himself has investigated the leading role of finance in the present process of globalization.

scale and capabilities of the modern corporations would not exist. For instance, as Chesnais and Sauviat point (p. 36), the present merger wave among large corporations is fuelled by stock operations: the fictitious capital reshapes the real capital, contributing to the increase of the scale and the reach of global corporations.⁶ This rectifies a statement from Hilferding: now, the movements in the capitalist property affect the capitalist production.⁷

This relationship is not new. Financial arrangements (and sometimes financial innovations) have been supporting major increases in the size of leading firms. Marx points in *Capital* that one key role of credit in the capitalist society is to support the emergence of large-scale firms, and that the joint-stock company afforded a new and larger level of capital accumulation.

Therefore, instead of a straight transition from a phase where finance supports industry to another where the industry supports finance, it might exist a more interdependent relationship, where improvements in the finance realm pushes advances in the capital accumulation and vice-versa. This co-evolutionary pattern, with different interactions through different phases, is neither predetermined nor automatic.⁸

This paper is organized into four sections. The first section discusses the importance of an integrated analysis of the capitalist system, evaluating the role of a reading of Marx's elaboration that articulates the first and the third volumes of *Capital* and that introduces his discussion on the role of credit in the capitalist accumulation.⁹ The second section presents Hilferding's analysis of the financing of corporations and the role of stock exchange as an agent of the mobilization of capital. The third section uses these theoretical and historical points to support the conjecture about the changing relationship between fictitious and real capital. The fourth section concludes the paper suggesting an integration of this changing relationship into a long-term perspective.

1. INTEGRATING THE FIRST AND THE THIRD VOLUMES OF CAPITAL

Marx's discussion on money is a thread between the first and the third volumes of *Capital*. On the one hand, in Chapter III, Volume I, Marx presents a complete theory of money, with its basic and classical functions – measure of values, means of circulation, and money. On the other hand, while presenting the function of means of payment, one of the functions of money, Marx points to certificates of debt and credit-money, supporting the emergence of concepts like bonds market, money

⁶ A few examples of M&A using stocks as payment are the Comcast deal with AT&T's cable, "for about \$47 billion in stock" (*New York Times*, Dec 20, 2001, p. 1) and the Amgen acquisition of Immunex - \$18 billion, "15 percent in cash and the rest in stocks" (*New York Times*, Dec 14, 2001, p. C1).

⁷ Hilferding puts forward that "the mobilization of capital transforms an increasing proportion of capitalist property into titles to income, and in doing so it makes capitalist production increasingly independent of the movement of capitalist property" (p. 141). The mobilization of capital seems to open more maneuvering room for capitalist accumulation than pointed by Hilferding. As section III discusses, the accumulation of fictitious capital would feedback on capital production, at least allowing the expansion of the scale of corporations, as the use of stocks in mega-mergers indicates.

⁸ Marx (vol. III), discussing the division between monetary and real capital, highlights a limit for the conversion of real capital into monetary capital (someone must generate profits...) and points how the market would act to correct an excessive allocation of capital in the monetary side (a devaluation would take place).

⁹ This paper suggests that the neo-schumpeterian elaboration has been focusing mainly subjects concerned with the themes of the first volume of *Capital*.

market, fictitious capital. Although these concepts are investigated only in Volume III, they are already *presupposed* in Chapter III, Volume I.

For Marx, in the first volume, capitalism would be a system vulnerable to crisis *even if* prices were equal to values, even if money had metallic equivalence, even if time, space and inequality among capitals were ruled out. Capitalism is vulnerable to crisis because it is based on an expansive and disruptive contradictory reality: the capital.

The phenomenology of this process - the various possibilities and sources of crisis - is presented throughout the three volumes of *Capital*, with increasing complexity and in a more concrete way. But its existence is putted forward since the origin of the commodity, which is the contradictory unity of use-value and exchange-value, of quality and quantity.

Similarly, the supposition of money (M) as a starting point of the cycle M-C-M is only apparently simple. The cycle M-C-M is the most elementary form of the circuit of valorization of capital. At this stage of exposition, Marx omits that for the existence of money M a mechanism that provides money should be operating – a money market. This omission is consequence of Marx's exposition strategy (or his method of presentation), that a money market at that stage could only appear as presupposition.

The book *Capital* has a quaternary structure: Volume I deals with the production of capital in general, Volume II discusses the circulation of capital in general, Volume III presents the production and the circulation as a whole, dealing with the existence of various capitals, that is, the overcoming of an abstraction used in Volumes I and II – the hegemony of the capital in general, and Volume IV is a critical appraisal of the history of political economy.

