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SCHUMPETER VS. MINSKY ON THE EVOLUTION OF CAPITALISM AND ENTREPRENEURSHIP

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ABSTRACT

In the course of their lives, both Joseph Schumpeter and Hyman Minsky developed a theory of business cycles and of capitalist development. Minsky was influenced by Schumpeter during the period he spent at Harvard University in 1942 and he thought that Schumpeter's vision of the capitalist process required integration of the financial markets and investment behaviour: roughly speaking, Minsky's financial Keynesianism was what Schumpeter needed to complete his own theory of the development of a capitalist economy. Minsky explored an even broader historical framework during the last decade of his life: his theory of capitalist development was forged along the lines of the idea that there are many types of capitalism. In this paper, I shall focus particularly on this analysis with the endeavour to up-date his taxonomy, taking into account the process of global financialization, and comparing it with Schumpeter's previous scrutiny into the evolution of capitalism.

On one hand, in fact, in his 1942 book Schumpeter stressed that in the last stages of capitalist evolution, entrepreneurship would end up in impasse, and he forecast that a socialist form of society would inevitably emerge from an equally inevitable disintegration of capitalist society. On the other hand, Minsky made it clear that the evolution of the capitalist systems is not necessarily a progressive process since speculative activity by money managers, globally conceived, may crowd out entrepreneurship and bring about profound global financial fragility. Both Schumpeter's and Minsky's theories of capitalist development continue to guide us and challenge us to explore important questions regarding the evolution of capitalism, although their analyses of this evolution showed different results.

Keywords: Capitalism, Financialization, Crisis, Entrepreneurship.
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"Whereas all capitalisms are flawed, not all capitalisms are equally flawed"
(Minsky 1986b, 295).

Introduction

In the course of their lives, both Joseph Schumpeter and Hyman Minsky developed a theory of the business cycles (cf. Schumpeter 1939; Minsky 1982) and of capitalist development (Schumpeter 1934; 1942; Minsky 1990a; 1990b; 1993a). According to Schumpeter, in fact, the dynamic of a capitalistic economy is generated by the innovative process. This process does not unfold in a continuous and uniform manner, but through a periodic succession of cycles (Schumpeter 1939). Minsky was influenced by Schumpeter during the period he spent at Harvard University in 1942 [1] and he held that Schumpeter's vision of the capitalist process required integration of the financial markets and investment behaviour: roughly speaking, Minsky's financial Keynesianism was what Schumpeter needed to complete his own theory of the development of a capitalist economy. The point raised by Minsky is important because it relies on chapters in Schumpeter's book titled *The Theory of Economic Development* (1934) that were often overlooked by many economists. In this book, Schumpeter considered money, credit and finance as essential to the innovation process promoted by the entrepreneurs (cf. Knell 2015).

Minsky developed what is known as the "Wall Street" paradigm, a financial theory of investment, and the often-cited financial instability hypothesis (FIH) (Minsky 1977; 1982). These contributions, and his subsequent writings, have all received significant attention in recent years due to the recent financial crisis seen as a "Minsky moment". Nevertheless, Minsky explored an even broader historical framework during the last decade of his life, structuring his theory of capitalist development on the basis of the idea that there are many types of capitalism (cf. the epigraph). In this paper, I shall focus particularly on this analysis with the endeavour to update his taxonomy and compare it with Schumpeter's (1942) previous investigation into the evolution of capitalism.

Bellofiore, Annalisa Rosselli, Anna Maria Variato, Jan Toporowski and all the participants in the session dedicated to Minsky's legacy for useful discussions and comments.

[1] In fact, Minsky began his doctoral dissertation research under Schumpeter whose untimely death occurred in early 1950. For this reason Minsky's PhD was finished (1954) under the supervision of Leontief. This thesis was published later in 2004 with the title *Induced Investment and Business Cycles*, it explored how market structure, financial institutions, the determinant of effective demand, and business cycle performance related to each other.

The paper is structured thus: in Section 1, I aim to describe how Schumpeter's vision of the evolution of capitalism lay behind Minsky's exploratory work on a theory of capitalist development. In Section 2, Minsky's theory is then outlined and compared with Schumpeter's investigation into the topic, with particular regard to his 1934 and 1942 books. Section 3, takes into account the process of current financialization and its impact on entrepreneurship; Section 4 turns the focus on the threats to financial stability associated with the financial globalization recounted by Minsky as from the 1990s. Finally, I summarize my conclusions.

1. Schumpeter on the evolution of capitalism

Schumpeter identified innovation as the critical dimension of economic change. He argued that economic change revolves around innovation, entrepreneurial activities, and market power. He sought to prove that innovation-originated market power can provide better results than the invisible hand and price competition. He argued that technological innovation often creates temporary monopolies, allowing for abnormal profits that would soon be competed away by rivals and imitators.

Schumpeter was probably the first scholar to theorize on the subject of entrepreneurship, and the field owed much to his contributions. He argued that a nation's innovation and technological change is due to the entrepreneurs. Coining the word *Unternehmergeist*, German for "entrepreneur-spirit", he asserted that "[…] the doing of new things or the doing of things that are already being done in a new way" stemmed directly from the efforts of entrepreneurs.

Once the entrepreneur has been defined in general terms, the question arises as to who really takes on the entrepreneurial functions in what has historically been termed as the capitalist economy and which is, in fact, the kind of economic order that specifically interests Schumpeter. Related to this is another question: who are the beneficiaries of the profit in this order of economy? The latter question relates to the former but differs from it insofar as while the role of the entrepreneur is essential to generate the profit it may not be the entrepreneur who eventually receives the profit.

In order to answer these questions, we should keep in mind that for Schumpeter innovation generally means construction of new plants or, at least, radical transformation of existing plants. Given this criterion, it goes without saying that the innovations which do not comply with the above specification are of minor relevance and do not characterise the process of development. Creation of new plants can come about with either the birth of new firms or the expansion of old firms. In this regard, Schum-

peter distinguishes between two stages of development of capitalism, the first called "competitive capitalism", the second "trustified capitalism". The first stage is characterised by firms not particularly large in relation to the dimensions of the market, and here the introduction of innovation generally entails the creation of new firms. Instead, in the second stage big firms become more widespread and are capable of sustaining the innovative process within their own structures, so that the innovations do not help the birth of new firms which might then go on to compete with the old ones.

