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Abstract

In this paper we explore the role of finance in the recent crisis noting that its expansion, in a context of deregulation and globalisation, has boosted financial profits and capital accumulation, but at the cost of a growing systemic instability both in the leading capitalist economy, i.e. the USA, and at the international level. The expansion of finance tends to emerge in certain phases of capitalist development, in particular during periods of countries' decline. At the same time, each phase has its peculiar aspects and, referring to the recent evolution, we focus on the phenomenon of financialisation, intended as an increasing involvement of economic agents in the working of financial markets.

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1. Introduction

The expansion of finance is a phenomenon that historically emerges in certain phases of capitalist development, in particular during periods of countries' decline. At the same time, each phase has its peculiar characteristics. Referring to the last decades history, we discuss some aspects of the recent phase of financialisation intended as an increasing involvement of economic agents – from financial to nonfinancial firms and households – in the working of financial markets.[1]

Financialisation has interacted with other evolving phenomena in last decades. The current turmoil can be interpreted as a result of the recent phase of capitalist accumulation based on a broad process of *deregulation* that originated in the US and UK from political decisions taken since the 1970s. In this perspective, the same elements which allowed a renewed accumulation process (labour market flexibility, decentralised production through outsourcing and offshoring, migration and trade liberalisation, international capital movements as well as the expansion of the financial sector) have created, at the same time, the basis for a series of crises both in the leading capitalist economy, i.e. the USA, and at the international level (due to growing inequality, excessive indebtedness, global imbalances, financial instability, etc.).

A particular feature of the 'financialisation model' which has characterised the recent decades is the interplay between financial aspects and social ones: increasing inequality and the precarisation of many individuals' life have been exploited by the financial sector through providing credit consumption, sub-prime mortgages, etc. Furthermore, a rising fraction of households' saving has been invested in pension funds and other financial activities associated to increasing levels of risk. In general, the financial sector has gradually shifted from loan-based financing of nonfinancial corporations to more market-based activities and speculative operations. In turn, nonfinancial corporations has been increasingly

[1] According to Epstein (2005, p.3), financialisation can be defined as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of domestic and international economies".

involved in financial activities and the accumulation of capital has been even more based on “the making of financial profits by means of financial profits”.

The remainder of the paper is organised as follows. In the next section we briefly describe the evolution of the recent turmoil and discuss its potential causes. In section 3, financialisation is analysed in a historical perspective as a phenomenon that periodically tends to emerge, especially in declining hegemonic economies. The characteristics and the “stylised facts” of the recent phase of capitalist development and financialisation are presented in section 4. Then, in the final section, we provide some concluding remarks.

2. On the crisis and its causes

In this section we provide a short discussion on the recent crisis episode and the potential elements involved in its evolution.[2] Among the proximate causes of the crisis there are various “financial innovations” introduced in recent years – “innovative financial products” (from subprime mortgages to structured products and derivatives), the “originate-to-distribute” banking scheme (instead of the traditional one, that is “originate-to-hold”), the “shadow banking system” created to collect risks “off-balance” (to avoid the constraints of regulation on capital adequacy) and so on – which have allowed to increase financial profits in advanced economies, especially in the USA. This has happened in a context of increasing riskiness associated to financial operations which culminated in the recent crisis episode, starting from the collapse of the US subprime mortgage market.

According to many commentators, the “bad regulation” of financial markets (or the excessive deregulation) has emerged as a cause of the crisis, given that the process of origination and distribution of “private risk” has increased the complexity of financial products and interconnections, resulting in an informational opacity about the risk-yield relationship and an increase of *systemic risk*.

[2] The following analysis is based on a contribution proposed by one of the authors (Russo, 2010).

The monetary policy of recent years has been indicated as a contributing cause of the crisis ("Greenspan put"): the long post-9/11 phase of "low" interest rates has supported excessive risk-taking, speculation and growing indebtedness and leverage, leading the system towards financial unsustainability.