In an important section of the *Grundrisse*, written in 1857/58, Marx presents the logical steps of his exposition, of his critique of the Political Economy, taking as a starting point his effort of a materialistic reconstruction of dialectics, as follows:

I. Generality

1. Transformation of money into capital
2. Circulation of capital
3. Singularities of capital
 - capital and profit
 - capital and interest

II. Particularity

1. Accumulation of capital
2. Competition among capitals
3. Concentration of capital

III. Singularity

1. Capital as credit
2. Capital as share capital
3. Capital as money market

In this structure it is crystal clear the key role in the logical structure of the Marxian work for the capital as credit, capital as share capital, and as money market, since 1857/58. The series of metamorphosis of the capital in its dynamics terminate exactly as credit-share capital-money market, as interest-bearing capital.

Interest-bearing capital is the manifestation of an essential function of money. In the first volume, money M is a mass of wealth under the most universal form that this wealth could be presented. Afterwards this mass of wealth is unfolded and experiences metamorphosis. This process turns explicit what in the first moment was only presupposed, culminating in money market – synthesis, a set of singular forms, of a materialization of funds for the functioning of the capital accumulation.

The method of presentation of *Capital* involves three moments. In the first moment, there is capital in general, a homogeneous and abstract mass – the dimension of generality. The second moment – the dimension of particularity – refers to the concentration of capital and competition among its diverse owners. In the third moment – the dimension of singularity – the capital resumes its initial condition as money M. Not anymore a uniform mass of universal wealth, money in this moment is a plethora of its multiple tools and forms – shares, debentures, bills of exchange, checks, IOUs, debt certificates, public bonds etc.

The expositive plan presented in the *Grundrisse* was modified, but the plan implemented in the *Capital* keeps the basic sequence putted forward in 1857/58. This basic sequence completes the odyssey of the commodity, of the capital, in the third volume, as an explicit description of forms: commercial capital, money-dealing capital, interest-bearing capital, credit, fictitious capital, banking capital, interest rate, joint-stock companies, loan capital, exchange rates (Rosdolsky, 2001, p. 60).

In other words, parts four and five of Volume III, from Chapter XVI to XXXVI, discuss all the diverse forms of existence of money in the capitalist dynamics (Marx, 1894).

Today's finance innovations – expansion of future markets, hedges, speculative movements based on derivatives – are contemporary manifestations of the old fictitious capital, already analyzed by Marx (1894, pp. 525-542). This ectoplasmic mass, multiplied by the hypertrophy of finance capital, presents itself as the *nectar plus ultra* of a winning capitalism. But it is a new apparition of an old ghost, in fact, the ghost of a ghost.

This integrated interpretative approach can be seen in Marx's discussion on the role of credit.

Already in the first volume, Marx indicates the role of joint-stock companies for the process of capitalist accumulation: "The world would still be without railways if it had had to wait until accumulation had got a few individual capitals far enough to be adequate for the construction of a railway. Centralization, however, accomplished this in the twinkling of an eye, by means of joint-stock companies" (Vol. I, p. 780).

Throughout the second volume (the process of circulation), Marx highlights how the circulation of capital could be accelerated and money economized in several parts of the process as a whole. In a very detailed description of the process, Marx points how there is room for development of specialized functions in the capitalist process, for types of capitalists that assume functions as

commercial and money-dealing capital. These functions provide ways for economizing money and circulating capital and for the continuity of the process of production.

These specialized functions of the capital help the accumulation of money capital, which by its turn, intensifies and enlarges the process of capitalist accumulation (Vol. III). In Chapter XXVII, Volume III (“the role of credit in capitalist production”), Marx condenses in few (and very didactical) pages his elaboration “so far made on the credit system” (p. 566-573):

- I. the formation of the credit system is necessary “to bring about the equalization of the profit rate or the movement of this equalization, on which the whole of capitalist production depends”;
- II. “the reduction of circulation costs”: 1- money is economized by credit (it is “dispensed with in a large portion of transactions”; “credit accelerates the velocity of the metamorphosis of commodities”; and there is “the replacement of gold money by paper”); 2- acceleration of the metamorphosis of capital “and hence an acceleration of the reproduction of capital in general”;
- III. “the formation of joint-stock companies”, which involves: 1- “a tremendous expansion in the scale of production”; 2- capital now “receives the form of social capital (capital of directly associated individuals); 3- “the transformation of the actual functioning capitalist into a mere manager, in charge of other people’s capital, and of the capital owner into a mere owner, a mere money capitalist”;¹⁰
- IV. “credit offers the individual capitalist ... an absolute command over the capital and property of others, within certain limits, and, through this, command over other people’s labour” (p. 570).