Having made this point, and given the fact that identification of an entrepreneur is never an easy task because no one is just an entrepreneur *tout court*, nor so in a perfectly continuous way, Schumpeter points out that in the period of competitive capitalism the entrepreneurial function is generally performed by the proprietors of the firms themselves.

However, the matter becomes much more complex as the big firms come to dominate. The entrepreneurial function can then be performed either by someone who controls the firm – in a joint stock company by the holder of majority of shares – or by those who are responsible for running the firm, or even by ordinary staff, and can reside in a single individual or a collective body.

Once the profit has been generated, whether it is received by the entrepreneur or not is a matter of an institutional nature. In the case of family firms, the profit is received by the same people who have performed the entrepreneurial activity, and in this case, it – generally – constitutes the origin of those great fortunes upon which industrial dynasties are founded. In the industrial system based on the big joint stock companies, instead, the profit, as such, belongs to the firm and its distribution becomes a matter of company policy: it can be received by the shareholders, or by the board of directors or even by the staff and workers, independently of whoever has actually performed the entrepreneurial action. Despite the vagueness of the issue as to who receives the profit, it is a well-established fact that for Schumpeter the profit cannot be the reward for the risk, as has often been believed by other economists. Schumpeter points out that the risk is taken by the capitalist and not by the entrepreneur, and the entrepreneur takes the risk only in so far as he is also the owner of the capital. If we were to accept that innovations are incorporated in new plants, the problem immediately arises as to how such innovations are supposed to be financed. At steady state every firm finances its operations using current revenue.

However, the entrepreneur who has to construct the plant in which his innovations are to be realised needs new purchasing power, not previously available, with which he is to acquire the possibility of controlling certain productive resources diverted from old uses and employed for the new uses, as prompted by the innovation. This availability of new means

of payment (with money – notes or deposits – created for that purpose is achieved with credit which, according to Schumpeter, is the other fundamental characteristic of economic development.

Schumpeter saw bankers as standing between those who wish to form new combinations and the possessors of productive means. Banking activity in fact creates the possibility for "the carrying out of new combinations, authorises people, in the name of society as it were, to form them. He is the *ephor* of the exchange economy" (Schumpeter 1934: 74).[2]

As in a planned economy realization of the innovative process would require an order from the planning authority to divert the productive resources from their current use to the new service, likewise in capitalist economy credit performs analogous functions in the hands of the entrepreneurs because it allows them to utilize a part of the wealth of the system to their own ends. In the logic of Schumpeterian system the possibility that saving may precede investment has to be discarded, as saving does not exist or, in a steady state, exists only to a negligible extent: in fact, the main source where it is formed lies solely in the profits drawn from diffusion processes determined by the competitors. It is clear, therefore, that including saving among the factors that kick-start development would mean including in the premises part of what needs to be explained. In other words, financing investments for innovations outside the loan business is a phenomenon that belongs to an already developed system.

Schumpeter cautions against seeing this logical order as necessarily corresponding to the historical succession. If credit creation by the banking system is, logically, the beginning of the capitalist process, this does not also assign it an historical priority. In fact, it should be taken into account that, historically, at the beginning of capitalistic development firms were sufficiently small as to be able to be financed with means derived from the formation of saving by the preceding economic systems.

We might say that for Schumpeter this initial stage of "primitive financing", as the capitalistic system developed historically, was followed by two more stages, as suggested by his distinction between *competitive capitalism* and *trustified capitalism*.

The first should correspond to the great development of the credit system, manifested with full deployment of its *essential* function, namely financing innovations. Naturally, there also come into play, on the one hand, secondary functions of the credit system (financing the current business

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[2] The Ephors were elected magistrates who supervised the kings in Sparta, so Schumpeter's analogy is with bankers effectively deciding which 'new combinations' will be formed. In fact, they act as "social accountants".

transactions) and, on the other, utilization of the saving coming from internal funds-revenue (profits) to finance entrepreneurial activities; but the fundamental characteristic of the period in question would remain the fact that the bank continuously recreates in the system the financial terms of development to cope with the systematic annulment, by competitors, of the dynamic revenue. In the second stage, albeit on a different level and decidedly in different conditions, some characteristics of the initial stage are to some extent reproduced – at least, in the sense that the development and consolidation of firms of ever-growing dimensions and reinforcement of all the direct methods to hamper the competitor's performance are phenomena that tend to stabilize permanent sources of saving within the firms themselves and, therefore, to relegate the bank within the limits of its secondary function.

Schumpeter began the first edition of *The Theory of Economic Development* (1934) with a description of the circulation of money and real goods and services in terms of a *Kreislauf* or monetary circuit, but included reference to the importance of credit money at the end of the first chapter. Schumpeter considered money to be analogous to capital as bank deposits allow them to supply credit to producers for their purchases of *circulating* capital goods. However, Schumpeter (1934: 107) took this idea one step further, stating that "credit is essentially the creation of purchasing power for the purpose of transferring it to the entrepreneur". The availability of credit allows entrepreneurs to gain access to investment goods necessary for innovation "before they have acquired the normal claim to it". Schumpeter reasoned that money was credit-driven and determined endogenously by the demand for bank loans by entrepreneurs engaged in innovative activities. Entrepreneurs not only had an insatiable desire to gain profit through innovation, but could finance new innovations through endogenous money creation.

The Schumpeterian distinction between "competitive capitalism" and "trustified capitalism" helps clarify another important question for economic theory, namely definition of the concepts of competition and monopoly. According to Schumpeter, the real competition that takes place in the capitalist economy is not that which is practised between small firms producing the same goods, but rather is the competition that innovative firms engaged in entrepreneurial activity pursue with respect to other firms; it is not the competition between identical goods, all of them produced in the same way, but is that which new products or the new productive processes exert on old ones. Schumpeter called this competitive process a process of *creative destruction*, a term which emphasises that the actual competition comes about through the effects that innovations have on the existing firms.

