

Did Hilferding Influence Schumpeter?

Panayotis Michaelides and John Milios*

Abstract: In this paper, the origins of some of Joseph Alois Schumpeter's views are traced back to Rudolf Hilferding's *Finance Capital*, regarding the Schumpeterian hypothesis and the separation of roles between capitalists, entrepreneurs and managers. After a careful examination of Hilferding's writings, the conclusion may be drawn that Schumpeter expresses ideas very similar to Hilferding's, and seems to have been influenced by his conceptualisation of a 'latest phase' of capitalism, shaped by the structure of the 'monopolistic enterprise'. Hilferding's approach is understood in this paper as a major revision of Marx's conceptual understanding of the capitalist mode of production and, therefore, as a 'paradigm shift' within Marxian economic theory.

1 Introduction

There is no doubt that Joseph Alois Schumpeter 'was one of the greatest economists of all time' (Haberler 1950, p. 1).¹ Given Schumpeter's various theories and the modern spin-offs of his work, the issue of which theories or ideas might have influenced his thought becomes of great interest and deserves analysis. What were the main influences behind Schumpeter, in the development of his ideas, and to what extent, if any, can his views be traced back to earlier works? This paper attempts to provide a partial answer to this question, regarding the affinity of certain Schumpeterian elaborations with Hilferding's theory of monopoly capitalism. It is true that there is a gap in economic literature concerning the influence that Hilferding's work might have exercised on Schumpeter, and with the exception of very few papers (for example, Fritz and Haulman 1987) no research seems to have been done on this important issue. Following Backhouse, we would like to affirm the following thesis, which has been the point of departure of our investigation:

[T]he history of economic thought is concerned primarily, with who first invented particular concepts. It is of course important to be as accurate as possible in ascribing priority in the development of economic ideas, but the date when an idea came into general circulation may be more important than the date of the earliest document in which the idea can be found. (Backhouse 1985, p. 8)

The purpose of the present paper is to show how Hilferding's *Finance Capital* (1910) influenced some of Joseph Alois Schumpeter's analyses. In this context, a major aim of the paper is to promote dialogue between Marxist and Schumpeterian political economy, which is an underdeveloped area of analysis. Section 2 offers a brief biographical presentation of both economists' life and work. In section 3 we explore Hilferding's influence on the formulation of what has been codified as the Schumpeterian hypothesis; section 4 investigates the influence of Hilferding's work upon Schumpeter's approach to the separation of roles between capitalists, entrepreneurs and managers; section 5 discusses the role of credit, while section 6 elaborates on the paradigm shift that was introduced in Marxian economic

theory by Hilferding's *Finance Capital* to show that Schumpeter drew arguments and ideas from Hilferding. Section 7 concludes the paper.

2 Joseph Alois Schumpeter and Rudolf Hilferding: Brief Biographical Notes²

2.1 Joseph Alois Schumpeter

Joseph Alois Schumpeter (1883-1950), the son of a cloth manufacturer, was born in Triesch in the Austrian part of Moravia, in what was then the Hapsburg Empire (now part of the Czech Republic) and died in Taconic, Connecticut. In 1901 Schumpeter enrolled in the faculty of law at the University of Vienna, and continued his studies in Berlin and London. He studied economic theory under Friedrich von Wieser, Eugen von Philippovich and Eugen von Böhm-Bawerk. In 1905 he took part in Böhm-Bawerk's seminar, where the latter's criticism of Marx was one of the topics of debate. A year later, in 1906, he took the degree *Doctor utriusque iuris* (doctor of law).

In 1909, thanks to Böhm-Bawerk (Kisch 1979, p. 143), Schumpeter became an Assistant Professor at the University of Czernowitz. Between 1911 and 1919 he taught Political Economy as a Full Professor in Graz, while in 1913 – at the age of thirty – and in 1914 he was an Exchange Professor at Columbia University.

In 1918, Schumpeter became a member of the German Socialisation Commission (*Sozialisierungskommission*), and in 1919 he was appointed Minister of Finance in the new government formed by the Social Democrats (Haberler 1950, p. 346). In 1921 he became president of a highly respected private banking house (*Biederman Bank*) in Vienna, and when the bank collapsed in 1924 after the great inflation in Germany he returned to the academic world, and in 1925 accepted a professorship at the University of Bonn in Germany. From 1932 until his death he taught at Harvard University, and he served as president of the American Economic Association, the first foreign-born economist to attain this distinction (Oser and Blanchfield 1975, p. 451).

Schumpeter's writings cover a broad range of topics: (a) the dynamics of economic development (for example, the *Theory of Economic Development*, 1912, and his book on *Business Cycles*, 1939); (b) the integration of economic, sociological and political perspectives with regard to the feasibility of capitalism, documented in *Capitalism, Socialism and Democracy* (1942); (c) the history of economic concepts (*Economic Doctrine and Method*, 1914, and *History of Economic Analysis*, 1954).

2.2 Rudolf Hilferding

Rudolf Hilferding (1877-1941) was born in Vienna and died in Paris. He studied medicine at the University of Vienna, where Joseph Schumpeter was also a student, and obtained his doctorate in 1901. However, he practised medicine only until 1906 (returning briefly during his military service in the World War I), and thereafter devoted himself exclusively to politics and the study of economic theory. At the age of fifteen he joined the socialist movement and from 1902 he contributed frequently to *Die Neue Zeit*, the theoretical journal of the German Social-Democratic Party (SPD). Between 1904 and 1923 he published, along with Max Adler, the *Marx-Studien*, as a means of expression for the emerging Austrian

Marxism. In issue 1 his first important monograph was published, under the title *Böhm-Bawerk's Criticism of Marx*. In 1905 Hilferding participated in the seminar on economic theory directed by Böhm-Bawerk. In 1906 he accepted an invitation from the SPD and tutored for a year at the party school in Berlin. Immediately afterwards he was appointed editor of the party's newspaper, *Vorwärts*.

In *Finance Capital* (1910), Hilferding introduced the notion of a 'latest phase' of capitalism, characterised by the following features: (a) the formation of monopolistic enterprises, which put aside competition; (b) the fusion of bank and industrial capital, leading to the formation of finance capital, which was considered to be the ultimate form of capital; (c) the subordination of the state to monopolies and finance capital; and finally (d) the formation of a protectionist and expansionist policy.³

In 1914 Hilferding joined the Independent Social Democratic Party of Germany (USPD), which emerged from a split with the SPD. In 1918, he became member of the German Socialisation Commission and in 1922, after the majority faction of the USPD had been transformed into the German Communist Party (KPD), he returned to the SPD. He became editor of the party's journal, *Die Gesellschaft*, and served as Minister of Finance in 1923 and 1928-9. When Hitler came to power in 1933 Hilferding went into exile. He fled to Denmark in 1933, then stayed in Switzerland and in 1939 went to Paris. In 1941 he was handed over to the Nazis by the Vichy government and died in Paris either by suicide or from injuries inflicted by the Gestapo.

2.3 Schumpeter and Hilferding: *The Interaction*

From Schumpeter's biography we know that he spent a significant part of his life in Vienna. Then he lived in other cities of Austria-Hungary and paid longer visits to London, Berlin, Cairo, New York and elsewhere. If we include his extensive reading in German, English, French, Italian, Latin and Greek we may conclude that he was a cosmopolitan (Haberler 1951, p. ix; Andersen 1991, p. 6), not only as a man but also as a theoretician, that is, as regards the possible influences on his thought. However, if we include some knowledge of general history as well as of Schumpeter's preferences, we may delimit our main focus in Vienna (Andersen 1991, p. 6). This conclusion was also reached by his colleague Gottfried Haberler on the occasion of his death: 'Although he [Schumpeter] became one of the most cosmopolitan of men, the experience of those early years in Vienna never really left him' (Haberler 1951, p. ix).

The Vienna of Schumpeter's youth was a 'melting pot' of nationalities and theories. His experience was primarily gathered in Vienna and was used effectively in his own theory of economic development. In this intellectual environment Böhm-Bawerk's personality, although he was not widely known abroad, was dominant.⁴ As a teacher Böhm-Bawerk was quite liberal, especially during summer terms when he was the leader of seminar discussions; there the students had a chance to develop their views and fight for them intellectually. During Schumpeter's student years, political and intellectual conflicts had become extremely aggravated and it was in this theoretical environment that he built his skills in discussion and theoretical construction (Andersen 1991, p. 20).