Marx concludes this chapter highlighting the dual nature of the credit system: on the one hand “accelerates the material development of the productive forces and the creation of the world market”; on the other hand “credit accelerates the violent outbreaks of this contradiction, crises, and with these the elements of dissolution of the old mode of production” (p. 572).

In regard to the development of the joint stock companies, Hilferding’s analysis could be seen a step ahead of Marx’s elaboration. Hilferding stresses that Marx conceives the corporation as a consequence of the credit system, quoting the passage above on the “expansion in the scale of production”.

2. HILFERDING ON THE MOBILIZATION OF CAPITAL

Hilferding takes Marx’s analysis of the credit system one step further. His investigation on the differences between individually-owned enterprises and the corporations leads him to three major contributions: the nature of the joint-stock companies, the “distinctive economic category” of dividends and promoter’s profit, and the role of stock-exchanges.

¹⁰ This passage is a short statement of a very productive line of research for industrial economics, another demonstration of the integrated nature of the first and third volumes of *Capital*. Furthermore, in a note in this chapter, Engels comments that “since Marx wrote the above passage, new forms of industrial organization have been developed, as is well-known, representing the second and third degree of joint-stock company” (p. 568). Hilferding’s elaboration could be seen as an answer to these new developments.

Unfortunately, as Hilferding takes one special case (Germany) as a general case, his analysis has been criticized and his contributions little used. Probably, Hilferding's analysis has been discarded too easily (an example is Henwood, 1998, p. 230). For sure, the amalgamation of industrial and bank capital as finance capital is very specific of the German case.¹¹ To mitigate this criticism, it is important to point that Hilferding, in a paragraph where he foresees the increasingly important role of banks and the declining importance of stock exchanges (p. 149), notes the "different roles of stock exchange abroad", highlighting that "[i]n particular, the New York stock exchange plays a much more important role than European exchanges in the transfer of property" (p. 403, n. 20).

Notwithstanding, Hilferding's analysis provides theoretical tools that are important to support the investigation of contemporary capitalism. In general, his description of the concomitant changes of industrial firms (the emergence of large corporations) and of financial markets (the development of stock exchanges) could underlie an interpretation focusing the mutual reinforcement of both developments.

A more friendly and contextual reading of his *Finance Capital* would disentangle what is general in his analysis from what is specific to the early twentieth century Germany. This disentanglement might highlight his lasting contributions.

2.1. Individually owned enterprises and corporations

The emergence of corporations (joint-stock companies) multiplies the opportunities for capital accumulation, *vis-à-vis* the individually owned enterprises.

For Hilferding, the "corporation is independent of the size of individual amounts of capital", and "broaden the circle of people involved" (p. 122). With the corporation, "every sum of money ... is capable of being combined with other sums in a joint-stock company and used as industrial capital". In sum, "[i]t is, therefore, much easier to establish, or to expand, a corporation than a privately owned enterprise" (p. 122).

The size of an enterprise, with the emergence of the corporation, "is independent of the amount of wealth already accumulated by an individual" (p. 123).

Although banks and corporations have the capacity to "assemble capital", there is a crucial difference. On the one hand, the banks "retain the accumulated capital in its original form as money capital, and make it available as credit for production after it has been assembled" (p. 122). On the other hand, "the corporations combine the atomized money capital in the form of fictitious capital" (p. 122).

Probably, the key link between the modern corporation and the stock exchange is this: the development of a new capacity, the capacity to mobilize capital, or, in other words, "the creation of fictitious capital" (p. 142).

¹¹ Zysman (1983, p. 55) provides the useful typology of financial structures: 1) "a credit-based system dominated by financial institutions" (Germany); 2) "a system based on capital markets" (USA and UK); and 3) "a credit-based system with critical prices administered by government" (Japan).

The development of stock exchanges and the increase in the size of corporations influences the emergence of “a distinctive financial technique, the aim of which is to ensure control over the largest possible amount of capital with the smallest possible amount of one’s own capital” (p. 119). Eventually, Hilferding notes that the American system reaches the perfection of this technique.

2.2. Shares and fictitious capital

Fictitious capital is a category already discussed by Marx (section 1, above). Hilferding deepens the analysis of a specific form of fictitious capital: the shares.