This concept of competition entails a concept of monopoly, but again different from the traditional one. The first thing to note is that innovation inevitably leads to some degree of monopoly: before any innovation finds widespread application it remains the monopoly of the entrepreneur and the profit that he receives is due to this monopoly. According to Schumpeter, the transition from competitive capitalism to trustified capitalism, i.e. the transition from a phase in which innovations are generally incorporated with the new firms to a phase in which innovations are prevalently carried out by the existing firms, results in neither less intense economic growth nor in deterioration of its quality. Indeed, growth might even be boosted during this transition.

Schumpeter, therefore, rejects the thesis advanced by many (and which we will need to discuss later on), who argue that capitalism is destined to a final crisis for reasons regarding its economic mechanism alone. Rather, while he is convinced that it would be impossible for capitalism to survive, his conviction is also based on non-economic considerations.

During his tenure as professor at Harvard, Schumpeter developed his theory of capitalist development and discussed the fate of capitalism. Many economists and political scientists of the day argued that large businesses had a negative effect on the standard of living of ordinary people. Contrary to this prevailing opinion, Schumpeter argued that the agents that drive innovation and the economy are large companies which have the capital to invest in research and development of new products and services and to deliver them to customers more cheaply, thus raising their standard of living. In *Capitalism, Socialism and Democracy* (1942: 123), Schumpeter wrote:

> As soon as we go into details and inquire into the individual items in which progress was most conspicuous, the trail leads not to the doors of those firms that work under conditions of comparatively free competition but precisely to the door of the large concerns – which, as in the case of agricultural machinery, also account for much of the progress in the competitive sector – and a shocking suspicion dawns upon us that big business may have had more to do with creating that standard of life than with keeping it down.

Nevertheless, as we have seen, Schumpeter saw the capitalist economy as destined to run into a period of final crisis calling for transition to different forms of economic organisation. In this respect Schumpeter's position is closer to that of the classical economists, and particularly of Marx, having in common the idea that the crisis of capitalism is not resolvable in the ambit of capitalism itself. By contrast, on the basis of a Keynesian framework some economists seek to define an economic condition in which considerable and continuous public intervention can keep the system alive, albeit modifying some of its characteristics. Schumpeter's argument has

also been said to be based on considerations which are not strictly of an economic order but refer, rather, to evolutions in the social structure.

The Schumpeterian thesis – presented in 1942 in his work "Capitalism socialism and democracy" – is essentially based on the evolution of the economic and social environment in the last stages of capitalism. The considerable increase in size of the firms that gives each firm a very large share of the overall market requires business and group planning to make the serious risks bearable. These risks derive from the close dependence of the efficiency of the productive development that takes place at a point in the economic system on what happens in the rest of the system itself. This basically means that the formation of capital becomes increasingly controlled by the activities of the management boards rather than the initiatives of individual entrepreneurs. In other words, the close relation that existed at the beginning of capitalism between the single entrepreneur and innovation is broken off; innovation itself is being reduced to a routine process, while the economic process tends to become depersonalised and automatized.

In society, then, the entrepreneurial function, *conceived individualistically*, loses its importance and moves towards *managerial capitalism*.[3] But, as forecast by Schumpeter, there exists a second reason for the weakening of entrepreneurial activity when the capitalistic economy reaches a certain state of development.

In highly developed societies there was a tendency to systematically permit forms of intervention and implementation of economic policies which tended either to a great increase in public investment as part of the overall investments or to a redistributive process which eventually had the effect of rescheduling the distribution of income between consumption and savings in favour of consumption (consider, for example, the vast scale of social security schemes).

This kind of evolution may be explained on the basis of Keynesian considerations, a matter of the indispensable complex policies to maintain the effective demand at a level sufficient to guarantee a high level of employment. But what Schumpeter infers from it is that the accumulation of capital, in the ambit of private economic activity, is becoming less important for the development of the system, and as a result the position of the private entrepreneur, evidently vis-à-vis accumulation, becomes ever less important.

As Schumpeter maintains, if full deployment of entrepreneurial activity on a private and individualistic basis is the essential connotation of capitalism, the developments mentioned earlier lead to a profound transformation in the long run. Schumpeter sees this process as irreversible in relation

[3] This aspect was also pointed out by Minsky (see Section 3).

to an economic system in which the capitalist class becomes ever weaker, approaching the economy with a degree of planning, which he believes, if not desirable, is certainly perfectly possible: "a socialist form of society will inevitably emerge from an equally inevitable decomposition of capitalist society" Schumpeter (1942: 129).

2. The influence of Schumpeter on Minsky's theory of capitalist development

As outlined in the introduction, Minsky's theoretical analysis has the merit of resting on the shoulders of two intellectual giants. As we know, his writings on business cycles made considerable use of the prior works by Keynes. However (cf. Whalen 1997; 2001) that may be, in the mid-1980s he became convinced that the structure of the US economy and of developed capitalist economies has so fundamentally changed that analysis of their structural evolution was essential.

He further maintained that "to understand the short-term dynamics of the business cycle and the longer-term evolution of economies it is necessary to understand the financing relations that rule, and how the profit seeking activities of businessmen, bankers, and portfolio managers lead to the evolution of financial structures" (Minsky 1993b: 106). His FIH[4] explained how the complexity of financial relations based on the differences in balance sheet structures may drive a "robust" economic and financial system into a "fragile" one: capitalist systems are inherently flawed and unstable (Sau 2013).

It was at this point that Minsky turned to the insights of his Harvard's mentor, Joseph Schumpeter. In a 1986 essay, Minsky (1986c: 121, quoted by Whalen 1999) wrote: "The task confronting economics today may be characterized as a need to integrate Schumpeter's vision of a resilient intertemporal capitalist process with Keynes' hard insights into the fragility introduced into the capitalist accumulation process by some inescapable properties of capitalist financial structures".

Minsky believed that this integration was possible because Schumpeter and Keynes (along with Marx and the institutionalists) had a common perception of the task of economics. From this perspective, the economy is a complex, time-dependent system.[5]

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[4] The FIH is derived not only from his own interpretation of the General Theory and the analysis of the credit view of money and finance of Schumpeter but also by Kalecki's principle of increasing risk and Kalecki's analysis of the investment-profit nexus.