In fact, after years during which the interest rate on *fed funds* has remained "low", when the FED decided to increase it, a rise of the delinquency rate on subprime mortgages has followed while the increase of housing prices has stopped.[3] Consequently, in the summer 2007, some of the primary financial institutions (in US and in Europe) has declared huge losses due to the bad performance of the housing market; then, a lack of confidence among operators has followed, leading to a grave crisis in interbank markets. In the following period the perception of risk has remained elevated – as signalled by high spreads between interbank interest rates and their risk-free counterparts (for instance, the Overnight Index Swap). However, until the mid of 2008 the instability was mainly in monetary and financial markets, without relevant effects on the "real economy". The monetary policy interventions implemented by central banks in this period (quantitative easing, decrease of the interest rate, bailouts in collaboration with governments, etc.) have partially mitigated the effects of the "liquidity crisis".

The Lehman Brothers' default in September 2008 has resulted in a serious deterioration of the crisis. The confidence among financial operators has dramatically fallen. From this episode on, in a situation of liquidity hoarding, the real economy has began to go down. In a context of high uncertainty, the lack of confidence has resulted in a vicious circle of reduced propensity to lend money

[3] More in general, in last decades the US financial system has faced growing difficulties to work with "high" interest rates because of the excessive leverage of financial operators and, as maintained by Fitoussi and Stiglitz (2009), to finance households' consumption in years of growing inequality (in a sense, monetary policy has become "endogenous" to income distribution). The transformation of financial institutions, the introduction of new financial products and the process of deregulation have made the US financial system very fragile, while many players have become convinced "that a steady flow of liquidity will be, at all times, made available by the authorities and, in particular, by the US Federal Reserve, to face emergencies the market has come to experience almost daily. The LLR can thus be said to have become a lender of first resort" (de Cecco, 1999, p.6).

(and deleveraging) at different level (from interbank markets to the lending to firms and households). In other words, a credit crunch has resulted in a reduction of investments, production and, subsequently, employment in various sectors and countries. All in all, after September 2008, the “liquidity crisis” has transformed in a “global economic recession”.[4]

Central banks and governments have contrasted the worsening of the crisis by putting significant resources in the economy. As a consequence, the deficits and public debts of many countries have raised remarkably – consisting in a large socialisation of private losses. Currently, there is a problem of public debt sustainability in a number of countries and some difficulties emerge with respect to the implementation of “exit strategies”. Finally, various countries are discussing over the necessity of reforming the regulation of national and international financial markets and some progress has been done towards the approval of the “Basilea 3” agreement.[5]

Besides the above aspects – financial innovations, regulation and monetary policy – other (long-term) factors contributed to the evolution of a highly unstable economic and financial system, both at the level of the core-country and globally.

In recent decades a progressive decline of the labour share has occurred in advanced economies (about 10% in Europe and Japan and 3-4% in Anglo-Saxon countries since 1980), especially in unskilled sectors (IMF, 2007, chap. 5). Among the possible causes we list the following: skill-biased technological change, labour market reforms (aimed at increasing “flexibility”, especially in

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[4] More in general, in a Keynesian perspective, money and finance play a fundamental role in generating instability and crises: in a period of turmoil agents’ confidence falls and the “preference for liquidity” goes up with significant “real” effects: as a matter of fact, in a monetary production economy capitalists aim at accumulating wealth; when they believe that the safest way to store up and increase wealth is no longer to produce commodities, but instead to hold liquid money, an unemployment crisis occurs (Graziani, 2001). However, while “western economies” have faced a vast financial and economic crisis, “eastern economies”, after a minor deceleration, have continued to grow at high rates: in 2009 the GDP growth rate was equal to -2.4 in the US, -5.2 in Japan, and -4.1 in the Euro area; the contraction has then produced an increase of the unemployment rate around 10% in the US as well as in Europe; in the same period China has grown at 8.7% and India at 5.7% (IMF, 2009, 2010).

