

Capital Accumulation and Stagnation: a framework to analyse the Portuguese case (*in draft*)¹

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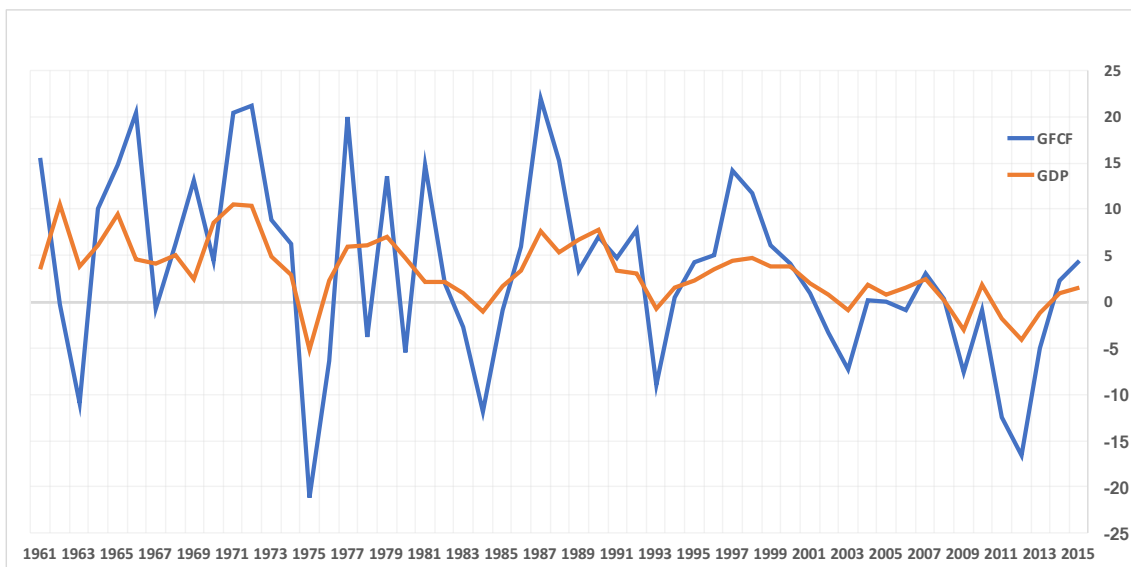
ABSTRACT This paper takes issue with the long-term stagnation tendencies affecting the Portuguese economy, with particular emphasis on the ‘Lost Decade’, in the 2000’s. Secular Stagnation has been presented as a monetary phenomenon. This paper questions that perspective and argues that stagnation emerges as the result of the very process of capital accumulation and concentration. Considering capital not as factor of production but as embodiment of power relations, its accumulation and concentration do not necessarily correspond to growth and investment. The concept of ‘sabotage’ proposed by Veblen (2001 [1921]) may be productively deployed to describe the negative effects of capital concentration and accumulation in Portugal. Contrary to the usual view that presents this process as the result of market failures, technological breakthroughs or increasing returns to scale, it is argued that oligopolies emerge as a combination of four factors: privileged access to finance, or State power, family heritage and fraud. The investment theories of Kalecki and Steindl will be drawn upon to understand the links between the prevalence of ‘monopoly power’ and stagnant investment and growth. The concentration of surplus in large conglomerates with lower propensity to invest relatively to small and medium enterprises leads to a situation of overall indebtedness and stagnation, known as the ‘Lost Decade’.

¹ Please do not quote.

1. Stagnation in Portugal: secular declining growth and the ‘Lost Decade’

The Portuguese economy presents signs of a secular economic slowdown. Graph 1 shows clearly how both fixed investment and GDP have been growing at a slower pace, especially since the 2000’s, leading the economy to a situation of stagnation, known as the ‘lost decade’.