In Böhm-Bawerk's seminar in 1905, many prominent Marxists participated (Taylor 1951, p. 547), among them Emil Lederer, later Professor at Heidelberg and Berlin and founder of the New School for Social Research in New York (Haberler 1950, p. 337) and Otto Bauer, the brilliant theorist and intellectual leader of the

Austrian socialist movement after 1918 (Haberler 1950, p. 337), member of the 1919 Republican Government and leader of the Austrian Social Democratic Party until the advent of fascism (Andersen 1991, p. 20). However, as Bottomore (1978) and Andersen (1991) have pointed out, for Schumpeter, 'even more important was the encounter with the leading representative of the new Austro-Marxist School: Rudolf Hilferding' (Andersen 1991, p. 20). At that time, in 1905, Hilferding was writing his path-breaking book, *Finance Capital* (Andersen 1991, p. 21), which was published five years later (1910) in Germany. In fact, according to Faltello and Jovanovic (1997), during the seminar meetings in 1905 Hilferding was finishing the first full draft.

Schumpeter seems to have been inspired by those discussions in the seminar meetings.⁵ As Schumpeter's colleague Haberler pointed out, he had conceived the fundamental ideas (fully expanded in the *Theory of Economic Development*) in 1905 (Haberler 1950, p. 341).⁶ It was also in these seminars that Schumpeter became well acquainted with certain interpretations of Marxist theory, as well as with the socialist movement and the psychology of its leaders.⁷

As the available material demonstrates, the two fellow-students, Schumpeter and Hilferding, seemed to be on good terms from the beginning of their acquaintance (Haberler 1950, p. 337) and later became friends (Taylor 1951, p. 547). The two theoreticians' interaction must have continued in the years that followed Böhm-Bawerk's seminar, and in 1918 Schumpeter became a member of the German Socialisation Commission (*Sozialisierungskommission*), signing the report which pleaded for socialisation. The Socialisation Commission was presided over by another Marxist, Karl Kautsky (Kirsch 1979, p. 147). In the next year, the Social Democrats emerged as the largest party in Austria and formed the new government under the leadership of Karl Renner, a right-wing socialist (Haberler 1950, p. 346). Schumpeter became the Minister of Finance.

We may conclude from this that both thinkers developed certain of their major theories in the same social, political, theoretical and ideological environment, and that they were well acquainted with each other's ideas. We may suppose, therefore, that the similarities of certain Schumpeterian elaborations with theoretical theses and analyses originally formulated and introduced in Marxian economics by Rudolf Hilferding (see below) is not accidental, but is the outcome of this long acquaintance and interaction between the two Austrian economists.

3 Market Structure and Technological Progress

According to Schumpeter, even before he had developed what is now described as the 'Schumpeterian hypothesis', economic development is accompanied by growth, that is, sustained increases in national income; however quantitative growth does not constitute development *per se*. He wrote: '[W]hat we are about to consider is that kind of change arising from the system which so displaces its equilibrium point that the new one cannot be reached from the old one by infinitesimal steps. Add successively as many coaches as you please, you will never get a railway thereby' (Schumpeter 1912, p. 64).

Real economic growth and development depend primarily upon productivity increases based on 'innovation'. More precisely, for Schumpeter this concept covered the following five cases: '1. The introduction of a new good or a new quality of a good. 2. The introduction of a new method of production

3. The opening of a new market 4. The conquest of a new source of supply
5. The carrying out of the new organisation of any industry' (*ibid.*, p. 66).

In this context, he used the term 'technological progress' to characterise these changes (Scherer 1992, p. 1417), which account for the greater part of economic development. He clearly distinguished this process from growth due to the gradual increase in population and capital. He wrote:

The slow and continuous increase in time of the national supply of productive means and of savings is obviously an important factor in explaining the course of economic history through centuries, but it is completely overshadowed by the fact that development consists primarily in employing existing resources in a different way, in doing new things with them, irrespective of whether those resources increase or not. (Schumpeter 1942, p. 65)

The Schumpeterian hypothesis was formulated along this line of reasoning, as a response to the question of 'who is actually the vehicle of innovation and technological progress', and can be summarised as follows: 'large firms with considerable market power, rather than perfectly competitive firms were the "most powerful engine of technological progress"' (Schumpeter 1942, p. 106, cited by Mokyr 1990, p.267).⁸

Schumpeter criticised traditional price theory for its misleading focus on perfect competition:

[I]n capitalist reality as distinguished from its textbook picture, it is not [perfect] competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization (the largest-scale unit of control for instance) – competition which commands a decisive cost or quality advantage This kind of competition is much more effective than the other. (*ibid.*, pp. 84-5)

In his book *Capitalism, Socialism and Democracy*, Schumpeter rejected perfect competition as an ideal market structure in capitalism, and dismissed the idea of 'an entirely golden age of perfect competition' as 'wishful thinking' (*ibid.*, p. 81), since: '[P]erfect competition is not only impossible but inferior' (*ibid.*, p. 106).

Schumpeter believed that perfect competition is not favourable to technological progress, for two reasons: (a) it cannot lead to high profitability and thus it cannot create real incentives for innovation; (b) it cannot create incentives for the capitalist and the enterprise to undertake risky and uncertain projects, because it is unable to guarantee, as a reward, an *extra profit*. More precisely, by incorporating new technologies, new types of organisation and so on, innovations create surpluses of revenues over costs. Competition, however, tends to eliminate these extra revenues (extra profits), but the 'spread of monopolist structures' and the ability of big enterprises to promote innovation constantly recreates them (*ibid.*, pp. 81ff.).

In fact, in his *Theory of Economic Development* (1912), the predominant role of large oligopolistic firms in technical innovation had been already acknowledged:

And if the competitive economy is broken up by the growth of great combines, as it is increasingly the case today in all countries, then this must become more and more true of real life, and the carrying out of new combinations must become in ever greater measure the internal

concern of one and the same economic body. The difference so made is great enough to serve as the water-shed between two epochs in the social history of capitalism. (Schumpeter 1912, p.67)

However, Hilferding seems first to have developed the idea that development depends on large non-competitive enterprises, whose technological superiority derives from their ability to attain profits high above the average. Just like Schumpeter, Hilferding believed that: '[T]he reduction of profit in the non-monopolised industries is bound to retard their development', whereas: 'Cartelisation brings exceptionally large extra profits' (Hilferding 1910, p. 233) that function as incentives for undertaking such entrepreneurial acts, which, in turn, will lead to the further empowerment of the non-competitive, monopolistic formations. Hilferding considered technical progress to be the condition *sine qua non* for assuring a cartel's or a trust's supremacy in the market: '[O]nce a combination has come into existence as a result of economic forces it will very soon present opportunities for the introduction of technical improvements in the process of production' (*ibid.*, p. 197). In fact: 'They are obliged to introduce these [technical] improvements, for otherwise there is a danger that some outsider will use them in a renewed competitive struggle [I]n this case technical improvements mean an extra profit, which is not eliminated by competition' (*ibid.*, p. 233).

It is this technical superiority that makes the monopolistic formations able to maintain and constantly reproduce their dominant role: 'These technical advantages, once achieved, in turn become a powerful motive for forming combinations where purely economic factors would not have brought them about' (*ibid.*, p.197). 'The corporation can thus be equipped in a technically superior fashion, and what is just as important, can maintain this technical superiority' (*ibid.*, p. 123).

The thesis regarding the limited ability of free competition to promote technological progress is supposed, for both theoreticians, to be a conclusion drawn from past historical experience. More precisely, Schumpeter argued that the capitalist era could be divided into two distinct periods (Screpanti and Zamagni 1993, pp. 243ff.): (a) The era of 'competitive capitalism' when small enterprises dominated, an era which declines in the 1880s and (b), the era of monopolistic or 'big-business capitalism', during which large enterprises, trusts and cartels dominated, starting roughly from the 1880s and having consolidated its fully fledged form by the time Schumpeter's book was written.

For Hilferding, too, the elimination of free competition and monopolies came, historically, in a similar way: 'Finance capital signifies the unification of capital. The *previously separate* spheres of industrial, commercial and bank capital are brought under the common direction of high finance, in which the masters of industry and of the banks are united in a close personal association', and consequently: 'The basis of this association is the *elimination of free competition among individual capitalists by the large monopolistic combines*' (Hilferding 1910, p. 301, emphasis added). Thus, 'it is also clear that monopolistic combines will control the market' (*ibid.*, p. 193).

We have seen, so far, that for both theoreticians the *real incentive* for innovation was the ability of monopolistic formations – deriving from their non-competitive nature – to create extra profits. Also, the elimination of free competition was regarded, by both economists, as the main characteristic of an era during which large enterprises, trusts and cartels dominated, and which attained its typical characteristics around 1900.

As far as the other aspect of the Schumpeterian hypothesis is concerned, namely that perfect competition is an unstable market structure where only large enterprises can push technological progress forward, the views of both theoreticians are strikingly similar. For Schumpeter, once big corporations are formed, the imperfectly competitive market structure becomes stable, as large firms become increasingly conducive to technological progress and change:⁹ 'There are superior methods available to the monopolist which either are not available at all to a crowd of competitors or are not available to them so readily' (Schumpeter 1942, p. 101). 'The perfectly bureaucratized giant industrial unit ousts the small or medium-sized firm' (*ibid.*, p. 134). On the same line of argument, the large firm is considered to possess the ability to attract superior 'brains', to secure a high financial standing (*ibid.*, p. 110), and to deploy an array of practices to protect its risk-bearing investments.