The stock exchange is the market for securities.¹² There are two main groups: credit certificates (bill of exchange, for example) and “certificates which do not represent a sum of money but its yield” (“fixed-interest papers” - like debentures and government bonds – and “dividend certificates” - shares). The main difference between these two groups is that with the second group “the money is definitively surrendered” (p. 130).¹³

Hilferding describes the meaning of shares and their specific circuit: “the money is definitively relinquished, converted into productive capital, and comes into the hands of those who sell commodities. It does not return to the stock exchange... In place of money there are now capitalized claims to interest. Money is really withdrawn from the money market” (p. 133). This money “will never return to its starting point” (p. 130).¹⁴

The essential in this “transformation of money capital into industrial capital” is, according to Hilferding, the “form in which it is done, which enables the money capital to become fictitious capital and *at the same time* retain for its owners the form of money capital” (p. 113) [italics added].

The shares, therefore, “cannot represent this money” ... “neither do they in any way represent the productive capital in itself” (p. 131). The “shareholders have no claim to any part of the productive capital, but only to yield... it is only a claim to certain amount of money” (p. 131).

This amount of money is the dividend. Hilferding’s analysis uncovers this “distinct economic category” (p. 114). As he points, “once the shareholder has parted with this capital, he cannot recover it... He has no claim upon it, but only a claim to a pro-rata share of its yield” (p. 109).

This yield is determinant of the value of the share: “In the capitalist society”, writes Hilferding (p. 109), “every sum of money has the capacity to bear interest; and conversely, every regularly recurring income which is transferable ... is regarded as interest on capital and has a price which is equal to the yield capitalized at the current rate of interest”.¹⁵

¹² Securities are “every kind of scrip which represents sums of money” (p. 130).

¹³ The difference between bonds and shares is in their “maturity”: bonds have a date when they will be repaid, and the shares will not be repaid (www.nyse.com).

¹⁴ Hilferding describes the “peculiar form which the circulation of fictitious capital takes” (p. 113).

¹⁵ This general relationship is recognized in modern economics. Among the points that Brickley et al (1987, p. 173) summarize about what is known about dividend policy, they show “stock prices increase permanently when regular dividend are increased, when special dividend are declared, and when shares are repurchased... and that stock prices decline when dividends are reduced”. In 2000, the “cash dividends on NYSE-listed common stocks” were estimated to total \$ 165.55 billion (NYSE, 2001, p. 106).

Hilferding describes how the competition between various investment opportunities brings the price of shares closer to the price of investments with a fixed interest, and reduces the shareholders' yield from the level of industrial profit to that of interest" (p. 109).¹⁶ Here, Hilferding asks a question: "where the other part of the profit (average profit minus interest)... had gone?" (p. 110). The answer is the "promoter's profit", "an economic category *sui generis*" (p. 113). Hilferding offers a detailed example of how the promoter's profit appears: "a source of gains which arises only from the conversion of profit-bearing into interest-bearing capital" (pp. 111-112). The promoter's profit is produced either by founding corporations (new enterprises or transformation of individually owned into joint-stock companies) or by "increasing the capital of existing corporations" (p. 128).

The dividend, as a distinct economic category provides several links between the fictitious and the real capital. First, profits reflect the performance of a firm, and profits are the basic source of a dividend, thus higher dividends signal good economic conditions of a firm (and dividends are the income that shares as titles deliver). Second, dividends define the value of a share (as any other capitalization title): therefore, the real conditions of the firm define its value in the stock exchange, in other words, the real economy defines the value of fictitious capital. Third, the dividends (as a deduction of the firm's profits) define the retained profit available to new investments for a firm, which in turn sets boundaries for the firm's growth. Fourth, the value of the stocks (consequence of the dividends, as seen) offers multiple alternatives for a stock-rich firm: acquisitions can be and are made by stock offerings.

2.3. Stock-exchanges and the mobilization of capital

Hilferding pinpoints the main role of the stock exchange: "a market for titles to interest, or fictitious capital. Here the investment of capital as money capital, which is to be converted into productive capital, takes place" (p. 133).

There is an historical evolution of the function of the stock exchange:

1. Originally, it was a place for the circulation of bills and currency;
2. "Later, it became a market for fictitious capital, which emerged with the development of state credit... It became the market for state loans" (p. 139);
3. "But it was radically transformed when industrial capital began to assume the form of fictitious capital and the corporate form of enterprise began to spread throughout industry" (p. 139).

In this stage, Hilferding notes that the resources "at the disposal of the stock exchange now increase rapidly and without limit" (p. 139).

The role of stock exchange is peculiar. It is a market which is always available and this is "a prerequisite for the conversion of industrial capital into fictitious capital and the reduction of dividends to interest" (p. 139).