[5] Some commentators have rightly noted that the long time before the enforcement of some Basilea 3 norms is enough to see in the meanwhile the occurrence of a couple of financial crises.

some European countries); national and global reorganisation of production through outsourcing and offshoring, import of commodities from low-cost countries, migrations, etc.[6] The decrease of the labour share may cause a lack of effective demand in a context of growing inequality. Actually, consumer credit and other form of indebtedness have prevented this to happen at the cost of an increasing financial instability, eventually leading to a large crisis.[7]

The flexibility of labour markets and the decentralisation of production have interacted with a political process of deregulation which, starting from the US and UK, has gradually eliminated the rules created after the Great Depression aimed at segmenting financial markets to preserve financial stability. From the 1980s financial deregulation (or the "new" regulation) has boosted financial profits, but the expansion of finance has also provoked a series of crises in the "core-country" (Wall Street in 1987, savings & loans in the 1980s and 1990s, the "new economy" bubble, until the subprime mortgages one). At the same time, the deregulation of the international financial system has opened new investment channels ("financial globalisation") at the cost of rising global instability (especially due to short-run speculative operations), leading to various crises (Mexico in 1994-5, south-east Asia in 1997, Russia and LTCM default in 1998, etc.).

Moreover, the outsourcing-offshoring dynamics, the flow of capitals as foreign direct investments (FDIs) and the working of MNEs have supported a

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[6] "Changes in labor market policies have had a positive effect on the labor share in Anglo-Saxon countries, but a much more modest effect on average in Europe, particularly in large European economies where labor policies are estimated to have actually contributed to a decline in the labor share" (IMF, 2007, p. 177). In particular, "[…] labor globalization has negatively affected the share of income accruing to labor in advanced economies (labor share). […] Rapid technological change – especially in information and communication sectors – has had a bigger impact, particularly on the labor share in unskilled sectors" (IMF, 2007, p. 180).

[7] In a Marxian perspective, the expansion of the financial sector, the increasing role of credit to sustain consumption and, in general, of indebtedness, jointly with financial innovation, labour market flexibility, outsourcing and offshoring, privatisations, etc. are all factors which have allowed a recovery of capitalist accumulation after the crisis of the 1970s (see Uctum and Viana, 1999, on the decline of US profits and the successive recovery in the 1980s). As a matter of fact, at some point the contradiction between the individual goal of maximising profits ("micro") and the collective one ("macro"), consisting in the valorisation of capital (through selling commodities in markets), gives rise to an overproduction crisis. In this perspective the financial collapse is the most apparent manifestation of a more general crisis whose realisation has been postponed and amplified by financial factors (Marx, 2009).

global industrial reorganisation ("production globalisation") based on the mounting importance of east Asian (low-cost) countries in "traditional" sectors (although sector composition is already evolving towards more advanced productions while wages are rising)[8] in a period of decline of manufacturing and rise of services and finance in advanced economies. Among other things, the so-called *global imbalances* emerged as a consequence of China penetration in global markets. Then, the ascent of China (and of other emerging economies) took place in a context of increasing internationalisation. In other words, capitalist accumulation has expanded towards the East following the profitability deriving from lower production costs. On this basis, if the subprime mortgages US market can be considered as the "epicentre" of the crisis, its fundamental causes are due to the underlying movements of capitalist accumulation.[9]

3. Some historical aspects of financialisation

A mechanism that is usually involved in financial crises is the pro-cyclicality of the credit supply (Minsky, 1982): the supply of credit increases in expansionary phases – operators become less risk-averse in "good times" – while decreases in recessions – agents become more risk-averse in "bad times". Consequently, lower risk perception in expansions leads to more indebtedness so increasing the *financial fragility* of the system.[10] The events that lead to the crisis

[8] "Real wages (corrected for purchasing power) have been converging rapidly and are relatively high in Asian countries that started developing earlier (Hong Kong SAR, Korea, Singapore, and Taiwan Province of China). Wages in other Asian countries, including China, have been converging at a slower pace, though this has accelerated in recent years" (IMF, 2007, p. 169).