In his *Finance Capital*, Hilferding had developed a similar approach:

The expansion of the capitalist enterprise which has been converted into a corporation can now conform simply with the demands of technology. The introduction of new machinery, the assimilation of related branches of production, the exploitation of patents, now takes place from the standpoint of their technical and economic suitability Business opportunities can be exploited more effectively, more thoroughly, and more quickly A corporation is able, therefore, to organize its plant according to purely technical considerations, whereas the individual entrepreneur is always restricted The corporation can thus be equipped in a technically superior fashion, and what is just as important, can maintain this technical superiority. This also means that the corporation can install new technology and labour saving processes before they come into general use, and hence produce on a large scale, and with improved, modern techniques, thus gaining an extra profit, as compared with the individually owned enterprise. (*ibid.*, pp.123-4)

Consequently, 'The introduction of improved techniques [benefits] the tightly organized cartels and trusts. [T]he largest concerns introduce the improvements and expand their production' (*ibid.*, p. 233).

Hilferding repeatedly affirmed the position that the big corporation is able to create the conditions which may assure its market supremacy as well as its extra profits for a long period: 'An industrial enterprise which enjoys technical and economic superiority can count upon dominating the market after a successful competitive struggle, can increase its sales, and after eliminating its competitors, rake in extra profits over a long period' (*ibid.*, p. 191).

Thus Hilferding expressed what we could codify as 'Hilferding's hypothesis', namely the thesis that 'the size and technical equipment of the monopolistic combination ensure its superiority' (*ibid.*, p. 201), which is, in general terms, very similar to 'Schumpeter's hypothesis', written thirty-two years after Hilferding: 'large firms with considerable market power, rather than perfectly competitive firms were the "most powerful engine of technological progress"' (Schumpeter 1942, p. 106). The obvious similarity of ideas of both theoreticians on this specific issue needs no further comment.

Further to the above, Hilferding introduced, in his *Finance Capital*, the notion of a 'latest phase' of capitalism, which is characterised by the following main features: the formation of monopolistic enterprises, which put aside capitalist

competition; the fusion of bank and industrial capital, leading to the formation of finance capital, which is considered to be the ultimate form of capital; the subordination of the state to monopolies and to finance capital; and, finally, the formation of an expansionist policy of colonial annexations and war.¹⁰

Hilferding regarded capital exports as an inherent characteristic of capitalism in its 'latest', monopolistic, stage, rooted in the 'cartelisation and trustification' of the economy and the need 'to annex neutral foreign markets ... above all overseas colonial territories' (Hilferding 1910, pp. 326, 328).

Finance capital, as Hilferding defined it, is advanced to industrial capitalists who use it. This 'new' concept is also seen as the linking between capitalism's 'latest' stage and imperialism (Winslow 1931, p. 727). The colonies were regarded as the outlets for the export of finance capital. In this sense, finance capital was considered to be helpless without political and military support: 'capital export works for an imperialistic policy' (Hilferding 1910, p. 406) since it 'does not want freedom, but domination' (*ibid.*, p. 426). Imperialism is, thus, a tendency to expansion of a developed capitalist power, a tendency created, in the last instance, by economic processes, but also supported by political processes. It is argued, therefore, that imperialism, which is capitalist rivalry at its highest level, leads to war and mutual destruction of the capitalist powers.¹¹

On this issue Schumpeter clearly differentiated himself from Hilferding and all other Marxist approaches that conceived imperialism as an indispensable trend of the 'latest phase' of capitalism. He limited the field of discussion at once, by defining imperialism as the 'objectless disposition of a state toward unlimited and violent expansion' (Schumpeter 1919, p. 3). Schumpeter considered imperialism to be an obsolete policy and regime, that is, an absolutist remnant, which was bound to fade away with the development of modern capitalism. Indeed, he regarded imperialism as an 'old' inheritance from pre-modern capitalist eras, which was going to disappear, contrarily to Hilferding, who regarded imperialism as a 'new', inherent characteristic of capitalism in its 'latest', monopolistic, stage: 'A purely capitalist world can offer no fertile soil to imperialist impulses. This does not mean that it cannot maintain an interest in imperialist impulses' (Schumpeter 1951, p. 69).

Schumpeter regarded expansion and war as a possible outcome of intra-state (imperialist) rivalries, and pointed out the various forces opposed to militarism and war. He claimed that the socialist perspective could be comprehended as an attempt towards a solution to the problem of imperialism. Schumpeter (1919, pp. 296-7) gave Hilferding credit for working out such problems, and believed that factors impelling imperialistic policies are not lacking in capitalist society. He finally remarked, however, that many elements (for example, tariffs, cartels, trusts, monopolies), which were analysed as a part of the 'economic' framework of imperialism, were political and, possibly, pre-capitalist in origin (*ibid.*, p. 295).¹²

The question of whether the similar theses of both economists under discussion might be directly rooted in a common theoretical framework, that is, in the economic theory of Karl Marx, will be analysed in section 6. There we will defend the thesis that, contrary to Marx's approach, which proceeded on the assumption that free competition is a structural feature of the capital relation which cannot be abolished, both Hilferding and Schumpeter thought of monopolies, as already discussed, as the decisive feature of the supposed 'latest phase' of capitalism from which both innovation and growth originate.

4 The Entrepreneur and the Separation of Roles

We may now move on to another area of Hilferding's work that may also have influenced Schumpeter's writings. Hilferding believed that the domination of big monopolistic enterprises in the 'latest phase' of capitalism brought with it a sharp distinction between the entrepreneur, conceived as the head of the firm's managerial staff, on the one hand, and the capitalist (the owner of the enterprise or principal creditor) on the other. He considered this separation of roles to be of fundamental economic significance for the 'latest phase' of capitalism, as it allowed the distinction between two specific forms of enterprise: the dominant (big 'monopolistic' enterprise), from which emerge the main patterns of evolution of capitalism, and the dominated (traditional individually-owned firm). He wrote:

Up to the present, economics has sought to distinguish between the individually owned enterprise and the joint-stock company (or corporation) only in terms of differences in their organisational forms and of the consequences which flow directly from them. [...]but it has neglected to investigate the fundamental economic differences between the two forms of enterprise, even though these differences are crucial to any understanding of modern capitalist development, which can only be comprehended in terms of the ascendancy of the corporation and its causes. (Hilferding 1910, p. 107)

In addition, Hilferding argued that the new form of industrial corporation 'involves above all a change in the function of the industrial capitalist. For it converts what has been an occasional, accidental occurrence in the individual enterprise into a fundamental principle; namely, the liberation of the industrial capitalist from his function as industrial entrepreneur' (*ibid.*, p. 107). And he concluded: 'As a result of this change the capital invested in a corporation becomes pure money capital as far as the capitalist is concerned. The money capitalist as creditor has nothing to do with the use which is made of his capital in production. His only function is to lend his capital and, after a period of time, to get it back with interest' (*ibid.*, p. 107).

It is obvious that Hilferding made a clear distinction between the entrepreneur, who is in charge of the use of capital in production, and the (money) capitalist, who advances or lends his capital and bears the risk. He further considered this separation of roles to be an outcome of the formation of the 'latest phase' of capitalism. This very sharp separation of roles between the capitalist and the entrepreneur in modern 'trustified' capitalism is also at the core of Schumpeter's approach, and has been commented on by many authors (for example, Heilbroner 1998, chapter 10). Thus, both Hilferding and Schumpeter conceived of the separation of roles between the capitalist and the entrepreneur as a major characteristic of the big corporation. However, they saw differently the connection of each one of these two agents with the corporation's managers. While for Hilferding the entrepreneur was simply the top manager, closely connected with the rest of the managerial staff in promoting innovation and development, for Schumpeter the entrepreneur, representing the element of initiative and change, confronted the managers, who were mainly concerned with routine affairs.