Therefore, the increasingly central role performed by the stock exchange in the capitalist development is not surprising at all. Hilferding connects the development of the stock exchange with

¹⁶ Marx (1894, pp. 459-524) discusses extensively the interest-bearing capital and the relationship between interest and profit.

an “inherent tendency of capitalism”: “its need to place all the available social wealth at the disposal of the capitalist class, in the form of capital, and to ensure the same yield for each unit of capital”. This inherent tendency “obliges it to mobilize capital, and thus make a valuation of it as mere interest-bearing capital”. And, once more, Hilferding points the crucial role of the stock exchange, as its function is “to facilitate this mobilization, by providing the machinery for the transfer of capital” (p. 141).

As a claim to profit, the shareholder can sell his shares at any time in a special market - the stock exchange: “the establishment of this market endows share capital ... completely with the character of money capital” (p. 109).

But, another structural feature of the stock exchange is speculation. As already explained, the money capital spent in shares - titles or claims to profit – will not be recovered, but they can be sold in a special market: the stock exchange. Therefore, the stock exchange performs these two not dissociable functions: the creation of fictitious capital (floatation of shares) and the selling (and buying) of existing shares.

For Hilferding, the development of a market for fictitious capital makes speculation possible and necessary (p. 139). Speculation is “necessary to keep this market open for business at all times, and so give money capital as such the possibility of transforming itself into fictitious capital, and from fictitious capital back into money capital, whenever it chooses” (p. 139). Although, as seen earlier, the circuit of fictitious capital does not flow back to the starting point, the money capital invested (the principal) must always be recoverable through the sale of titles to interest (p. 139).

Furthermore, the structural necessity of speculation is understandable “for the fact that marginal gains can be made by buying and selling [and it is] a constant stimulus to engage in these activities and to insure the permanent existence of an active market” (p. 139).

2.4. Banks and stock exchanges: different roles

Hilferding summarizes the banks’ functions as providers of circulation credit (p. 83), investment credit (p. 87), and floatation services to the industry (p. 97). These three functions are mentioned again in his discussion of “floatation of shares” (p. 127).

Banks channel resources for the process of mobilization of capital. This development “causes all funds to flow into banks, so that only through their mediation can they be transformed into money capital”. And this transformation, operated through banks, allows them to supply productive capital “by converting money into industrial capital and fictitious capital, and taking charge of this process themselves”.

Hilferding discusses quantitative and qualitative differences between the activities of banks and stock exchanges (pp. 132-134).

From the quantitative standpoint, the stock exchange is not concerned with “collecting small savings”, “but attracts large amounts of already accumulated capital which are seeking investment” (p. 132).

From the qualitative standpoint, the stock exchange “is not concerned with the diverse ways to make credit available”, but it “simply provides the money which is necessary to sustain the circulation

of credit money. The money is supplied in large amounts, in the form of first-class bills. Both the demand and supply involve large, concentrated sums of money, and it is on the stock exchange that the market price of loan capital (the rate of interest) is established” (p. 132).

Beyond these differences between banks and stock exchanges, Hilferding distinguishes the functions of banks and of corporations. While corporations deal with sums from big capitalists, “the small sums of petty capitalists are more likely to be assembled by banks than by the corporations” (p. 122). Later, Hilferding suggests a kind of division of labor between banks, stock exchanges and big capitalists: “[t]he stock exchange constitutes the market for the traffic of money among banks and big capitalists” (p. 132), and that the “appeal to the money market is mediated by the banks” (p. 120). These passages from the *Finance Capital* seem to leave room for other institutional arrangements: if the available resources (for the mobilization of capital) were not small and scattered sums of petty investors, the banks could have a more limited role. Therefore, other financial institutions could perform other roles in the broad process of mobilization of capital.

A friendly and careful reading of Hilferding would not consider this process of changing roles of the component institutions of the financial structure to be strange to his elaboration. He writes that the development of banks led themselves to take over “the major part of the business of supplying payment credit to industrial capitalists, which was initially the principal function of the stock exchange”(p. 133).^{17, 18}

These observations probably point to a paradox in Hilferding’s analysis, when he mentions the declining role of stock exchanges, connected with the development of large banks (pp. 149-150). The main point in this “paradox” lays in his clear evaluation of the specific role of the stock exchange (as the place for “mobilization of capital”, “the creation of fictitious capital” in the form of shares, and for “speculation”). This role, following his analysis could not be taken over by the banks. And there is no reason why the future developments of capitalism would give up such key institution for the mobilization of capital. The later and actual development of capitalism in fact multiplied the channels of resources for “capital mobilization”, therefore strengthening the central role of stock exchanges in the capitalist accumulation.¹⁹