[9] In next years, a further enlargement of the capitalism's "container" may follow, resulting in the incorporation of other less-developed economies, including Latin America and various African countries, and a reconfiguration of the international division of labour. This phenomenon would arise because of the "new" Asian centre's structural change towards more advanced sectors (with an increasing role of knowledge and scientific research and rising internal production costs, wages included) and the consequent need for a new "periphery" from which to import raw materials, intermediate products, and, in general, commodities produced with lower labour costs. This process may face important limits due, in particular, to the potential political instability in emerging economies and to huge environmental costs.

[10] "Minsky followed Fisher and attached great importance to the behaviour of heavily indebted borrowers, particularly those that increased their indebtedness in the expansion to finance the purchase of real estate or stocks or commodities for short-term capital gains" (Kindleberger and Balibar, 2005, p.22).

start with an “exogenous shock” to the macroeconomic system. The nature of the shock varies from one crisis to another but boom-bust cycles tend to show a typical anatomy:[11] if the shock is large enough, agents’ expectations improve leading to the increase of anticipated profits associated to the development of one or more sectors; then, agents’ indebtedness rises due to the increase of investments aimed at taking advantage of the increase of expected profits; as a consequence, the growth rate accelerates; a follow-the-leader mechanisms develops as firms and individuals see that others are benefiting from speculative deals; this collective movement boosts the expansionary phase, inflating the “bubble”. The boom is fuelled by the expansion of credit and represents a very *unstable* process of economic and financial growth. The implosion of the bubble is generally related to the decline in the prices of stocks, commodities or real estate and often leads to a financial crisis.

Then, according to the Kindleberger’s historical analysis of financial crises, the model proposed by Minsky is useful to describe the typical evolution of financial crises given that the cycles of manias and panics results from the pro-cyclical changes in the supply of credit. “The features of these manias are never identical and yet there is a similar pattern. The increase in prices of commodities or real estate or stocks is associated with euphoria; household wealth increases and so does spending. There is a sense of ‘We never had it so good’. Then the asset prices peak, and then begin to decline. The implosion of a bubble has been associated with declines in the prices of commodities, stocks and real estate, and often these declines have been associated with a crash or a financial crisis. Some financial crisis were preceded by a rapid increase in the indebtedness of one or several groups of borrowers rather than by a rapid increase in the price of an asset

[11] According to Kindleberger and Aliber (2005), the shock of the 1920s in the US was a great expansion of automobile sector (together with the development of highways, the eletrification of much of the country and the diffusion of telephones). The shocks of the 1980s in Japan were financial liberalisation and the rise in the foreign exchange level of the yen. Also in the case of Nordic countries in the 1980s the shock was financial liberalisation. In the 1990s, the shock in the US was the information technology and the new, low-cost forms of communication. It is worth noting that “[f] inancial innovation in the form of deregulation or liberalization has often been a shock” (Kindleberger and Aliber, 2005, p.45).

or a security" (Kindleberger and Balibar, 2005, p.10).

From the 1970s, the process of financial deregulation has created a very unstable environment, leading to many crisis episodes both in the leading capitalist economy and at the international level. "Despite the lack of perfect comparability across different time periods, the conclusion is unmistakable that the financial failure has been more extensive and pervasive in the last thirty years than in any previous period" (Kindleberger and Balibar, 2005, p.6). Thus, from one side, the expansion of credit and finance of last decades resembles a typical dynamical pattern leading to financial instability and crisis episodes; on the other side, the "financial innovations" introduced in recent years – from financial products and practices to legislative changes – have radically modified the economic and social contexts in which agents interact, leading to a particularly unstable path of economic development in which financialisation has emerged as a central aspect of economic incentives and agents' behaviour, from financial to nonfinancial corporations and individuals' life (we will discuss this aspect in more detail in the next section).