Consequently, for Hilferding the capitalist owner had become superfluous, an evolution which paved the way to socialism. He wrote:

Finance capital puts control over social production increasingly into the hands of a small number of large capitalist associations, separates the

management of production from ownership and socializes production to the extent that this is possible under capitalism The tendency of finance capital is to establish social control of production, but it is an antagonistic form of socialization, since the control of social production remains vested in an oligarchy [However, this] socializing function of finance capital facilitates enormously the task of overcoming capitalism it is enough for society, through its conscious executive organ – the state conquered by the working class – to seize finance capital in order to gain control of production. (Hilferding 1910, p. 367)

On the contrary, for Schumpeter the entrepreneurs constantly renewed the capitalist class, as the more successful among them systematically showed the propensity of becoming capitalist owners themselves (Schumpeter 1912, pp. 78-9).¹³ Only the bureaucratisation of the big enterprise, through the subordination of the entrepreneurs to managers, could lead trustified capitalism to socialism:

The perfectly bureaucratized giant industrial unit ousts the entrepreneur and expropriates the bourgeoisie as a class which in the process stands to lose not only its income but what is infinitely more important, its function Thus the same process that undermines the position of the bourgeoisie by decreasing the importance of the functions of entrepreneurs and capitalists, by breaking up protective strata and institutions, by creating an atmosphere of hostility, also decomposes the motor forces of capitalism from within. (Schumpeter 1942, pp. 134, 161-2)

Schumpeter defined socialism as ‘an institutional arrangement that vests the management of the productive forces with some public authority’ (*ibid.*, p. 113), and claimed that ‘the modern corporation, although the product of the capitalist process, socializes the mind’ (*ibid.*, p. 156). Furthermore, he argued that the ‘bureaucratization of economic life’ is stimulated by and within the large-scale corporation (*ibid.*, p. 206) and so allows the transition to a socialist but ‘bureaucratic apparatus’ by establishing new modes of managerial responsibility and selection that ‘could only be reproduced in a socialist society’ (*ibid.*, pp. 206-7).

In fact, a basic argument of *Capitalism, Socialism and Democracy* is that the entrepreneur becomes less and less important, and consequently the process of economic development comes to halt and capitalism gives way to socialism. Schumpeter gave two reasons for the gradual disappearance of the entrepreneur:

For, on the one hand, it is much easier now than it has been in the past to do things that lie outside the familiar routine – innovation itself is being reduced to routine. Technological progress is increasingly becoming the business of teams of trained specialists who turn out what is required and make it work unpredictable ways. The romance of earlier commercial venture is rapidly wearing away, because so many more things can be strictly calculated that had of old to be visualized in a flash of genius.

On the other hand, personality and will power must count for less in environments which have become accustomed to economic change – best instanced by an incessant stream of new consumer’s and producer’s goods – and which, instead of resisting, accept it a matter of course. (*ibid.*, p. 132)

However, Schumpeter still stressed the importance of individual entrepreneurs, albeit in a different institutional setting: for example, a production engineer in the research and development department of a large firm could be regarded as an 'entrepreneur' in Schumpeter's sense of the word. Thus, despite envisaging the demise of the entrepreneurs and their partial replacement by a new mode of economic organisation (Freeman 1982; Philips 1971), he never completely abandoned his initial model of the entrepreneur as the agent of technological and economic change (te Velde 2001, p. 24).

We may conclude therefore that both authors commenced from a similar theoretical point (that is, separation of roles between the capitalist and the entrepreneur in the big enterprise of 'trustified capitalism') and arrived at a similar conclusion: the inevitability of socialism, conceived as a system of control of the means of production by central state authorities.¹⁴

However, they understood differently the 'capitalist element' in the big enterprise. For Hilferding this element consisted in private property and had become superfluous, while for Schumpeter this private ownership regime necessarily entailed the entrepreneur as conveyor of vision, economic novelty and innovation. In Hilferding's view the role of innovation was ascribed to the firm's managerial staff, to which belonged not only the entrepreneur (being identified with the top-manager) but also another 'personality' (belonging to the same managerial staff), the innovative manager, whose primary goal was to make new ideas work properly. This innovative manager would attain and further unfold his innovative role in the framework of a socially planned economy.

Hilferding concluded that a form of tension emerged between capitalist owners and managers, the former being only interested in short-term profit maximisation, the latter preferring long-run strategies based on technological development and innovation:

The separation of capital ownership from its function also affects the management of the enterprise. The interest which its owners have in obtaining the largest possible profit as quickly as possible, their lust for booty, which slumbers in every capitalist soul, can be subordinated to a certain extent, by the managers of the purely technical requirements of production. More energetically than the private entrepreneur they will develop the firm's plant, modernize obsolete installations, and engage in competition to open up new markets, even if the attainment of these goals entails sacrifices for the shareholders. (Hilferding 1910, p. 126)

Schumpeter defined production as the combinations of materials and forces that are within our reach (Schumpeter 1942, p. 65). However, the producer is not an inventor. Following Scott's formulation: 'Schumpeter emphasized the role of the entrepreneur in development. By definition, he is the man who sees that the new combination is made. He is to be distinguished from the capitalist (who bears the risk) and from the inventor (who has the ideas), although it is possible for one man to be all three' (Scott 1998, p. 104). Schumpeter incorporated the modernising functions of Hilferding's 'innovative manager' with those of the entrepreneur and thus connected them with the 'spirit of capitalism'. In other words, he ascribed the role of innovation to the entrepreneur who, without being a capitalist, might exist only in the framework of the capitalist regime.

It is along these lines of reasoning that Schumpeter drew a sharp distinction between the roles of entrepreneurs and managers. He believed that 'the entrepreneur is concerned with change' whereas the manager is 'concerned with

routine problems' (Scott 1998, p. 104). We agree with Scott (*ibid.*, p. 104), that the tension between the manager and the entrepreneur had already been stressed in *The Theory of Economic Development*: 'Carrying out a new plan and acting according to a customary one are things as different as making a road and walking along it' (Schumpeter 1912, p. 85). He stressed the difference between an entrepreneur and a manager in the following words: '[everyone] is an entrepreneur only when he actually "carries out new combinations", and loses that character as soon as he has built up his business, when he settles down to running it as other people run their businesses' (Schumpeter 1912, p.78).

Schumpeter further developed this idea of antithesis between the entrepreneur and the manager in *Capitalism, Socialism and Democracy*. He claimed that the bureaucratisation of the big enterprise, with the transformation of entrepreneurial activity into a routine process conducted by managers and technical employees, would lead to the final decline of the big enterprise and thus of the capitalist economic order.

Closing this section, it is important to stress again here that the conceptualisation of the separation of roles between the capitalist, the entrepreneur and the manager seems to have been developed by Schumpeter in close connection with his idea of the supremacy of the large oligopolistic corporation. In other words, the separation of roles is considered to be an outcome of the prevailing type of firm structure and entrepreneurial activity. We argue that this conception traces its roots back to Hilferding, who first presented the 'liberation of the industrial capitalist from his function as industrial entrepreneur' (Hilferding 1910, p. 107) as an outcome of the formation of the 'latest phase' of capitalism, characterised by the predominance of monopolistic enterprises. However, Schumpeter elaborated on the idea of antithesis between the entrepreneur and the manager, and in this framework tended to incorporate the functions of the 'innovative manager' into the role of the entrepreneur himself.

5 Credit

Schumpeter was realist enough to see that the carrying out of new combinations involves a lot more than 'an act of will'; command over the means of production is necessary (te Velde 2001, p. 7). In most cases the entrepreneur has to resort to credit, especially since new ventures do not have revenues from previous years. Consequently, if someone wants to function as an entrepreneur, he must raise funds. The provision of credit, as discussed, comes from another personality, the capitalist. The capitalist may, of course, use funds which are themselves the result of successful innovation and entrepreneurial profit (Schumpeter 1912, p. 72). The capitalist bears the financial risk (the entrepreneur risks his job and his reputation) and, because capital utilisation is nothing but the diversion of the factors of production to new uses (*ibid.*, p. 116), the capitalist has some power to dictate new directions to production (te Velde 2001, p. 7).

In his *Theory of Economic Development* (1912) Schumpeter began with the description of a market-based circular flow of economic activity and in this context defined economic development as a phenomenon 'entirely foreign to what may be observed in the circular flow or in the tendency toward equilibrium'. It is a 'spontaneous and discontinuous change in the channels of the flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing' (Schumpeter 1912, p. 64), so that 'the 'new combination of means of

production' and credit' are the 'fundamental phenomena of economic development' (Schumpeter 1911, p. 74).

Schumpeter stressed the importance 'of credit means of payment created *ad hoc*, which can be backed neither by money in the strict sense nor by products already in existence' (Schumpeter 1912, p. 106). In this manner, credit performs the functions of 'enabling the entrepreneur to withdraw producers' goods which he needs from their previous employments, by exercising a demand for them, and thereby to force the economic system into new channels' (*ibid.*, p. 106). For Schumpeter credit provides the entrepreneur with an additional purchasing power that enables him to foster development: 'Granting credit in this sense operates as an order on the economic system to accommodate itself to the purposes of the entrepreneur' (*ibid.*, p. 107).