¹⁷ The financial institutions have developed in many directions, since Hilferding’s *Finance Capital*. New institutions have appeared (specialized investment banks, brokerage houses, diverse financial firms managing various funds, etc), new opportunities for wealth accumulation (the development of welfare institutions, market-based or not) etc. Probably, the stock exchange has kept his central role in capitalist economies and improved it, as long as the institutions and channels for capital mobilization (the creation of fictitious capital) became more complex, sophisticated, and omnipresent. In sum: more institutions, more specialization, and a more sophisticated labor division among these more specialized agencies (for an overlook of the “players” of Wall Street, see Henwood, 1998, pp. 56-117). The financial structure is not, anymore, a subject only for banks and stock exchanges.

¹⁸ *The Economist* (May 3, 2001) surveys an “evolution of finance”, that contains an evaluation of the specific role of banks: “In the early stages of development, local banks are needed to gather local savings together in order to gather enough capital for growth. Later, big clearing banks that can operate at national level start to operate. At that early stage companies rely largely on internal financing and bank loans. Banks are useful mainly because capital is so scarce. ... In the next stage of growth, capital is relatively more abundant, so markets are better placed to take over the task of capital allocation from banks. The initial capital markets, for bonds and equities, are soon complemented by others, such as commercial-paper markets. Once these are in place, the scene is set for the arrival of ever more sophisticated instruments for slicing and dicing credit risk to suit different investors”.

¹⁹ The *Economist's* survey mentioned above (May 3, 2001, Chart 10) presents data that differentiate the American and British cases from the Japanese and German ones: it compares the market capitalization and the total of bank deposits as percentage of the GDP. On the one hand, in the US case, market capitalization reaches more than 140 percent of the GDP, while bank deposits are less than 50 percent of the GDP; and for Britain the percentages are respectively more than 150 and almost 80. On the other hand, for Japan and Germany the market capitalization shares are less than the bank deposits: respectively 75 and 110 percent for Japan and 60 percent and 105 percent for Germany. It is noteworthy that in these two different financial structures there is a role for stock exchanges. Even the German and Japanese financial arrangements do not rule out a specific role for the stock exchanges.

2.5. The struggle between dividends and promoter's profits

The definition of dividends and promoter's profit as distinct economic categories is an important contribution from *Finance Capital*. Furthermore, Hilferding establishes their relationship with profit and entrepreneurial gains.

There is an historical process (that accompanies the development of stocks and the stock exchange) that reduces the shareholder's yield to the level of the rate of interest (p. 109) and sets the profit level as the upper limit for the dividend.

Once these relationships were defined, Hilferding adds an important note, *en passant*, about a "kind of struggle between banks and corporations over the division of the promoter's profit" (p. 128). This struggle, in Hilferding's reasoning, appears from the bank's role in the floatation of shares. The bank sells fictitious capital on the market and "realizes the promoter's profit which arises from the conversion of industrial capital into fictitious capital" (p. 128). The role of banks as the main channel of funds to the corporations through the stock exchange is the source of their demands for larger slices of the promoter's profit.

This struggle for the division of promoter's profit is illustrative of the indeterminate nature of these economic categories. Changing the main channels of resources for mobilization of capital and transporting the discussion to contemporary financial world, it is understandable how institutions that represent shareholders (institutional investors funds) would bargain increases in their slice of the corporate profits, beyond the interest rate. The dividends are reported as a fraction of the "after taxes corporate profits". And they have been systematically higher than bonds' returns (paid by the interest rate) during the last century (*The Economist*, May 3, 2001).²⁰

2.6. The main contributions from Hilferding's analysis for contemporary capitalism

Summing up this section, a careful and open-minded reading of Hilferding would suggest the following points as his lasting contributions for the analysis of capitalism:

- 1 - mobilization of capital: a) its meaning: creation of fictitious capital (floatation of shares); b) its role: lever of capitalist accumulation; c) the place of stock exchange in this process (and the necessity of speculation);
- 2 - dividends and promoter's profit as distinct economic categories (and their relationship with industrial profit) and the struggle between dividends and promoter's profit.

Furthermore, Hilferding's elaboration could be read as contemplating a dynamic of evolution of financial institutions, suggesting various arrangements between the key institutions of the financial system: banks, stock exchanges and corporations.

²⁰ Chesnais & Sauviat (2001), therefore, should not take as a specific characteristic of a new accumulation regime a "bargain" between important channels of resources and the corporations about the size of dividends in relation to their profits.