[5] If the first element in Minsky's theory is the focus on economic activity as a process in time, then the second element is that capitalist dynamics can take many forms. The path of the

A fundamental determinant of the particular path of capitalist development is the economy's institutional structure. It is this structure that facilitates, influences, regulates and constrains economic activity. Moreover, given the notion of the economy as an evolving system, Minsky also stressed the dynamic nature of the institutional structure. Like Schumpeter, Minsky's recognition of historical time led him to emphasize that production precedes exchange, and that finance precedes production. Thus, credit and finance are, in compliance again with Schumpeter's analysis, at the centre of capitalist development. Moreover, because credit is essential to the process of development, a theory of economic development needs to integrate it into its basic formulation: "the in-place financial structure is a central determinant of the behaviour of a capitalist economy" (Minsky 1993a: 106).[6]

The profit motive was also an essential element in Minsky's writings; he had long argued that present and prospective profits influence economic activity within the context of a given institutional structure, and that the structure itself changes in response to profit seeking. As Minsky paid increasing attention to capitalist development, profit-driven structural change took on increasing importance. In the previous Section I identified the Schumpeterian forces of creation and destruction at work in products and manufacturing processes. However, Minsky pointed out that Schumpeter also focused on changes in the financial systems. Thus, Minsky's theory stresses that financial markets evolve not only in response to the profit-driven demands of business leaders and individual investors but also as a result of profit-seeking activity by the banks and financial firms (cf. Minsky 1986b; 1990a; 1993a).

Minsky was, in fact, concerned with the "profit-seeking activities" that drive "evolutionary changes in financial institutions", which then lead to the endogenous creation of money. He claimed that it was almost impossible to control monetary aggregates because of financial innovations and new financial instruments. Later, Minsky (1986b: 120) recapped the origin of this idea: it suffices to extend the Schumpeterian vision of the experimenting entrepreneur who innovates to financial firms and their clients to explain why portfolios migrate to a brink at which a shortfall of cash flows or a rise in financing terms may lead to market revision of asset values. Here Minsky linked Schumpeter's idea of the innovating entrepreneur with that of financial innovations produced by financial institutions. Min-

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economy through time may be progressive, stagnant or deteriorating – and, moreover, tranquil or turbulent. In fact, it may be highly irregular (cf. Whalen 2001 and Sau 2013).

[6] On this topic see also the relevant book by Hilferding (1910 reprint 1981).

sky (1993a: 7) concluded: "Nowhere is evolution, change and Schumpeterian entrepreneurship more evident than in banking and finance and nowhere is the drive for profits more clearly a factor in making for change". Financial innovation is, then, another essential element in Minsky's theory since it is a crucial determinant of institutional evolution. In his view, the financial structure is neither neutral nor dichotomic vis-à-vis the real sector of the economy; indeed, financial evolution plays a crucial role in the dynamic patterns of the economy.

Nevertheless, as Knell (2015: 298) has remarqued, despite Minsky considered Schumpeter as one of his mentors, he "was very critical of Schumpeter's adherence to Walrasian theory in several papers written around the time of Minsky's retirement". In one of these papers (Minsky 1986c) he argued that Schumpeter's response to the crisis of capitalism (i.e. to the Great Depression) was "banal" and he thought that when Schumpeter was writing *Business Cycles* he was trapped in a Walrasian's approach that assumed only real things matter. By contrast he believed that *The Theory Economic Development* (1934) was more compatible to investigate a monetary production economy since the innovation process was entangled with money, finance and credit.

3. Minsky's theory of capitalist evolution

As I pointed out in the previous Section, Minsky's theory of capitalist development is finance-driven, and the relations between finance and investment are given centre stage. The stages are related to what is financed and who does the proximate financing. Following Whalen's (1999) taxonomy, Minsky's varieties of capitalism can be identified in at least five stages – and we might now be on the verge of creating a sixth. The five stages can be labelled (US spelling) as follows:

– merchant capitalism (1607-1813);
– industrial capitalism (1813-1890);
– banker capitalism (1890-1933);
– managerial capitalism (1933-1982);
– money-manager capitalism (1982-present).

Merchant capitalism emerged from European feudal society and took root in America with the establishment of the British colonies in the 1600s. The various activities to be financed were production and transportation of goods, and the acquisition of inventories. The pivotal source of financing lay in merchant banking and commercial banking. The main instru-

ment of this stage was a bill of exchange or other instruments relating credit to specific commodities. The bill is drawn on a bank and asserts that the banker guarantees that the receiver of goods will pay the shipper. As regards the object of financing, it was characterized by owner-managed enterprises – usually proprietorships or partnerships – with few employees and often few transactions per day. Merchant capitalism was undermined by growing population and the advent of the industrial revolution. Minsky also focused attention on the profit motive, since profit was the driving force for individuals whose names have become synonymous with the advent and expansion of industrial capitalism.

As for *industrial capitalism*, it was characterized by the fact that the particular activities to be financed as industrial expansion went ahead were factories, capital-intensive transportation, mills, and mines. The main source of financing was through investment banking as exemplified by J.P. Morgan. This stage also saw the beginnings of the New York Stock Exchange. As regards the fundamental enterprise financed, the partnership gave way to the industrial corporation. The industrial revolution led to a great increase in the importance of machinery in production and thus in the non-labour costs that prices had to cover.

Banker capitalism was established when investment bankers responded to cutthroat competition in the 1880s and 1890s. Its advent was characterized by investment bankers turning their attention to financing industrial consolidation (cartels, trusts and mergers). Indeed, a wave of mergers followed in its wake. Private economic power, in this stage, had become highly concentrated: financiers and managers exerted their own formidable force during the period of banker capitalism – at both enterprise and industry levels. Taylorism and the new "scientific" techniques (inspired by Frederick Winslow Taylor) combined assembly-line production and enabled managers to generate significant increases in factory output. The group holding the greatest economic power was represented by investment bankers since they acquired controlling positions in the economy by arranging mergers but also by securing large ownership shares and seats on the boards of directors of newly formed corporations.