Hilferding also emphasised, in his analysis of 'credit money', the crucial role of banks in the development of capitalism (Fritz and Haulman 1987). However, where Hilferding presented an indictment of capitalism, Schumpeter found considerable strength. At first, Hilferding differentiated between paper money as legal tender, 'which emerges from circulation as a social product', and credit money, which is a 'private affair', not backed by the government (Hilferding 1910, p. 66). In this last case, money can be replaced by a promise to pay. The development of the capitalist system is followed by a rapid increase in the total volume of commodities in circulation and thus 'of the socially necessary value in circulation. Further the expansion of production, the conversion of all obligations into monetary obligations, and especially the growth of fictitious capital, have been accompanied by an increase in the extent to which transactions are concluded with credit money'. So Hilferding concluded that credit money required 'special institutions where obligations can be cancelled out and the residual balances settled, and as such institutions develop so is a greater economy achieved' (*ibid.*, p. 66). And this was seen as a fundamental function of any developed banking system.

For Hilferding credit originated as a consequence of the changed function of money as a means of payment. A purchase not followed by direct payment, that is, a delay in payment, 'means that one capitalist has enough surplus capital to wait for payment for the purchaser, the money due is credited' and 'money is merely transferred' (*ibid.*, p. 82). However, when a promissory note functions as a means of payment, money capital has been saved, and this type of credit is called 'circulation credit' (*ibid.*, p. 83). According to Hilferding, this credit form increases transactions between capitalists and so an increased demand for production capital emerges.

He believed that an increase in production means a simultaneous expansion of circulation, and 'the enlarged circulation process is made possible through an increase in the quantity of credit money' (*ibid.*, p. 83). However, circulation credit does not 'transfer money capital from one productive capitalist to another; nor does it transfer money from other (unproductive) classes to the capitalist class' (*ibid.*, p. 87). This role is played by another form of credit, which converts idle money into active money capital, and is called 'capital credit'. This credit form constitutes a transfer of money to those who use it as money capital, that is, for the purpose of purchasing the elements of productive capital.

Finally, credit 'puts money into circulation as money capital in order to convert it into productive capital' (*ibid.*, p. 88). This expands the scale of

production with the simultaneous expansion of circulation. Thus the scale of circulation is enlarged by utilisation of previously idle money.

Despite the apparent similarities, the two theoreticians' views on the nature of credit seem to diverge significantly. Schumpeter adopted a more 'endogenous' approach to money and credit ('means of payment created *ad hoc*, which can be backed neither by money in the strict sense nor by products already in existence'), while Hilferding adopted a more traditional or classical approach, regarding credit rather as a substitute for the value of existing commodities or of 'commodity money' (and in this sense as conversion of already-existing 'idle money' into 'active money capital').¹⁵

Up to this point we have emphasised the affinity between Hilferding's and Schumpeter's analyses regarding the role of the big enterprise in economic development, the tendency towards trustification of the capitalist economy, the separation of roles between capitalists, entrepreneurs and managers and the role of credit. In the next section we are going to investigate whether these ideas are directly rooted in the writings of Karl Marx, or whether it is Hilferding's unique interpretation of Marx's theory, which subsequently influenced Schumpeter.

6 Hilferding's and Schumpeter's 'Microeconomic' *vis-à-vis* Marx's 'Macroeconomic' Approach

It is well known that, on the one hand, Hilferding was a major Marxist theoretician of his time, while on the other, as Ricardo Bellofiore has argued, 'Schumpeter's legacy may be summarized through a comparison with Marx' (Bellofiore 1998, p. 1009).¹⁶ If the similarities of their approaches to the issues of market structure and technological progress on the one hand, and to the separation of roles between capitalist and entrepreneur on the other, are the result of the unfolding of certain Marxian theses, analyses or ideas, then the first impression that Hilferding might have influenced Schumpeter could be wrong. Both economists might have come to similar conclusions because they had commenced, independently, from the same theoretical point of departure, that is, Marxian theory.

In what follows we will argue against the above hypothesis. Our main argument will be that the theoretical system developed by Hilferding and first introduced with his *Finance Capital*, which Schumpeter seems to have followed at certain points of his work, is a 'revision' rather than merely a further development or 'actualisation' of Marx's theoretical analysis.

6.1 *The Marxian Theory and the Notion of 'Social Capital'*

Marx developed his economic theory, under the rubric of *A Critique of Political Economy*, mainly in the period 1857-1867. It is a well-defined system, structured as a logical array of original concepts and analyses based on Marx's notions of value and surplus value.

Concerning Marx's value theory, it must first of all be made clear that this theory does not have as its object of study any specific capitalist country or 'historical form' ('historical stage') of capitalism, but the Capitalist Mode of Production (CMP), that is, the structural elements of the capitalist system as such, irrespective of its specific forms of appearance¹⁷ or its level of development (Althusser *et al.* 1965; Milios *et al.* 2002).¹⁸

Both Hilferding, in his early writings (1904), and Schumpeter adopted a 'mainstream' interpretation of value theory, which we have elsewhere defined as

‘Ricardian Marxism’ or the ‘Classic version’ of value theory (see Milios *et al.* 2002; Milios 2005). This version incorporates into Marxist theory the viewpoint of the classical school of political economy on value as ‘labour expended’: according to it, the value of each commodity is determined independently, and is commensurable (qualitatively identical) with price (that is, belongs to the category of empirically tangible quantities).¹⁹ Consequently, value can be reduced to (production) price by means of mathematical calculation.²⁰

Most important for our analysis is the fact that, despite different interpretations of Marx’s economic analysis, all versions of Marxism until the publication of *Finance Capital* accepted an identical point of view concerning the relationship between the capitalist economy as a whole and the individual enterprise. This point of view was based on theses formulated by Marx, which shaped a fundamentally ‘macroeconomic’ approach to the capitalist economy. According to it, the immanent causal regularities (‘laws’) of the capitalist system stand at the level of the capitalist economy as a whole and are therefore imposed as ‘motives’ on the individual elements of this economy.

As Marx clearly noted, ‘the immanent laws of capitalist production manifest themselves in the external movement of the individual capitals’ and ‘assert themselves as the coercive laws of competition, and therefore enter into the consciousness of the individual capitalist as the motives which drive him forward’ (Marx 1867, p. 433). The notion that corresponds to the overall causal relationships of capitalist production is, according to Marx, social capital (*Gesamtkapital*). In another formulation, the immanent causal relationships governing the capitalist economy transform the totality of enterprises (‘individual capitals’, according to Marx’s terminology) into elements of social capital, that is, they situate them within an economic system, which then exercises a conditioning influence on them.

It is in this way, according to Marx, that capital constitutes an historically specific social relation of exploitation and domination.²¹ Social capital is thus the concept of capital at the level of the capitalist economy as a whole, that is, it is the complex concept embracing empirically detectable regularities of a capitalist economy, but also all the ‘laws’ – the hidden causal determinants – of the capitalist system. Embodied in the structural framework of social capital, the individual ‘capitalist is simply personified capital, functioning in the production process simply as the bearer of capital’ (Marx 1894, p. 958). He/she is not the subject of initiative and change; he/she is subjected to the laws of evolution and change of social capital, imposed as motives to his/her consciousness through competition.

6.2 *Free Competition and Monopolies in the Capitalist Mode of Production*

We will focus now on the issue of free competition, as it allows a deep insight into matters of causality and into the content of notions such as monopolies and technical change in Marx’s and Hilferding’s respective theoretical systems.²²

As already stated, according to Marx, free competition ensures the reciprocal engagement, peculiar to the capitalist system, of institutionally independent production units, imposing on the respective capitals the laws of capitalist production. Competition makes it possible for the separate capitalist enterprises, the individual capitals, to constitute themselves and function as social capital. Through their structural interdependence, that is to say their organisation as social capital, the individual capitals proclaim themselves a social class: they

function as a uniform social force which counterposes itself to, and dominates, labour (see Milios 2000, pp. 289-98).

As individual capitals, enterprises intend to maximise their profit. This tendency is however, through free competition, subordinated to the laws inherent in the concept of social capital, and more specifically to the process of equalisation of the rate of profit and the formation of a tendentially average profit. The tendency towards equalisation of the rate of profit is thus a structural characteristic of the capitalist relation as such.

This tendency is related to two processes:

a) Competition within each branch or sector of production, which in principle ensures for each commodity the 'establishment of a uniform market value and market price' (Marx 1894, p. 281). Competition within each branch of production therefore tends in every instance to impose on all the individual capitals the more productive manufacturing techniques and to equalise the rate of profit within each branch.

b) Competition at the level of overall capitalist production, which ensures such mobility of capital from one branch to another that a uniform rate of profit tends to emerge for the entire capitalist economy (the general rate of profit). The shaping of the uniform general rate of profit is achieved on the basis of production prices. These are, in other words, precisely those prices for the product of each individual capital that guarantee it a rate of profit (equal to the ratio of the total profit for a certain period of production to the total capital advanced) equal to (tending towards equality with) the general rate of profit in the economy.