In recent decades the expansion of finance has prolonged the economic growth of some countries, although it has especially boosted financial profits. But the ascent of finance in a period of difficulty for the real economy may signal an uncertain future for economic development. According to de Cecco (2007), one of the finding of the Keynesian analysis is that an "excess of finance" may lead to the collapse of a capitalist economy and that financialisation has emerged as a characteristic of economic systems more likely in periods of decline than of ascent in the economic history of various countries.

According to the French economic historian Fernand Braudel, financial expansion occurs in response to capital over-accumulation, that is the accumulation of capital on a scale beyond the normal channels for investment; consequently, the expansion of finance capital can be seen as a "sign of autumn" for a country which has reached a maturity stage of development. Along these lines, Arrighi (1994) proposes a historical analysis of the world economic system as a sequence of *systemic cycles of accumulation* each of which represents the ascent and the decline of the hegemonic economy of the world capitalism.

The Giovanni Arrighi's analysis of systemic cycle of accumulation is based on a reinterpretation of the M-C-M' Marxian schema according to which it represents, not just the individual capitalist's logic underlying investment decisions, but also a recurrent path of world capitalism. The central aspect of this approach is the alternation of phases of material expansion (M-C) and financial expansion (C-M'): in phases of *material expansion*, the money capital (M) sets in motion a raising mass of commodities (C), including labour-power and natural resources; instead, in phases of *financial expansion*, which occur when the material expansion of productive forces has reached its limits, an increasing mass of money capital sets itself free from its commodity form and capital accumulation tends to proceed increasingly through financial operations (M-M'). Taken together, the two phases constitute a systemic cycle of accumulation.

During material expansions the returns of capital invested in production and trade increases; the realised profits are then reinvested in production and trade, prolonging the phase of material expansion. Over time, this process leads to an over-accumulation of capital because the further reinvestment in trade and production results in a reduction of the profit rate below a "tolerable" level. Then, when the material expansion of trade and production has reached its limits, the accumulation process tends to keep in liquid form a larger part of capital and a phase of financial expansion develops. During this phase the economy lives a *belle époque* which is only temporary because it tends to deepen rather than solve the over-accumulation crisis. Historically this period is characterised by an increase of inequality due to the working of financial capitalism ("accumulation by dispossesion") which redistributes assets and incomes from the borrowers to agents that control surplus capital, and from labour to capital, so producing an ever greater over-accumulation of capital. While the expansion of finance signs the decline of the incumbent hegemonic country, a reorganisation of trade and production on a larger geographical scale gradually leads to a new phase of material expansion centred in new, emergent centres.

Accordingly, the systemic cycles of accumulation are not just recurrent phenomena but also fundamental periods of reorganisation and enlarged reproduction of world capitalism. Each cycle overlaps the preceding and the successive ones and financialisation is not a specific phase of capitalist development nor its final stage, but a frequent phenomenon involved in the critical phases during which the centre of capitalist accumulation tends to move towards another location. Then, the "autumn" of a leading capitalist organisations is also the "springtime" for another location.[12]

Arrighi (1994) has identified four, overlapping, systemic cycles of accumulation, each during a "long century": the Genoese-Iberian cycle, from the fifteenth through the early seventeenth centuries, based on the alliance between the territorial power of Spain and the capital power of Genoese capitalists; the Dutch cycle, from the late sixteenth through the late eighteenth centuries, based on the expansion of United Provinces and the commercial and financial power of Amsterdam; the British cycle, from the mid eighteenth through the early twentieth centuries, based on the material expansion following the Industrial Revolution and the growing centrality of London as an international financial centre; finally, a US cycle, from the late nineteenth through the latest financial expansion. Referring to the last accumulation cycle, the crisis of the 1970s (the "spy-crisis") signals the transition from the material to the financial expansion in the leading capitalist economy. The recent turmoil could be then considered as a "terminal crisis" of the US hegemony, while a new centre of capital accumulation is developing in East Asia, particularly in China (Arrighi, 2007).