The transition from *banker capitalism* to *managerial capitalism* was driven by the Great Depression since it made manifest the need for public economic policies to stabilize economic activity in the face of the great downturn. This downturn was getting even worse in the aggregate, since individual bankers, businesses and farmers did nothing but cut loans, slash prices, reduce employment, and increase agricultural yields. Franklin Roosevelt's New Deal shifted the distinctive activity financed through a series of policies and reforms that ushered in the next stage of US capitalist development, macroeconomic growth and stability, with bold government

action in the realm of monetary and fiscal policies alongside regulation of the banking activity (the Emergency Banking Act, bank reorganizations, and institutional reforms including deposit insurance, securities regulation, and compartmentalization of financial institutions). The Glass-Steagall Act (1933) contained institutional innovations that prevented complete breakdown of the financial system and massive debt deflation by ensuring strict separation between commercial and investment banking.

Managerial capitalism saw corporate managers running giant corporations, and the pursuit of corporate growth was regarded as the major aim of firms (Stockhammer 2006). The institutional settings that enabled this process were, however, historically specific to the Fordist accumulation regime which characterised the Golden Age – as it came to be called – between the end of World War II and the early 1970s. And, as we have seen, they were largely the direct consequence of the institutional arrangements brought in subsequent to the crisis of 1929. In fact, in the course of the 1930s Governments over the world progressively became aware of the dynamics that had led to the financial crisis, which is why they strictly limited the influence of financial capital, eventually reinforcing the role of corporate management.

The pivotal source of financing was through the Central Bank. Basically, the object of financing lay in the private sector, broadly speaking financed through the banking system, and conglomerate form was dominant into the market. Unfortunately, the financial system evolved towards a more fragile situation characterized by reductions in margins of safety, a greater reliance on debt financing, and a turn toward short-term financing.

These were the preconditions for the stage that followed, represented by *money-manager capitalism*. It was characterized by a burst of activity by finance companies and other non-bank financial institutions – as well as a steady stream of bank innovations such as the securitization of loans and the creative use of off-balance sheet commitments. But one of the major innovations in the financial system in this period (the 1980s) was the rise of managed-money funds – pension funds, mutual funds, bank trust funds, and so on. Over time, these funds accumulated vast amounts of money. *Money-manager capitalism* is characterized not only by a substantial growth of financial assets but also by a shift in responsibility for holding and managing those assets to mutual and pension funds (cf. Minsky 1996a). The ownership of financial instruments by dozy of shareholders was supplanted by the professional, *eagle-eyed* money managers.

Fear of wealth losses brought on by inflation eroding bank deposits also contributed to the increase in managed-money funds. As this stage progressed, "individual wealth holdings increasingly took the form of ownership of the liabilities of managed funds rather than the holding of a

portfolio of the liabilities of individual businesses" (Minsky 1993a: 110-111, quoted by Whalen 1999: 12).

Money-manager capitalism stemmed since the 1980s (and, as I shall argue later, characterizes our times), as institutional investors, by then the largest holders of savings in the developed countries, began to exert their influence on the financial markets and business enterprises. The aim of money managers is maximization of the value of the investments made by fund holders. As a result, business leaders became increasingly sensitive to short-term profits and the stock-market valuation of their firm. In the previous age of managerial capitalism, corporate managers "were the masters" of the economy, but by the 1980s the money managers had become the masters! Minsky (as well Keynes (1936: 154-155) [7] knew that these aspects would lead to greater instability for the financial markets. He then concentrated on the effect of this new power of the money managers in increasing the sensitivity of firms to stock market valuations and the threat of takeover, at the very time when all economies were opening up to wider – indeed worldwide – competition (i.e *financial globalization*). The rise of institutional investors encouraged continued financial-system evolution by providing a ready pool of buyers for securitized loans, the commercial papers of finance companies, and various other innovations. It also fuelled the trend toward mergers, acquisitions, corporate breakups, leveraged buyouts and stock buybacks, for the fund managers had a strong incentive to support whatever initiatives promised to boost near-term portfolio value. These managed-money funds often provided the resources that raiders needed to secure corporate control.

Furthermore, in many developed countries during this period governments also eased the evolution of the financial system by removing many regulations imposed after the Second World War (particularly in the US).

[7] "It might have been supposed that competition between expert professionals, possessing judgment and knowledge beyond that of the average private investor, would correct the vagaries of the ignorant individual left to himself. It happens, however, that the energies and skill of the professional investor and speculator are mainly occupied [...] with foreseeing changes in the conventional basis of valuation a short time ahead of the general public [...] Thus the professional investor is forced to concern himself with the anticipation of impending changes, in the news or in the atmosphere, of the kind by which experience shows that the mass psychology of the market is most influenced. This is the inevitable result of investment markets organized with a view to so-called "liquidity" [...] This battle of wits to anticipate the basis of conventional valuation a few months hence, rather than the prospective yield of an investment over a long term of years, does not even require gulls amongst the public to feed the maws of the professional; – it can be played by professionals amongst themselves [...] Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation [...] When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done" (Keynes 1936, Ch. 12: 154-156).

Tax law changes also encouraged takeovers, buyouts and other types of corporate restructuring (Wolfson 1994: 111-112). This process of deep financialization was closely linked to the neo-liberal paradigm, as well as the globalization process inspired by the Washington Consensus (cf. Lavoie 2012; Sau 2013; 2015). Neoliberals wanted deregulation, privatization, the intensification of competition, labour market flexibility, and mechanisms designed to modify the behaviour of managers. Performance pay became "the in-thing and the best that could be designed was pay packages strongly oriented toward stock options. With the stock market value of the firm as the ultimate objective, it was said that remuneration of managers ought to be a function of share prices" (Lavoie 2012: 217).

The managerial view of the firm, as described by Schumpeter and Minsky lost out to the shareholder view. The standard story emphasized that managers of corporations were forced to take the interests of the owners into prime consideration while the shareholder value argument had it that managers ought to maximize the stock market value of the firm.