'Freedom of capital', its concentration and centralisation and its capacity to move from one sphere of production to another – mobility facilitated by the credit system and necessitated by competition, because every individual capital seeks employment where it can achieve the highest rate of profit – are the terms which secure the predominance of the tendency towards equalisation of the rate of profit. It is according to this theoretical reasoning that '[T]he predominance of capital is the presupposition of free competition' (Marx 1857-58, p. 651) and free competition shall be regarded as an indispensable feature of the CMP.

By introducing the idea of 'the elimination of free competition among individual capitalists by the large monopolistic combines' (Hilferding 1910, p. 301), Hilferding replaces Marx's macroeconomic view with a 'microeconomic' approach, according to which the characteristics of the 'dominant form' of enterprise (individual capital) shape the whole capitalist system (the social capital) and determine its patterns of evolution and change. What we have here is an inversion of the flow of cause and effect in the relationship between social capital and individual capital, which constitutes a paradigm shift within Marxian economic theory.

Contrary to Soviet Marxists and other descendants of his theory of 'monopoly capitalism', Hilferding himself was frank enough to admit that his approach was not compatible with Marx's value theory: 'It seems that the monopolistic combine, while it confirms Marx's theory of concentration, at the same time tends to undermine his theory of value' (Hilferding 1910, p. 228).

The above conclusion concerning the paradigm shift introduced in Marxist economic theory by Hilferding's *Finance Capital* may be further elucidated on the basis of Marx's monopoly theory in Volume III of *Capital*. This theory is explicitly formulated by Marx, contrary to the belief that monopolies can be studied only in

the framework of the 'latest phase' of capitalism, which was supposedly formed only after Marx's death.

Marx's theses can be summarised as follows. The fact that there is a tendency towards equalisation of the rate of profit, that causes individual capitals to constitute themselves as social capital, does not mean that at any given moment the rates of profit of different individual capitals will automatically be equal. A monopoly was thus defined in Marx's theory as an individual capital which systematically earns an above-average ('extra') rate of profit (and not as a company which monopolises the market). Monopoly is accordingly not the polar opposite of free competition. It is a form of individual capital, which is created precisely within the framework of free competition, not outside and/or alongside free competition but through free competition and in the framework of its function.

Marx in *Capital* draws a distinction between two major types of monopoly: natural and artificial monopolies (see Varga 1974, p. 117). Natural monopolies arise from monopolistic possession of the elements of production in their natural form, which leads to increased productivity (in relation to the social average) and increased (monopoly) profit (Marx 1894, pp.784-5). Artificial monopolies also establish their monopoly status on the basis of conditions of labour productivity higher than the social average within a certain branch of production. However, in this case the higher-than-average productivity derives not from monopolisation of a natural resource but from the technological superiority of the specific individual capital in relation to average conditions in its own specialised branch of production. This technological superiority is reflected in above average profit rates (Marx 1867, p. 434).

It is crucial to note at this point, that according to Marx's analysis, and contrary to Hilferding's and Schumpeter's approaches, all monopolies must be short-lived, as extra profit always vanishes in competition. The extra profit enjoyed by an artificial monopoly 'acting as a coercive law of competition, forces his competitors to adopt the new method [of production]' (Marx 1867, p. 436). Artificial monopoly is thus brought into existence through free competition and abides in the midst of it, although at the same time its monopoly position is under continual threat from competition. The same is true of natural monopoly, given that its superiority in productivity, which derives from monopolisation of a natural resource by the specific individual capital, may very well be forfeited as a result of technical innovations introduced by its competitors.

We may conclude, therefore, that both monopoly forms only temporarily prevent the entrance of new enterprises in a specific branch. As extra profits (which characterise any monopoly) function as an incentive to technical innovation and cost reduction for other individual capitals, the tendency towards the generalisation of the most productive techniques prevails. According to Marx, free competition cannot be abolished.²³

It follows from the above that monopoly profit cannot be the predominant characteristic of the capitalist mode of production. The predominance of the tendency towards equalisation of the general rate of profit is the social condition that ensures the self-organisation of individual capitals into a ruling capitalist class: 'The various different capitals here are in the position of shareholders in a joint-stock company' (Marx 1894, p. 258). 'This is the form in which capital becomes conscious of itself as a *social power*, in which every capitalist participates in proportion to his share in the total social capital' (Marx 1894, p. 279).

Contrary to Marx's approach, both Hilferding and Schumpeter considered monopolies to be a permanent characteristic of modern capitalism; much more, they both thought of monopolies as the decisive feature of this 'latest phase' of capitalism (from which both innovation and growth originate). Schumpeter, after adopting a non-neoclassical definition of monopoly, which converges with that of Marx, summarised his main thesis as follows: 'The large-scale establishment or unit of control must be accepted as a necessary evil inseparable from the economic progress which it is prevented from sabotaging by the forces inherent in its productive apparatus' (Schumpeter 1942, p. 106).

In what follows we will demonstrate that Marx's sharp conceptual distinction between 'social capital' and 'individual capital' has as a consequence a very different comprehension of the motive force of technical change and of the separation of roles in the capitalist enterprise from that adopted by either Hilferding or Schumpeter.

6.3 *The Question of Innovation and Technical Change According to Marx*

As can be inferred from the above analysis, technical change and innovation are considered in Marx's macroeconomic perspective to emerge from the regularities determining the capitalist system as a whole, that is, from the trends regulating the expanded reproduction of social capital. Innovation and technical change are the main means of increasing labour productivity and, 'no less than other socio-economic activities, were best analysed as social processes the focus of Marx's discussion of technology and innovation is upon a collective, social process' (Rosenberg 1982, p. 35). Marx himself wrote that: 'A critical history of technology would show how little any of the inventions of eighteenth century are the work of a single individual' (Marx 1867, p. 493).

Consequently, production relations *per se* impose on all individual capitals the urge towards innovation and technical change. Capitalism cannot be technologically static. Continuous innovation ensures on the one hand the increase in the rate of exploitation of labour by capital, and thus may raise the rate of profit (what Marx describes, in Vol. 1 of *Capital* as 'production of relative surplus-value'), while on the other it is the means *par excellence* for improving the individual enterprise's position *vis-à-vis* its competitors.

As Marx explicitly stated: 'Apart from certain extraneous factors the tendency and the result of the capitalist mode of production is steadily to increase the productivity of labour, hence continuously to increase the amount of the means of production converted into products with the same additional labour' (Marx 1867, p. 959). 'Productivity of labour in general = the maximum of profit with the minimum of work, hence, too, goods constantly become cheaper. This becomes a law, independent of the will of the individual capitalist' (Marx 1867, p. 1037).

It is apparent that Schumpeter drew from Marx some hints for his own theory of 'creative destruction',²⁴ and his explanation of extra profit, which is partly contained here. The innovation creates a disequilibrium in the market, which enables the extraction from the sale of the product of a 'rent' over and above the normal rate of profit, as long as the monopoly position of some new method is maintained.

The idea that the introduction of new techniques generates an extra surplus was first developed in the framework of the Marxian labour theory of value. Marx stressed the fact that new technologies enabled the individual capitalist who first introduced them to enjoy extra profit. However, Marx emphatically insisted that

these extra profits are always short-lived, as competition soon leads to the diffusion of technological progress in the whole economy:

No capitalist voluntarily applies a new method of production if it reduces the rate of profit. But every new method of production of this kind makes commodities cheaper. At first, therefore he can sell them above their price of production He pockets the difference between their costs of production and the market price of the other commodities, which are produced at higher production costs His production procedure is ahead of the social average. But competition makes the new procedure universal and subjects it to the general law (Marx 1894, pp. 373-4).

Contrary to this approach, Hilferding and Schumpeter defended the thesis that high (monopolistic) profits, over and above the average rate of profit, are being constantly maintained, precisely due to the prevalence of monopolies in capitalist economies: 'Perfect competition would prevent or immediately eliminate such surplus profits But since in the process of capitalist evolution these profits acquire new organic functions that fact cannot any longer be unconditionally credited to the account of the perfectly competitive model' (Schumpeter 1942, p. 105).

For Marx the monopolisation of an advanced technique is an 'exception', which soon sets in motion the process of generalisation of innovation and technical progress. For Schumpeter (who seems to follow Hilferding's paradigm) it is the rule. The 'microeconomic' perspective (the monopolistic enterprise and 'the forces inherent in its productive apparatus' [Schumpeter 1942, p. 106]) replace the Marxian 'macroeconomic' perspective (the dynamics of social capital, which function as 'coercive laws of competition, and therefore enter into the consciousness of the individual capitalist as the motives which drive him forward' [Marx 1867, p. 433]).