4. The recent phase of financialisation

After the crisis of the 1970s, a series of political decisions, initially in the US and the UK, have changed the institutional and organisational settings of

[12] According to Li et al. (2007), the sequence of the systemic cycles of accumulation are related to the long-term movement of the profit rate in the capitalist economy.

capitalist accumulation emerged after the WWII: the institutional arrangement of capitalist accumulation emerged after the 1970s has resulted in a partial return to the pre-Great Depression "free-market" capitalism, removing the constraints to financial and economic activity implemented by governments in response to the post-1929.

After the early XX century *belle époque*, a new one emerged during the last decades of the same century with some resembling features as the expansion of finance, growing inequality and increasing instability. There are, then, some relevant similarities between the recent crisis and the post-1929 one, as we shall see later in this section; but the differences are perhaps more numerous, especially if we consider the pervasiveness of finance in the economic and social life.

Focussing on the US macroeconomic trends since the 1960s, van Treeck (2009, p.13) shows some of the main changes occurred after the 1970s. We summarise these findings – relative to the two sub-periods, *until* the early 1980s and *since* the early 1980s – as follows:

- the income inequality was relatively low and roughly stable, then it has drastically increased (to levels comparable to the 1920s);
- the personal net worth-to-income ratio was relatively stable or slightly decreasing, then it has strongly increased;
- the personal saving rate was relatively high and slightly increasing, then it has drastically declined (reaching negative values for the first time since the early 1930s);
- the personal debt-to-income ratio was relatively low and roughly stable, then it has drastically increased;
- non-financial corporations retained a large and roughly stable fraction of their net profits, then they have heavily increased the dividend-payout ratio;
- the growth rate of net capital stock displayed cyclical movements around a relatively high trend, then it has shown an overall declining trend (with the

relevant exception of the "new economy" boom of the 1990s);

- the contribution of the net new equity issues to the financing of fixed capital investment by non-financial corporations was small but positive, then it turned to be negative and very large in absolute value;
- firms' debt-to-capital ratio was relatively low, then it has increased.

Then, it results that the post-1970s *deregulation wave* has increased inequality and indebtedness (both for households and firms), promoting a broader role for finance in the working of the economy. "The tight regulations forced the financial sector to concentrate on promoting capital accumulation in the nonfinancial sector. Starting in the 1970s activity in financial markets and the profits of financial institutions began to rise relative to non-financial activity and profits (Kotz, 2008, p.4). For instance, in the USA the financial corporations' pre-tax profit rose from an average of 13.9% of all corporate profits in the 1960s to 25.3% in the 1990s and 36.8% in the period 2000-2006.[13] In general, from the 1970s to the 1990s, there was an increase of the share of national income received by financial institutions and financial wealth's holders in the majority of OECD countries (Epstein and Jayadev, 2005).

With respect to the relationship between firms and banks, in the pre-1929 period it occurred a concentration of power in banks which extended their control over nonfinancial corporations (according to the Hilferding's "finance capital" hypothesis); instead, after the crisis of the 1970s firms has focussed their strategies increasingly on financial markets, acquiring a certain independence from the banking sector. In other words, the recent phase of financialisation resembles the dynamics of the expansion of "finance capital" at the beginning of the last century, but the intensification of finance has rather led to a "separation" of banks and nonfinancial corporation, with banks and firms operating directly on financial markets, instead of being related through loan-based relationships.