3. THREE MOVEMENTS BETWEEN FICTITIOUS AND REAL CAPITAL

The theoretical contributions from Hilferding may underlie a very simple description of the interactions between the real and fictitious capital based on three movements.²¹ These movements highlight the interactions between these two dimensions, interactions that explicitly describe how developments in the financial infrastructure can be prerequisite for further developments in the industrial and innovative worlds.

3.1. First movement: the creation of fictitious capital – mobilization of capital

Money capital, collected by a myriad of channels, is directed towards the stock exchange that simultaneously transforms it in fictitious capital and transfers it as money capital to the hands of the industrial corporation. Therefore, the country with more fictitious capital accumulated is the country that has more deeply “mobilized capital”. In other words, the country with more fictitious capital accumulated necessarily is the country where the corporations have more capital available to them.

3.2. Second movement: the accumulation of fictitious capital

The accumulation of fictitious capital leads to its development. There is a process of diversification of the forms of fictitious capital, and a related diversification of the financial institutions.

This continuous improvement could be understood in many ways. First, for the necessity of new runs of mobilization of capital induces the permanent inventiveness of these markets to collect and to channel more resources to the stock exchange.

Second, as the capitalist society becomes wealthier, new amounts of money capital will seek for investment opportunities. Then, financial markets experience a new push to further diversification, which may imply in the opening of new “markets”. One example of this line of development is the emergence of “venture capital” as an organized financial market for riskier investments (OECD, 1996; NAVC, 2001). Venture capital, therefore, can be seen as a consequence of the improved sophistication of the financial markets, which is a consequence of the larger accumulation of money capital.

²¹ It is important to stress the intertwinement between the historical development of the financial markets in the USA and the growth and maturing of the modern corporation. Myers (1931, p. 296) writes, while discussing the “increase of industrial securities” issued by the New York Stock Exchange (NYSE): “The great part of the increase in the volume of trading was due to industrial security. The number of industrial issues listed by the exchange rose from 15 to 191 between 1867 and 1913, while the rails increased only from 63 to 147. The corporate form of organization for industrial enterprises, which had made slow advances during the first three quarters of the century, got under way with a great rush during the last quarter century”. Myers presents an interesting articulation between this phase and the earlier “railroad dominance” of the stock market. According to Myers, “[b]y that time the great period of railroad construction was nearly over; after 1867 the new mileage constructed each year declined almost steadily and the capital which had formerly gone into railroads became available for other types of security. Lax corporations laws, low interest rates and the ease with money could be raised by stock issues, were strong incentives toward the incorporation of business enterprises”.

The accumulation of fictitious capital can be useful as a channel for other uses: for instance, they provide a (supposedly) safe harbor for pension funds, in the USA case. The increased role of equities in the American economy could be a guide for these new uses.

3.3. Fictitious capital impacts upon real capital

Once the development of fictitious capital improves, there are several channels by which it can feed back on real capital.

First, there are more possibilities for crises. A sharp devaluation of fictitious capital can feed back against the real process of capital accumulation by diverse transmission mechanisms (the 1929's Great Depression is one example, where the impact of the devaluation of shares upon banks propagated their effects on the economy).

Second, wealth accumulated in the form of shares can have several uses: a) shares can be sold, generating money capital to start a new cycle of valorization of capital; b) shares are used as collateral in loans (which can be used for acquisition of capital goods etc); c) as Henwood (1998, p 115) puts forward, "when stock prices are high, one firm can take over another without spending cash, but just offering shares of its own stock as payment". Chesnais & Sauviat, (2001, p. 36) add a point to this line of reasoning, as they stress that most "takeovers are paid with shares rather than cash". In this sense, and contrarily to Hilferding's position, the capitalist production is not "increasingly independent of the movements of capitalist property" (p. 141).

Third, if venture capital is a product of the diversification of the forms of credit, then there is an important effect on the real economy: the financing of innovative companies with these resources. Microsoft, Intel, Cisco, Genetech, and Fedex are examples of firms created with resources from the venture capital (available only because there is such a huge accumulation of fictitious capital) (Chesnais & Sauviat, p. 37).²²

Fourth, the existence of a huge accumulation of fictitious capital represents an alternative for the financing of the firm. A firm operating in a country with a sophisticated stock market can elaborate complex trade-offs in order to achieve a more suitable form of financing its operations. Williamson (1988) offers an example of such rationale.²³

Fifth, financial innovations sometimes are a prerequisite for technological innovations: one very obvious example is the connection between e-commerce and credit card.