Let us now turn to the consequences that each point of view has concerning the question of 'who is the vehicle of technological progress'. Hilferding's and Schumpeter's approach allows only one answer, as already discussed: the monopolistic enterprise is 'the most powerful engine of that progress and in particular of the long-run expansion of total output' (Schumpeter 1942, p. 106). This monopolistic enterprise is considered to be the causal factor of evolution (or 'creative destruction') in the 'latest phase' of capitalism.

Things are much more complex with Marx's approach. From the above-presented abstract level of Marxian analysis of the structural interconnections of capitalism in general, that is, from the level of social capital and the CMP, one may move then to lower levels of abstraction, that is, to more concrete objects of investigation, regarding specific capitalist societies, at certain economic (or political) conjunctures and so on. It is at this lower level of abstraction that the question may be posed, as to which sector of capital takes the lead of innovation and technical progress at a given concrete situation.

In other words, according to Marx's approach, and contrary to Schumpeter (who seems to follow Hilferding's hypothesis), the question of whether it is the big or the small enterprise that promotes technical change is a problem which cannot be answered at the abstract-general level of analysis, since it is situated on a lower, more empirical level of investigation (referring, for example, to the economic conjuncture in a given country). This concrete analysis will show how (and to what extent) the general tendency towards technical change emanating from the structural characteristics of the capitalist system as a whole, is concretely materialised in the case under investigation.²⁵

6.4 *The Complementarity of Roles According to Marx*

We saw above that both Hilferding and Schumpeter considered the separation of roles between the capitalist and the entrepreneur to be a consequence of the formation and domination of the big monopolistic enterprise. However, Marx had already regarded the separation of roles as a tendency created by capitalist relations in general: it expresses the regularities inherent in the CMP, which are imposed upon (all) individual enterprises.

Marx conceived of enterprises as bearers of causal relations and trends traceable at the level of social capital, that is, in the framework of the totality of capitalist relations of production and distribution. In a similar manner he conceived of entrepreneurs and managers as bearers of the functions of capital, irrespective of whether they are the legal owners of the enterprise or not. In this view, entrepreneurs and managers become functionaries of capitalist economic control over the means of production and thus complement the capitalist legal-owners rather than confront them:

Mr. Ure²⁶ has already noted how it is not the industrial capitalists, but rather the industrial managers who are ‘the soul of our industrial system’ Capitalist production has itself brought it about that the work of supervision is readily available, quite independent of the ownership of capital. It has therefore become superfluous for this work of supervision to be performed by the capitalist. A musical conductor need in no way be the owner of the instruments in his orchestra, nor does it form part of his function as a conductor that he should have any part in paying the ‘wages’ of the other musicians Joint-stock companies in general (developed with the credit system) have the tendency to separate this function of managerial work more and more from the possession of capital, whether one’s own or borrowed. (Marx 1894, pp. 510, 511, 512)

Marx’s remarks on the separation of roles between legal owners and the directors of the production process have fuelled interesting discussions among Marxist theorists. Commencing from the analyses of Althusser *et al.* (1965), several Marxist authors distinguished between legal and real economic ownership of the means of production (see, for example, Bettelheim 1968, 1970; Poulantzas 1968, 1974; Rey 1973). According to these approaches, real ownership of the means of production as an economic relationship (that is, as comprising the essential content of the relations of production) consists in the control of the means, objects and results of the production process. In distinction from formal legal ownership, ownership as a (real) economic relation presupposes possession of the means of production, that is, the management of the production process and the power to put to utilisation of the means of production. That is to say, ownership as an economic relationship exists in a relation of homology (coincidence – correspondence) with the possession (management) of the means of production.

Contrary to this view, both Hilferding and Schumpeter distinguished the entrepreneurs and managers from the class of capitalists, which they restricted to the legal owners of enterprises: ‘The perfectly bureaucratized giant industrial unit ousts the entrepreneur and expropriates the bourgeoisie as a class’, wrote Schumpeter (Schumpeter 1942, p. 134), who thought of entrepreneurs and top managers only as would-be capitalists, in the sense that they might acquire property rights, if they are successful, and be thus (and only thus) incorporated into the

bourgeoisie, since they do not form a social class by themselves (Heilbroner 1998, pp. 405, 420). Schumpeter (1942, p. 134) wrote: 'Although entrepreneurs are not necessarily or even typically elements of that stratum [the bourgeoisie] from the outset, they nevertheless enter it in case of success entrepreneurs do not *per se* form a social class'.

Concluding this section, we suggest that while Marx put emphasis on the separation of roles between the legal owner and the directing agents of enterprises (entrepreneur or top manager), regarding this separation as an inherent feature of the capitalist mode of production, and thus opening the way to conceptualisations and theoretical conclusions that understand all these categories of economic agents as constituent parts of the bourgeoisie, Schumpeter seems again to move along the theoretical path opened by Hilferding's interpretation (and revision) of Marx's concepts.

7 Conclusion

In this paper, the origins of some of Schumpeter's ideas have been traced back to Hilferding's *Finance Capital*, concerning two main issues: the market structure and technological progress on the one hand and the separation of roles between capitalist(s), entrepreneurs and managers on the other.

Since Schumpeter had developed a cordial friendship with Hilferding and was well acquainted with his work, the question arose of whether Hilferding had actually influenced Schumpeter, or whether both authors simply drew their arguments and ideas from Karl Marx's writings.

We argued that Hilferding's thought in *Finance Capital* constitutes a major revision of Marx's 'macroeconomic' theoretical system in favour of a 'microeconomic' point of view, that seeks causality in the individual enterprise. Hilferding reversed the Marxian flow of cause and effect in the relationship between social and individual capital. In the new paradigm introduced with *Finance Capital*, it is the individual capital (monopolistic enterprise) which takes the causal role, and thus determines the main features and the mode of evolution of the economy as a whole (of social capital). It is exactly this theoretical paradigm that can be traced in Schumpeter's approach. In his own words: 'It is therefore quite wrong to say that capitalist enterprise was one, and technological progress a second, distinct factor in the observed development in output; they were essentially one and the same thing, or as we may also put it, the former was the propelling force of the later' (Schumpeter 1942, p. 110).

At this point, one must face an issue raised by Backhouse: 'When forgotten precursors of later ideas are found, the main interest is often in why they were neglected, as much as in the ideas themselves' (Backhouse 1985, p. 5). Put concretely, why is Hilferding's contribution to the formation of Schumpeter's ideas systematically neglected in the literature, whereas Marx's influence is persistently stressed? In our view, it is because the new paradigm of Marxian economic theory (the theory of 'monopoly capitalism') introduced by Rudolf Hilferding was (and is still) considered by many historians of economic thought, especially Marxists, to constitute a mere 'development' of Marx's theory. This is mainly due to the fact that it was soon imposed on the communist and Marxist movement as 'Marxist orthodoxy' *per se*, via Lenin's *Imperialism, The Last Stage of Capitalism* [1917] and soon after was incorporated in official soviet Marxism (see Milios 1999, 2001). This, we believe, is the reason why many authors regard Marx as the forerunner of

certain ideas of Schumpeter, and either entirely neglect Hilferding's influence, or consider its effect to be meditative in character. Hilferding is supposed to have digested and actualised Marx's analyses, which Schumpeter later adopted.

We conclude that the version of Marxism first shaped by Rudolf Hilferding seems to have exerted a certain influence upon the formation of Schumpeter's theses. But we are not claiming that Rudolf Hilferding, the influential Austrian Marxist economist and social politician, was the first or the only prominent economist to have influenced Joseph Alois Schumpeter,²⁷ nor that he influenced him on all theoretical issues. Schumpeter was most probably influenced by Rudolf Hilferding on issues such as the role of the big enterprise in technological progress and economic development, the tendency towards trustification of the capitalist economy – shaping a 'latest phase of capitalism' – and the separation of roles between capitalists, entrepreneurs and managers.

This connection between Schumpeter and Hilferding's *Finance Capital* may be very useful for promoting dialogue between different schools of economic thought and for understanding current economic issues. The potential Marxian influences behind, for example, Schumpeter's theory of credit could provide useful material for future investigation.

After all, it was Schumpeter himself who, toward the end of a long and successful career, concluded that 'if, starting my work in economics afresh, I were told that I could study only one of [the fundamental fields of economic analysis: economic history, statistics, or theory] but could have my choice, it would be economic history that I should choose' (Schumpeter 1954, p. 12).

* Department of Humanities, Social Sciences and Law, School of Applied Mathematics and Physical Sciences, National Technical University of Athens; Zografou Campus, 157.80, Athens, Greece. Emails: pmichael@central.ntua.gr; jmiliios@central.ntua.gr. We would like to thank John King, Editor of *History of Economics Review* and the two anonymous referees for their comments on this essay, which have helped us to improve it significantly. The responsibility for any remaining errors or omissions is ours alone.