Accordingly, the entire working of financial markets changed in recent

[13] Data from US Bureau of Economic Analysis presented in Kotz (2008).

decades: “the financial sector gradually shifted from loan-based financing of the nonfinancial sector to more market-based and more speculative activities” (Kotz, 2008, p.16). Specifically, “banks have turned toward mediating transactions in open markets, thus earning fees, commissions and trading profits. They have also turned toward individuals in terms of lending and handling financial assets” (Lapavitsas, 2010, pp. 24-25).

Furthermore, “individual workers and households have been led into the financial system with regard to both borrowing and holding financial assets. The retreat of public provision in housing, health, education, pensions, and so on, has facilitated the financialisation of individual income, as have stagnant real wages. The result has been the extraction of financial profits through direct transfers of personal revenue, a process called financial expropriation” (Lapavitsas, 2010, p. 25). Accordingly, the accumulation of capital through profit-making has occurred more in the “circulation” sphere, by-passing production: based on systematic misinformation due to the increasing complexity of financial products and the opacity of the yield-risk relationship in a context of strong uncertainty, profits' growth has been boosted by a process of financial expropriation directly out of personal income.

In an increasingly deregulated environment, the rise of inequality and the precarisation of many individuals’ life have been exploited by the financial sector through providing credit consumption, sub-prime mortgages, etc. Furthermore, a rising fraction of households’ saving has been invested in pension funds and other financial activities associated to rising levels of risk. In this way, individuals has been increasingly involved in the working of financial markets, adding to the risk of a precarious life that of financial operations. This process has co-evolved with a reduction of the public intervention in the economy resulting, among other things, in a reduction of the sustain to aggregate demand, while consumptions have been supported by a large expansion of credit and the wealth-effect due to financial incomes (Fumagalli, 2007). All in all, the uncertainty associated to the ‘financialisation model’ in a deregulated and unequal environment has created new profit opportunities, so boosting capital accumulation, but at the cost of a growing system instability.

A remarkable aspect of the recent phase of capitalist development regards the interplay between financialisation and economic growth. During the 1980s and 1990s the financialisation of nonfinancial corporations has emerged as a relevant phenomenon and it is now a well documented phenomenon for the US economy. As noted by Orhangazi (2007), before financialisation clearly emerged in the 1980s and 1990s, Tobin (1965) maintained that real investment and financial investment could be substitutes because when financial assets offer higher returns then real activities more resources will be directed to finance, resulting in a crowd-out of real investments. Using data from a sample of nonfinancial corporations from 1973 to 2003, Orhangazi (2007) finds a negative relationships between real and financial investment. From this firm-level investigation it emerges that two aspects of financialisation may have negative consequences on real investment, especially in the case of large firms: first, high financial profit opportunities result in higher financial investment, leading to a decline of real capital accumulation; second, increased financial payments leave firms with fewer funds to invest and shorten the planning horizon of firms' management.

According to Lazonick and O'Sullivan (2000), the financialisation of nonfinancial corporations has been characterised by a shift from a “retain and reinvest” strategy to a “downsize and distribute” strategy; that is, management strategies have changed focussing more on the maximisation of shareholder value and less on long-term growth. In fact, the profit share increase of recent decades has been accompanied by the stagnation of real investment and a sharply increase of interest payments, dividend payments and stock buybacks (also mergers and acquisitions may be considered).

Stockhammer (2004) confirms that over the past decades the financial investment of nonfinancial corporations has been rising and the accumulation of capital goods has been declining. According to this author, the 'shareholder revolution' and the development of a market for corporate control have shifted power to shareholders and thus changed management priorities, so leading to a reduction of growth rates. From the analysis of the time series of aggregate investment for the USA, the UK, France and Germany, it results that financialisation has been responsible for a slowdown of accumulation (in particular, for the first three countries).

Similar results have been reached by Crotty (2005), according to which nonfinancial corporations have increased financial investments as response to high interest rates and to low rates of profit associated to real investments, and Dumenil and Levy (2005), according to which the growth rate of real capital accumulation depends on that of retained profits (that is, profit after interest and dividend payments), which is diminished in recent decades.