Financialization has meant a change in the way corporations are being run, as well as changes in the behaviour of economic agents, in the microeconomic and macroeconomic policies being pursued by governments and central banks, and in the regime of capital accumulation and the distribution of income. Most obviously, it has meant changes in financial regulation through thoroughgoing deregulation. Furthermore, financialization has been accompanied by a series of economic theories (Efficient market hypothesis – EMH) that have justified or fuelled this process (Sau 2013). This process has been measured by the evolution in a range of variables, most notably the great increase in the relative importance of the finance, insurance, and real estate sectors since the early 1980s, whether measured in terms of gross domestic product (GDP), profits, or employee compensation. Transactions based on financial futures and derivatives have boomed.

Furthermore, over the last few years the financial investment of *non-financial businesses* has grown considerably, as have share buybacks and dividend pay-out ratios (Ohrhangazi 2008). It follows that the accumulation of real capital has been declining (Stockhammer 2004; Scarano 2019). Financialization, the shareholder revolution and the development of a market for corporate control have shifted power to the shareholders, and this has changed management priorities, leading to reduction in the desired growth rate.[8] The process of financialization "was based on weakened la-

[8] Stockhammer (2004) tested this phenomenon empirically, for the USA, the UK, France and Germany. In all these countries, the evidence supported the negative effect of financialization on accumulation.

bour unions, relatively low real wages, high profit shares, high real interest rates, and large capital gains, either in the equity or in the real estate market" (Lavoie 2012: 219).

Minsky (1993a; 1993b) was well aware that, thanks to the massive deregulation process in the financial markets inspired by the neo-liberal paradigm, the *money managers* had assumed a crucial position in financing mergers and organising hostile takeovers as a means to discipline managers of non-financial businesses, thereby forcing them to follow the money managers' interests and objectives. Yet financial investors usually have a shorter time horizon than the traditional corporations and banks (Stockhammer 2004). They are interested in short-run returns and therefore tend to underinvest in long-run projects, changing the growth strategies of the corporations controlled.[9]

While, with the stakeholder view of managerial capitalism, firms often took a long-term view, generalization of the shareholder model led to short-termism, with the managers being mainly concerned with the stock market prices even though the large firms may not finance any of their investments through stock issues. Unlike the previous stages, the emphasis was not on capital development of the economy, but rather upon quick returns for the speculator, and trading profits. The shareholder model, instead of aligning the interests of the managers with those of the owners, induced managers to mislead actual and would-be shareholders by manipulating the computation of earnings per share (Parenteau 2005: 128).

As remarqued by Minsky (1993a), in this stage of capitalism the financiers are not acting as Schumpeter's *ephors* of the economy that screen, promote and finance the most profitable projects. Indeed, today's money managers' activity is more akin to Keynes's characterization of the financial arrangements of advanced capitalism as the by-product of a *casino*.

As I have argued, in the first three post-war decades the role of shareholders in corporations was severely limited by heavily restrictive financial

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[9] The two typical constraints corporations face are the finance constraint and the profit-growth trade-off. On the first front, according to the pecking order theory, inside and outside finance are really and fundamentally different. In fact, as stressed again by Minsky, corporations follow the principle of increasing risk, and are then reluctant to accept high leverage rates, since failure will put their existence at risk. The banks, in turn, take corporate current profit and wealth as proxies for business reliability, granting credit only to firms that are profitable. In this way, financing by means of retained profits can become a preferential corporate strategy, which requires the company's commitment to maximizing the return on investment for potential shareholders. The growth-profit trade-off, instead, takes into account the fact that an increase in investment can harm future profits because of the start-up costs of investment or the 'Penrose effect' (increasing managerial costs of fast growth).

regulation and capital flows control, which were the political reactions to the financial and real crisis of the 1930s. In the 1950s and 1960s, giant corporations usually aimed at financial independence through retained earnings. They were able to borrow from financial institutions and the markets, but were not normally forced to act so and could avoid subjection to control by financial the corporations and outside shareholders. In this kind of corporation, "managers were a self-perpetuating group that identified itself with the corporation and its fate. The board of directors and the chief executive officers were 'organization men' and the control rested securely in their hands. Their major objectives were the corporation market share and its strategic positions in the market" (Scarano 2019: 13).

However, this situation has been changing since the late 1970s through the progressive erosion of financial regulation by means of the invention of new financial instruments, such as junk bonds and other high-risk and high-return securities.[10] By means of this financial deregulation, the financial markets have progressively exerted increasing pressure on non-financial corporations (NFCs), first through hostile takeovers, and then with the "shareholder revolution", characterised by a growing presence of institutional investors within their shareholding (Orhangazi 2008).[11]

Again according to Stockhammer (2004; 2006), the "shareholder revolution" is one of the main features of the present neo-liberal era, which has produced radical changes in corporate behaviour in the name of creating "shareholder value". As he sees it, this revolution was the consequence of the financial liberalization and the emergence of highly liquid share markets in the 1980s and 1990s, together with the successive rise in shareholders' capability to influence public company managers by means of the creation of "a market for corporate control". The managements of large non-financial corporations, in fact, would have committed to producing increasing shareholder value because of the expanded possibilities for financial investors to use the capital market to estimate and compare performance of their corporations and to discipline them with the threat of

[10] Moreover, up to 1982 the Securities and Exchange Commission (SEC) could counteract massive stock repurchases as illegal attempts to manipulate stock prices by the companies. Since the end of 1982, instead, during the deregulation onset of the neoliberal phase, the SEC has partially liberalized stock repurchases, provided that they be less than 25% of the average daily trading volume over the previous four weeks and the buybacks be carried out at neither the beginning nor the end of the trading day.

[11] As pointed out by Scarano (2019), French regulationists have been emphasizing corporate governance since the 1970s, because the pursuit of "shareholder value" is closely associated with the short-termism of non-financial corporations; Grahl and Teague 2000 have perceptively shown the connections between shareholder value and company downsizing throughout the neoliberal phase of capitalist development (Lapavitsas 2011; 2013).

hostile takeovers. In this new context, the managers of large corporations could easily be replaced by shareholders if corporate performance proved inadequate in creating value for them (Stockhammer 2006).