Notes

1 Scitovsky (1980, p. 1) places Schumpeter at the top of economic thought. Kessler (1961, p. 334) argues that, apart from Keynes, Schumpeter was 'the only truly great economist' of the twentieth century. Morgenstern (1951, p. 203) claims that he 'belongs to that small top group where further ranking becomes almost impossible'. Chandler (1962, p. 284) regards Schumpeter as the economist with the best understanding of the rise of big business and the crucial role of innovation and entrepreneurship. The works of Rosenberg (1982), Lazonick (1990), Scherer (1984), and Porter (1985) are also influenced by the Schumpeterian doctrine.

2 The information is, mainly, drawn from the *Routledge Encyclopedia of International Political Economy* (Miliios 2001, pp. 676-8), the *New Palgrave* (Green 1990, pp. 201-2) and the International Institute of Social History (2001: Internet), as well as from the authors' personal archives.

3 The idea of a 'latest' stage of capitalism possessing the above-described features was adopted by Bukharin, Lenin and others, thus shaping the so-called Marxist theories of 'monopoly capitalism' that dominated Soviet Marxism. However, 'Hilferding went

far beyond any previous Marxist' in the thoroughness with which he formulated this theoretical approach (Winslow 1931, p. 728).

4 According to Schumpeter, Böhm-Bawerk had become the 'bourgeois Marx' (Schumpeter 1954, p. 846).

5 See also Andersen (1991, p 21).

6 Schumpeter wrote in his Preface to the English edition of the *Theory of Economic Development*: 'Some of the ideas submitted in this book go back as far as 1907' (Schumpeter 1912, p. ix), while in his preface to the first German edition 'Schumpeter stated that he had conceived the fundamental ideas as early as 1905' (Haberler 1950, p. 341). Andersen (1991, p. 20, n. 30) believes that the age of the members of the seminar gives some hints concerning their relation to Schumpeter: Lederer (1882-1939), Bauer (1881-1938), Hilferding (1877-1941). Hilferding was the oldest and presumably the most educated discussant.

7 See also Andersen (1991, pp. 5-6).

8 The literature is summarised elsewhere (for example, Kamien and Schwartz 1982; Baldwin and Scott 1987).

9 For an excellent description of the dynamics of capitalist change in the Schumpeterian system, see Oakley (1990) and McKee (1991).

10 'The policy of finance capital has three objectives: (1) to establish the largest possible territory; (2) to close this territory to foreign competition and consequently (3) to reserve it as an area of exploitation for the national monopolistic combinations' (Hilferding 1910, p. 326).

11 On the 'monopolistic-imperialist stage' of capitalism, see Milios (1999).

12 Schumpeter wrote: 'It was neo-Marxist doctrine that first tellingly described this causal connection (Bauer) and fully recognized the significance of the "functional change in protectionism" (Hilferding) ...; Thus we have here, within a social group that carries great political weight, a strong undeniable, economic interest in such things as protective tariffs, cartels, monopoly prices, forced exports (dumping), an aggressive economic policy, an aggressive foreign policy generally, and war, including wars of expansion with typically imperialist character' (Schumpeter 1951, pp. 79, 83-84). Schumpeter wrote his essay on imperialism (1919) when historical events (World War I) seemed to have verified the postulate of Marxist authors (for example, Hilferding, Bukharin and Lenin) that modern capitalism included imperialism as one of its indispensable features. Therefore, his approach may be regarded as a critique of this postulate (Taylor 1951, p. 546). Sweezy claimed that Schumpeter's essay on imperialism was a corrective supplement to his own *Theory of Economic Development*, repairing his omission of any explanation of 'imperialism' (Schumpeter 1951, Preface by Sweezy). Taylor claimed (1951, p. 546): 'There is no doubt at all that the purpose of this essay [*The Sociology of Imperialisms*] was to counter the essence of the modern-Marxist (Bauer-Hilferding) theory of capitalist imperialism, with a more complex and adequate theory of imperialism'.

13 As Elliott puts it: 'Schumpeter made it clear that successful entrepreneurs become capitalists (or landowners), while unsuccessful ones presumably become workers or managers' (Elliott 1980, p. 49).

14 Schumpeter made an effort to discuss the relationship between socialism and entrepreneurship in the second German edition (1926) of the *Theory of Economic Development* (Csontos 1987).

15 The question of credit and money 'endogeneity' was posited and discussed in the framework of nearly all major non-neoclassical schools of political economy: the classical (Thomas Tooke and the Banking School – Currency School debate, see Rubin 1989), the Keynesians and Post Keynesians (see Moore 1988, pp. 207ff), and the Marxian school (see Milios 2002, 2005).

16 See also Catephores (1994, p. 4).

17 As Marx himself noted in the Preface to the first edition of volume 1 of *Capital*: ‘What I have to examine in this work is the capitalist mode of production, and the relations of production and forms of intercourse that correspond to it’ (Marx 1867, p. 90); and in volume 3 of *Capital* he stated: ‘we are only out to present the internal organization of the capitalist mode of production, its ideal average’ (Marx 1894, p. 970).

18 Marxism has since its beginnings taken the form of various trends and schools of thought, which are based on contradictory theoretical principles, positions and deductions (see Howard and King 1989; Milios 1995).

19 According to our understanding of Marxian value theory (Milios *et al.* 2002; see also Heinrich 1999; Arthur 2002), Marx’s theory of value constitutes not a ‘modification’ of classical political economy’s theory of value, but a new theoretical domain. Marx’s notion of value does not coincide with Ricardo’s concept of value as ‘labour expended’, but it constitutes a complex notion, a theoretical ‘junction’ which allows the deciphering of the capital relation, by combining the specifically capitalist features of the labour process with the corresponding forms of appearance of the products of labour. In this way, value becomes an expression of the capital relation and of the capitalist mode of production (CMP), that is, of the structural elements shaping the capitalist relations of production in general, independently of any temporal or spatial peculiarities (historical era, ‘phase’, or geographical region). In Marx’s theory both value and money are concepts, which cannot be defined independently of the notion of capital. In summary, value and price are not commensurable quantities, but they belong to different levels of abstraction. In Marx’s system, value is the notion, which deciphers prices, shows what prices are, without determining their exact level. Values as such cannot be measured (Marx 1867, pp. 138-9).

20 Analytically, Hilferding (1904) defended the main thesis of ‘Ricardian Marxism’, namely the commensurability between value and price, as follows: ‘we have commensurability, inasmuch as prices and values are both expressions for different quantities of labour they are qualitatively homogeneous’ (Hilferding 1904, p. 161), while Schumpeter explicitly expressed the view that ‘Marx must be considered a ‘classical’ economist and more specifically a member of the Ricardian group’ (Schumpeter 1954, p. 390). However, while Schumpeter rejected this (considered as *the* Marxian) value theory, Hilferding initially praised it (Schumpeter 1942, p. 23n; Hilferding 1904, p. 157).

21 This relation manifests itself, in the first instance, in the commodity character of the economy, in the general exchangeability (through money) of the products of labour on the market.

22 For a presentation of Marx’s and Hilferding’s related theses, see Kyung-Mi Kim (1999).

23 Marx referred to a third type of monopoly, which may come into existence, in the sphere of circulation of commodities (the market). He named this type of monopoly the accidental monopoly. The term is applied to certain individual capitals, which are able to secure extra profit by exploiting conjunctural or more permanent imbalances and fluctuations of supply and demand in the market (Marx 1894, p. 297).

24 ‘Capitalism is by nature a form or method of economic change and not only never is but never can be stationary revolutionizes the economic structure *from within*, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism’ (Schumpeter 1942, pp. 82-3).

25 It is worth mentioning that, in his earlier works, Schumpeter seemed to have allowed for a different view (that is, a view similar to that of Marx). This is apparent in most of his writings preceding *Capitalism, Socialism and Democracy*, that is, before formulating the

so-called 'Schumpeterian hypothesis'. In his 1912 *Theory of Economic Development* (Schumpeter 1912, p. 66), Schumpeter believed that innovations might also originate in new, characteristically small firms, which might grow large, although they had started as outsiders. Also, in his *Business Cycles* he wrote: 'It is, of course, true that mere size is not necessarily an advantage and may well be a disadvantage. Judgment must turn on the merits of each case. But statistical evidence to the effect that smaller concerns often do better than the giants should not be uncritically accepted. [I]t is held that the big concerns implied technological and organizational improvement when they were founded. It is not held that they retained their advantages until the present day. Our theory would in fact lead us to expect the contrary' (Schumpeter 1939, p. 404).

26 Marx refers to A. Ure, *Philosophy of Manufacturers*, French translation, 1836, I, p. 67.

27 For instance, Hashagen (1919, pp. 205, 210) stated that Schumpeter's theory of imperialism was anticipated in 1900 by Franz Mehring. On the other hand, Werner Sombart (1928, pp. 66-9) also had a theory of imperialism similar to that of Schumpeter.

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