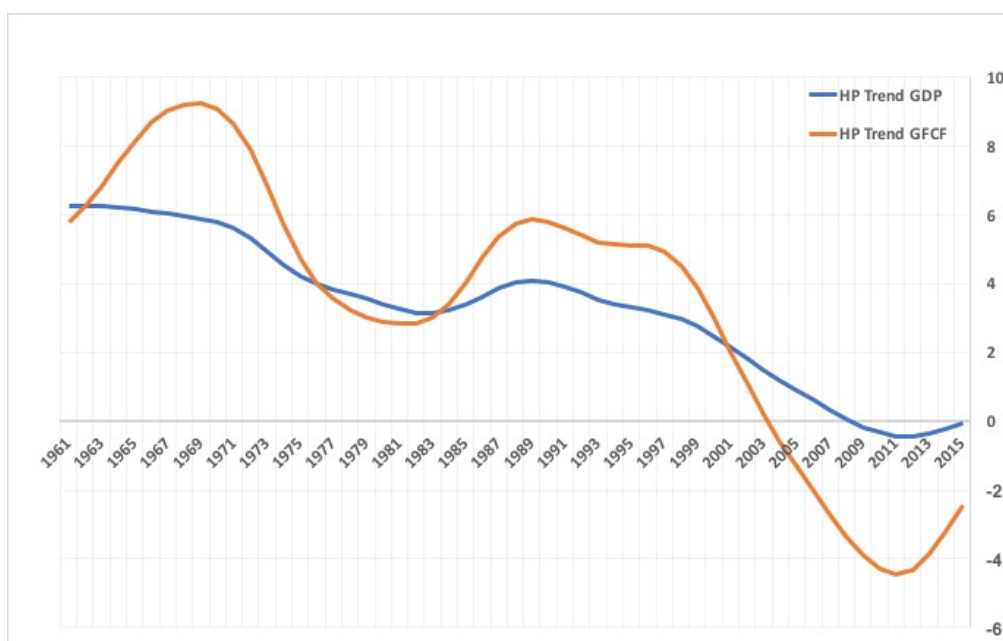
Graph 1 – Annual Growth Rates of GDP and Gross Fixed Capital Formation (%) for Portugal



Source: AMECO

Leaving – as much as it is statistically possible – aside the effect of the cycle, the evolution of the trend GDP and investment growth supports the conclusion outlined above. There is a declining tendency in both investment and domestic product since 1960’s, that was not counterbalanced by the upswing that followed the European Union integration in 1986. In the 1990’s the trend rates of growth resumed their continuous and steeper decline until the Great Recession.

Graph 2 – Trend GDP and Gross Fixed Capital Formation growth rates (%)

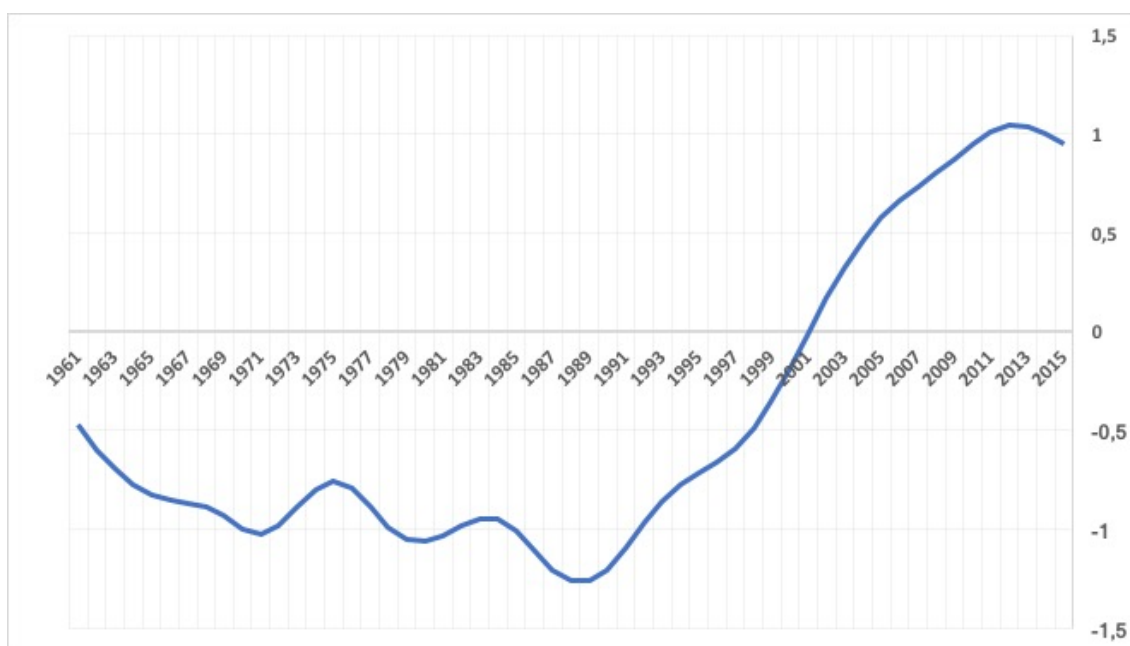


Source: AMECO. Own calculations using an HP Filter.