²² Gordon describes the central position of the financial institutions in the contemporary technological revolution (2001, p. 45): "the fruitful collaboration of government research funding, world-leading private universities, innovative private firms, and a dynamic capital market set the stage for American domination of the industries that constitute the New Economy". By its turn, the *Science and Engineering Indicators 2000* includes a section about the venture capital (pp. 7-23/7-29). According to the *National Science Foundation* (National Science Board, 2000, p. 7-23) "... venture capital ... can aid the growth of promising small companies and facilitate the introduction of new products and technologies, and is an important source of funds used in the formation and expansion of small high-technology companies".

²³ Williamson, from the standpoint of the transaction cost economics, argues that some projects, where "asset specificity is low to moderate ... ought to be financed by debt" (p. 193) and that equity finance "is the preferred financial instrument for projects where asset specificity is great" (p. 194).

4. CONCLUSION: THE INTERACTIONS BETWEEN FINANCE AND INDUSTRIAL EVOLUTION IN THE LONG RUN

This article suggested that Hilferding's analysis of finance capital might still inspire the comprehension of contemporary capitalism. Instead of focusing on the points that are more closely related to the specific features of the German financial system, we should pay more attention to his conceptual contributions that are relevant to the comprehension of the corporate financing. In this sense, Hilferding's analysis of the process of capital mobilization allows us to understand how it is amplified by the emergence of joint-stock companies and the role of stock-exchanges play on it. Conceptual innovations like the introduction of the concept of promoter's profit are also among these lasting contributions.

Taking these theoretical constructs in consideration, we attempted to unravel the relations between the fictitious and the real capital. We tried to show that these two dimensions are mutually reinforcing: on the one hand, the creation and accumulation of fictitious capital allows the diversification of the financial markets and institutions; on the other hand, the development of the fictitious capital reshapes the production (crisis, mergers, takeovers etc.)

These movements suggest a dynamic relationship between the financial and the industrial institutions. Since the early capitalism, the credit system has contributed for huge increases in the scale of production. As Guttman remarks, "it is no coincidence that the United States possesses the world's largest economy as well as its most developed capital markets. The two went hand in hand" (1994, p. 293). Of course, the development of the credit system also adds new sources of crises to the system, which require the creation of new institutions to handle these new sources of instability.²⁴

One major point among these readjustments is the proportion of capital allocated to industrial activities. As Marx pointed, since the early stages of capitalist development there is a mechanism for the adjustment of the excessive allocation of capital in the monetary side: the devaluation. But this two-sided process is unavoidable: as Hilferding puts forward, the speculation is necessary for the actual existence of the stock exchange and for the possibility of the creation of fictitious capital. Probably, it might be more realistic to describe the interactions between the two dimensions as subject to permanent adjustments and readjustments. Last but not least, state regulation and state intervention fulfill an important role. Therefore, the relationship between fictitious and real capital is not smooth and without conflicts and struggles.²⁵

Indeed, a very simple economic definition of this process (the division between dividends and promoter's profits) is a result of struggles between different agents at different moments.²⁶ And, it

²⁴ Guttman (1994, p. 320) discusses the 1987's crash. This crash "served as a useful remainder that the intricate, unstable, yet ultimately self-correcting relationship between fictitious capital, interest-bearing capital, and industrial capital is the most important force in the long-wave dynamic of our economic system". A few paragraphs before, Guttman describes the measures that have been taken by regulators to "prevent the recurrence of such a collapse".

²⁵ Keynes and the Post-Keynesians have important contributions in this regard.

²⁶ In this regard, it would be useful to develop, in the framework of the long waves of capitalist development, a co-evolutionary dynamics between financial institutions and real economy. Mismatches between them may be important causes of "structural crisis of adjustment", as Freeman & Perez (1988) have putted forward. An example of how this adjustments take shape is Henwood's description (1998, p. 95) of the negotiations between Wall Street bankers and political leaders for the new regulation framework established after the 1907 crisis.

would be naïve to underestimate the crisis potential represented by the present level of accumulation of fictitious capital. On the other hand, one should not imagine that the capitalist accumulation would have achieved the present level without the fictitious capital accumulation.²⁷ In this sense, the comprehension of this contradictory nature of capitalist development should take into account Hilferding's theoretical contributions.

²⁷ As the “equitization” of the economy deepens (the word comes from *The Economist*'s survey, May 3, 2001), the dynamics of the economy depends increasingly on the performance and the value of shares. The contemporary US economy, for instance, displays this high dependence: in addition to the usual channels of effects' transmission, a devaluation of shares would impact directly the pension funds system and the household wealth. The *New York Times* (July 14, 2002, p. 1) notices the impact of the fall in share prices upon individuals (“Stocks' slide is playing havoc with older Americans' dreams”).

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