Even in the case of offshoring it emerges a significant relationship between real and financial investment. According to Milberg and Winkler (2010), which have conducted an empirical study on US manufacturing and services industries over the period 1998-2006, offshoring is associated with a higher share of corporate profit in total value added. Offshoring has been a winning strategy for US corporations facing price competition in product markets: to maintain profits, firms has extended their global production chains, bringing costs under control. But "the potential dynamic gains of offshoring associated with reinvestment of the higher profits it brings have not fully realised. To the extent that corporations have become financialised – mainly through an increase in dividend payments and share repurchases, but also with increased merger and acquisition activity and large executive compensation packages involving stock options – this has diminished the capture of dynamic gains of offshoring" (Milberg and Winkler, 2010, p.277). Hence, offshoring significantly increased profit shares in various US sectors but there has been a shift in the use of these profits: firms reduced their spending on plant and equipment and expanded their spending aimed at immediately increasing shareholder value.

All in all, it emerges a picture according to which financialisation has been a fundamental factor behind the recovery of profits from the 1980s in the leading capitalist economy as well as a phenomenon involved in a slowdown of real capital accumulation. The institutional change driven by "neoliberal" policies after the crisis of the 1970s (deregulation, privatisation, decentralisation, globalisation) has boosted profits and capital accumulation, especially financial profits which have been reinvested increasingly in financial deals. Unsurprisingly, the average growth rate of most "advanced" countries, during the US *financial expansion* of the post-1970s, has not been higher than in the post-WWII "regulated capitalism". In the meanwhile, real capital accumulation based on the *material expansion* of production and trade has been faster in Asian countries, starting from Japan, and following with the "Asian tigers", and then China and India.

5. Concluding remarks

We have explored the causes and consequences of the recent critical phase of capitalist development with a particular focus on the role of finance. Financialisation has been one of the principal channels of capital accumulation in recent decades, together with the other ones opened by the deregulation process after the crisis of the 1970s (decentralisation, flexibility, privatisation, globalisation, etc.).

From one side, the expansion of finance is a phenomenon that tends to emerge in phases of countries' economic decline. In a historical perspective, financialisation can be thought as a "sign of autumn" of the incumbent hegemony of the world economy. This follows an earlier phase based on the material expansion of production and trade in the hegemonic economy and tends to overlap with a new material expansion which develops in the new, emerging core-country. A similar pattern seems to have characterised the recent evolution of the capitalist world economy which has seen the US financial expansion overlapping with a new phase of material expansion in East Asia.

On the other side, a peculiar aspect of the recent phase of financialisation is the increasing involvement of individuals in the working of financial markets – from pension funds to subprime mortgages and various types of financial innovations – resulting in a process of financial expropriation directly out of personal income. In general, the financial sector has shifted from a loan-based financing of nonfinancial firms to more market-based activities and speculative operations. The financialisation of nonfinancial corporations has been characterised by a shift from a "retain and reinvest" strategy to a "downsize and distribute" strategy: as a consequence, the profit share increase of recent decades has been accompanied by the stagnation of real investment and a sharply increase of interest payments, dividend payments and stock buybacks (also mergers and acquisitions may be considered). In a period of growing inequality and reduction of public intervention in the economy, consumptions have been supported by a large expansion of credit and the wealth-effect due to financial incomes. This has happened in a strongly uncertain environment, due to "systematic misinformation" (e.g., the growing complexity of financial products has made it more opaque the yield-risk relationship) and the "precarisation" of individuals' life, in which growing levels of inequality and instability have eventually led to an unstable phase and a large crisis.

All in all, in this paper we investigated some historical evidence about the expansion of finance as well as some novel elements which have characterised the role of finance during the recent phase of capitalist development. The paper just represents a first step towards a deeper analysis of the financialisation phenomenon and its implications for capital accumulation and social evolution.

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