Evidence, therefore, contradicts the predictions of convergence within the European Monetary Union, based on the Optimal Currency Areas Theory (OCAT), according to which convergence should be the natural outcome of the free movement of capital flows; and on neoclassical growth theories, namely the *intertemporal approach to current accounts* (Obstfeld and Rogoff, 1994): “To the extent that they are countries with higher expected rates of return, poor countries should see an increase in investment. And to the extent that they are the countries with better growth prospects, they also should see a decrease in saving. Thus, on both counts, poorer countries should run large current account deficits, and, symmetrically, richer countries should run larger current account surpluses” (Blanchard and Giavazzi, 2002, p.148).

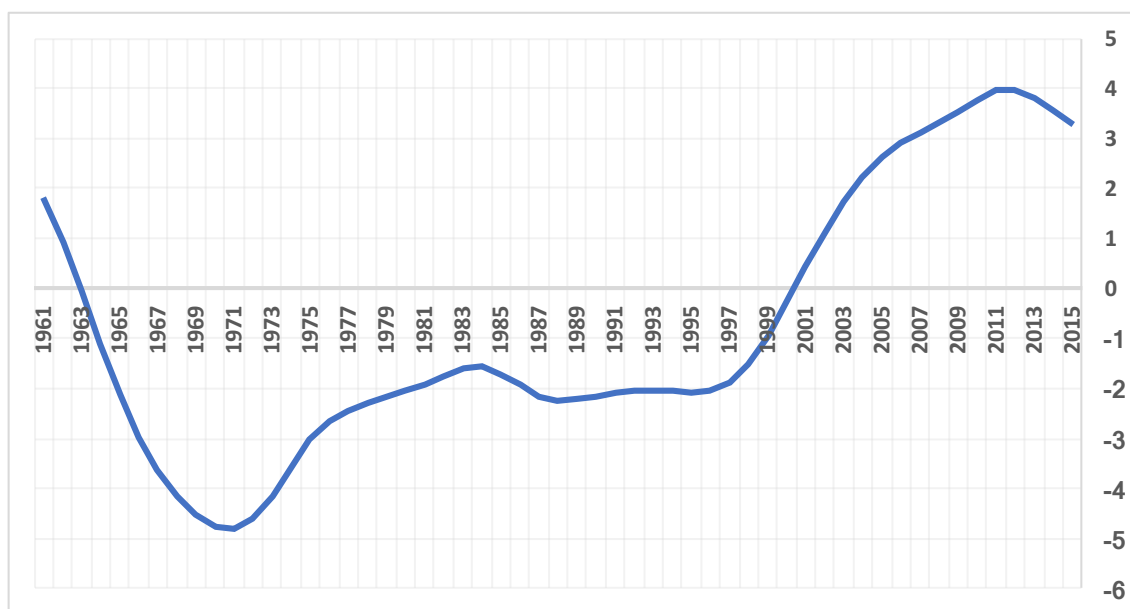
Important aspects stand out of the comparison of GDP and investment trends between Portugal and the Eurozone. Consider Graphs 3 and 4, when the difference is positive, the Portuguese GDP and investment trends are below the Eurozone. The greater the negative values, faster is the convergence between Portugal and the Euro area’s average. With GDP, this convergence process lasted until the 1990’s, albeit with some cyclical fluctuations. From 1991 onwards, the trend growth rates started to slow down in Portugal relatively to the European benchmark until, in 2001, the weak convergence was transformed in actual divergence. Investment shows a similar pattern, however, in this case, convergence started to slow down already in 1971, it was stagnant during the 1990’s and reversed in 1999.

Graph 3 - Trend GDP growth rate (%): Portugal and Euro area



Source: AMECO. Own calculations using an HP Filter. Difference obtained by subtracting the Portuguese values to the Euro area (12 countries)

Graph 4 - Trend Gross Fixed Capital Formation growth rate (%): Portugal and Euro area



Source: AMECO. Own calculations using an HP Filter. Difference obtained by subtracting the Portuguese values to the Euro area (12 countries)

Two facts that stand out clearly from this short analysis. The first is the long-term tendency for product and fixed investment growth rates to slow down. The second is the evolution of this dismal performance into almost one decade of stagnation, just before the

crisis of 2008, despite all the predictions of convergence and even the general economic overheating felt in other European economies.

The first conclusion can be deepened by identifying the main cycles in the period under analysis. (Table 1)². Until the early 2000's, the duration of a complete cycle (from trough to trough) was of about ten years. This trend changed with the century, when the average duration of the cycle became shorter and recessions more prolonged.