Since the 1990s mutual and pension funds held growing fractions of equity, increasing their ownership shares at the expense of cross-shareholdings between non-financial firms. These institutional investors allocated capital among industries and firms in a decidedly market-based way, imposing profitability norms on enterprises and looking to short-term profit. They exerted their power over the management with exit strategies, creating difficulties for the firm in obtaining new financing. Their arrival unleashed competition for global saving among companies. However, investment funds were set up by the banks, especially in Europe. Thus, the threat of growing control by large financial intermediaries in public companies could be an incentive for managers to change their investment behaviours, increasingly orienting them towards short-term profit investment and discouraging long-term strategic investments.

However, this tendency to produce increasing shareholder value might not have been so much the result of new forms of corporate governance and new financial intermediaries as, rather, the traditional way to maximise the equity capital self-valorisation in a different competition environment and given new financial investment opportunities. This places the emphasis on other transformations of the capitalist system in its neo-liberal phase, which have in part been brought together under the label of financialization.

Today the term financialization may be used to refer to three different, albeit interconnected, phenomena. The first is the reduction of reliance on bank loans by large non-financial corporations and their increasing autonomous ability to raise funds in the financial markets. The second is the expansion of the banks' mediating activities in the financial markets and their tendency to lend mainly to households. The third is the increasing involvement of households in the financial markets, as both borrowers and asset holders (Orhangazi 2008; Lapavitsas 2013; Scarano 2019). Financialisation can be examined at both the macroeconomic and the corporate (micro) level. As regards the former, financialisation in practice simply becomes synonymous with the expanding financial sector within the economic system (Michell and Toporowski 2013; Sawyer 2017). This expansion of the financial markets is one of the main characteristics of the neo-liberal era, due mostly to innovations in securitization and credit enhancement, which have favoured new trading strategies. As to the latter (i.e. the corporate level), it can highlight the changes in the behaviours of the managers of non-financial corporations and their new relations with the financial markets; that is, their adoption of shareholder value orienta-

tion associated with increasing investments in financial assets (Stockhammer 2004).[12]

These structural transformations are among the main results of the previously examined evolution in corporate governance. They have produced radical changes in the objectives of top managements, favouring an increasing propensity to substitute real investment with short-term financial investment in the process of corporate investment decision-making in order promote the 'pursuit of shareholder value'. In fact, according to Scarano (2019: 20) "financialisation has changed the relations between the financial sector and the real sector precisely because the passing of ownership of non-financial corporations into the hands of money managers has itself, in turn, fuelled the pursuit of this objective". In pursuit of higher quarterly earnings per share, American companies have conducted great stock repurchases to increase their own corporations' stock prices (Lazonick 2013). In this way, trillions of dollars have been subtracted from real investments and job creation over more than three decades.

In compliance with Minsky (1993a; 1993b) Stockhammer (2004 and 2006) has stressed that this phenomenon is an important factor in the slowdown of accumulation,[13] not because investment in financial assets is necessarily in conflict with physical investment, but because it is a symptom of the changes in management strategies, closely connected with a change in the institutional setting of the firms. This aspect could, therefore, also be viewed as a symptom of *money manager capitalism*. As pointed out above, in the same period the non-financial corporations (NFCs), while reducing their accumulation of capital goods, progressively increased their financial investments (Stockhammer 2004). Accumulation, while picking up again thereafter, never got back to the levels of the previous Fordist period, and non-financial corporations have continued to invest heavily in financial instruments – even after the 2008 great financial crisis.

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[12] Over the last three decades, in fact, a new kind of phenomenon has been powerfully emerging. Mainly in the US, but also in continental Europe, non-financial corporations (NFCs) have been increasingly investing in financial assets and creating own financial subsidiaries, deriving increasing shares of their income from this kind of pure financial activities (Stockhammer 2004; Orhangazi 2008; Lapavitsas 2011; 2013). Over the same period, the NFCs have increased transfers of earnings to the financial markets in the forms of interest payments, dividend payments and, mainly, stock buybacks.

[13] As pointed out by Scarano (2019: 13): "a marked slowdown in accumulation was experienced by most OECD countries from the 1960s to the 1990s. The growth rates of non-residential business capital stock, which is a measure of productive capacity of a country and is closely correlated with its GDP, reached their lowest points between the first half of the 1980s and the middle of the 1990s in most European countries and the United States. In the USA, the UK and Italy non-residential business capital accumulation saw a slight increase in the second half of the 1990s, but this was not the case in France and Germany".

Subsequent to financial liberalization, in fact, NFCs have been facing portfolio choice problems in their investment decisions between fixed and financial assets; the increasing availability of alternative financial investments may channel the NFCs' retained earnings to short-term financial portfolios instead of long-term real investments.

4. The threats of global money manager capitalism

Minsky concentrated his analysis on the effect of the new power of the money manager in heightening firms' sensitivity to stock market valuation and the threat of takeover, at the very time when all economies were opening up to vaster, worldwide competition.

As everybody knows, there are a number of different ways to define globalization, each of which underlines different aspects of a progressive worldwide integration process between people, companies, and governments. However, here I prefer to confine my attention to its major economic features, which can be summarised as enhancement of free trade and progressive liberalization of capital movements worldwide. Free trade has been only partially implemented under the umbrella of the WTO, with many surviving tariff regimes, and countless nontariff barriers, particularly nowadays.[14] The mainstream literature has often described the success of free and globalized movements of capital. According to neoclassical theory, free capital flows should essentially be a form of intertemporal trade and so the rules applied to them should be no different from the rules on free trade. Thus, free flows of external capital should contribute to smoothing consumption and production paths, improving social welfare. By contrast, Minsky was not so optimistic. In fact, he pointed out that capital account liberalization was the theoretical field where economics largely failed to account for events in the real world like financial crises and debt-deflation. Free movements of short-term capital, such as portfolio flows and short-term bank loans, have so far been associated with a long series of serious economic and financial crises because of their volatility and exposure to surges in and sudden withdrawals from the financial markets. Thus, subsequent to economic and financial crises in Asia, Latin America and Russia in the late 1990s, some economists pointed out the possible dangerous effects of these kinds of capital movements for the developing countries. Instead,

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[14] The situation seems to have been changing when this paper was being drafted; President Trump implemented further tariffs and barriers on US trade to cope with international competition and opened the way to "trade-war".

long-term capital flows, such as FDI, were usually regarded as more positive for the long-term economic growth of the developing countries, being generally more stable and having the potential to boost their production capacity and technology.