Average growth within cycles has also been declining, especially since the 1990's. The period between 1984 and 1993 was an exception to the continuous weakening of average economic growth rates, especially in Portugal, which grew faster than its euro counterparts. This moment corresponds to European Union integration process, officialised in 1986. The same pattern appears in the severity of the recessions and the success of expansions. Peaks of growth have faded to unprecedented levels and recessions became increasingly violent. The exception here is the pronounced fall in GDP in 1975, which is greatly related to the combination of the unique political context of Carnation Revolution and the international oil shock³.

Table 1 - GDP Cycles in Portugal. Own Calculations.

| Cycle (trough – trough) | Duration | Average Growth (except trough year) | Peak | Trough |
|--|-----------------|--|-------------|---------------|
| 1961 - 1975 | 15 years | 5,00% | 10,49% | -5,1% |
| 1975 – 1984 | 9 years | 3,53% | 7,10% | -1,04% |
| 1984 - 1993 | 9 years | 4,35% | 7,86% | -0,69 |
| 1993-2003 | 10 years | 3,50% | 4,8% | -0,93% |
| 2003-2009 | 6 years | 1,55% | 2,49% | -3,00% |
| 2009-2012 | 3 years | 0,036% | 1,90% | -4,03% |
| 2013 - | 4 years | 0,91% | 1,60% | |

Source: AMECO

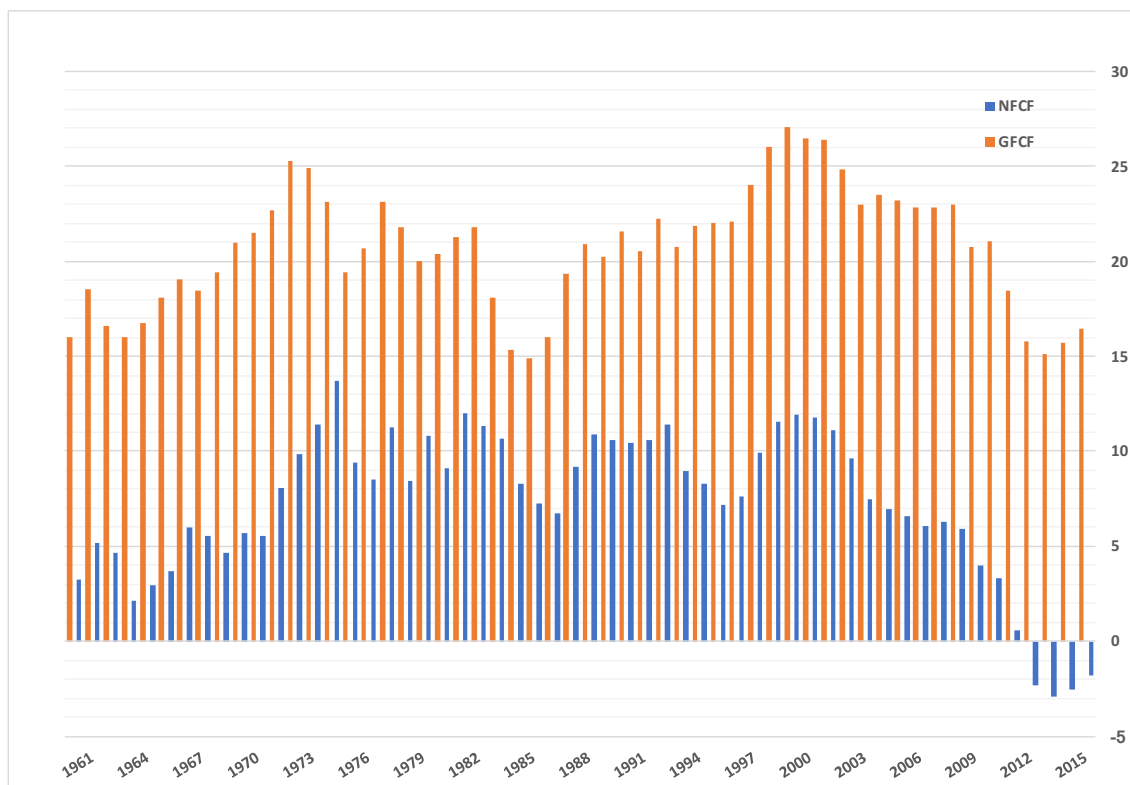
Considering the 'Lost Decade' separately, the average growth of Gross Fixed Capital Formation was -0,4% and the GDP growth rate 1,5%. This negative average rate of investment growth was unique in the Euro area, and well below the average rate of the

² The cycles identified are merely indicative and based on annual data. There is no intention to have a detailed chronology of the business cycles in Portugal, only to get a general idea of the behavior of the Portuguese economy. Castro (2011) makes use of a Markov-switching model to identify a chronology for the Portuguese business cycle and to test for the presence of duration dependence in expansion and contraction phases of the cycle.