Thus, the economic literature analysing the effects of liberalization of capital flows on the developing countries usually highlights the difference between short-term and long-term flows. However, as noted by Scarano (2019), free movements of capital can produce significant effects on the developed economies, too. Much less analysis has been dedicated to these effects, but they can play a major role in producing the present tendency to stagnation in these kinds of economies, and they are closely connected with another major phenomenon of our time: financialization by non-financial corporations, which can greatly contribute to reducing their real investment in the developed countries, contributing to decreasing their growth rate and increasing their unemployment rate.

In this context, however, the distinction between short-term and long-term capital flows may be less evident and significant. Free movements of capital, moreover, can play a major role in the financialization of NFCs from two different points of view. If real investment depends on the term structure of interest rates over the full range of financial and real investment opportunities, then real investments in the developed countries also depend on the differential between their rates of returns and the rates of returns on real investments in the developing or emerging countries. However, this differential comes into play not only through FDI, but also through the possibility of financial investment in foreign securities, associated with real investment in foreign countries. Financial globalization, multiplying the potential range of financial instruments available to big corporations' portfolios and creating new ways to indirectly access the high profits produced in the emerging markets, can play a major role in changing the portfolio composition. Moreover, the managers of "financialised nonfinancial corporations" can decide to substitute direct national real investments with financial investments in foreign corporations, thus also obtaining greater liquidity for their portfolios.

Furthermore, financial investments by non-financial corporations are usually very different from the traditional forms of takeover and corporate holding because their profitability depends not only on the ratio between profits and invested capital, but also on the terms of capitalisation of the expected future profits realised through the financial markets. Thus, the growing liquidity of non-financial corporations' portfolios can contribute to heightening the usual volatility of the rates of return on financial assets as well as the vulnerability to contagion-induced financial shocks (cf. Scarano 2019). Moreover, countries with a large financial sector have a

riskier financial account structure than, for instance, commodity-exporting countries, which show a safer financial account structure. All this obviously increases the overall uncertainty of financial investment profitability itself. And this growing uncertainty, in turn, leads to a greater tendency to money hoarding by non-financial corporations that crowd out real investments. Thus, the relation between fixed investment, uncertainty, increasing integration of international capital markets, the widening gap between real and financial sector transactions and corporate portfolio choice seems to be a very important factor.

The analysis of the evolution of capitalism by Minsky (at the end of his life) was thus striking and longsighted since he observed, well in advance, and rightly stressed, that money-manager capitalism was becoming global and that further international economic and financial integration would take place in the years ahead; "managed money capitalism is international in both the funds and the assets of the funds" (Minsky 1990a: 71) and "global financial integration is likely to characterize the next era of expansive capitalism. The problem of finance that will emerge is whether the financial and fiscal control and support institutions of national governments can contain both the consequences of global financial fragility and an international debt deflation" (Minsky 1995b: 93)

This insight entailed by Minsky's theory of capitalist development suggests, therefore, that a sixth economic stage might now be emerging. The evidence for this possible outcome lies in the fact that national and international entities have recently sought to contain the global financial crisis and particularly to cope with the contagion effects on the real economy emerging after the sub-prime crisis in the US.

As regards domestic policies, since 1990s, Minsky has stressed the role both of a "Big Government" and relatively unconstrained Central Bank to act as lender of last resort to prevent any serious approximation to 1929-1933 great depression. He was well aware that there is also a need for rethinking the system of intervention in capitalist economies that evolved out of the New Deal. In some of his late papers he argued that the further development of the banking and financial structure, the relations between banks, commercial, investment and merchant, and the management of mutual and pension funds needs to be put under scrutiny and under strict regulation.

Minsky has remarked indeed the risks of the repeal of the Glass Stegall Act (i.e. separation between investment and commercial bank in US) for the stability of the financial system and the need of a new separatism between investment banking and the managing of mutual and pension funds. Managers of mutual and pension funds are presumably in a fiduciary relation with the owners of positions in the funds.

It is of greater importance to think through how the emergence of the new dominant players in global finance, the pension and mutual funds affects the capital development of the economy. Given the length and the depth of world-wide recession these aspects are of great relevance to guide future economic policies.

Conclusions

In this paper I have tried to show how both Schumpeter's and Minsky's theory of capitalist development continue to guide us and challenge us to explore important issues regarding the evolution of capitalism. Nevertheless, as we have seen, these two giants of economic thought analysed the evolution of capitalism arriving at different results.

On one hand, in his 1942 book Schumpeter observed that in the late stages of capitalist evolution entrepreneurship would find itself in an impasse, and forecast that a socialist form of society would inevitably emerge from an equally inevitable decomposition of capitalist society. On the other hand, Minsky made it clear that the evolution of the capitalist systems is not necessarily a progressive process. Indeed, as I have shown in this paper, money manager capitalism and the global financialization process inspired by the neoliberal paradigm may represent serious threats to the system itself.

To analyse each stage of capitalist development following Minsky's perspective, we should first ask what distinctive particular activity is being financed, what the pivotal source of financing is, and what the balance of economic power is between those in business and in banking/finance activity. Capitalist development is shaped by the institutional structure, but this structure is ever evolving in response to profit-seeking activity. The financial system takes on special importance in this theory not only because finance exerts a strong influence on business activity but also because this system is particularly prone to innovation.

In the last Section of this paper, I pointed out that developing Minsky's theory more thoroughly might also involve in-depth exploration of the financial globalization process. This scrutiny may, in fact, bear out the likelihood of a sixth stage in capitalism evolution, namely global financial money-manager capitalism.

Summing up, insofar as Minsky and Schumpeter sought to understand the economic behaviour of capitalist economies as evolving entities, their perspectives will continue to guide and challenge us for many years to come.

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