³ The price of oil quadrupled in one year deteriorating the terms of trade.

1990's (5,2%). The absence of any additions to the stock of capital reduced the weight of fixed investment in GDP from 27% in 1999 to 22% in 2007. Extracting the consumption of capital from depreciation, the decrease was even sharper, from 13% in 1999 to 6% in 2007.

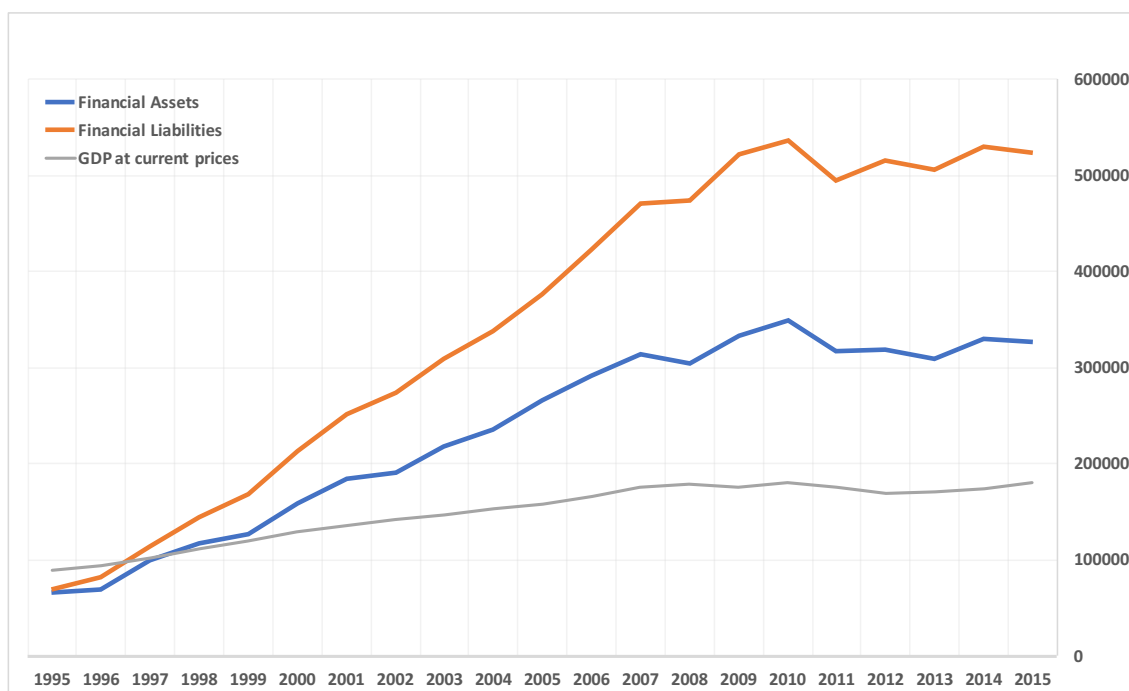
Graph 5 – Gross and Net Fixed Capital Formation in % of GDP



Source: AMECO.

It should be noted, to finalise this short summary of the Portuguese macroeconomic context, that stagnation was concomitant of a process of rapid accumulation of financial liabilities, only partially matched by the rise in financial assets. Over indebtedness appeared as the result of these simultaneous processes.

Graph 6 – GDP, Financial Assets and Liabilities (current prices)



Source: Bank of Portugal, millions of euros.

2. What is Stagnation?

Baldwin and Teulings (2014) define stagnation as the moment when the natural interest rate is too low to be achieved without negative real rates of interest, which poses a monetary policy problem. The problem with this definition is that it doesn't describe a visible economic phenomenon, only its consequences in terms of a specific theoretical framework. Neither the natural interest rate is a reliable concept, nor the real interest rate can have a straightforward impact on investment to help the economy to achieve its potential output.

Apart for some 'ceremonial' references to Hansen's (1939) work this approach ignores the history of the concept, deeply influenced by the work of Keynesian and Marxist inspired authors. In the vast and diverse literature just referred, stagnation isn't a mere monetary dilemma.

The concept was explicitly recognised first by Hansen as "sick recoveries which die young in their infancy and depressions which feed on themselves and leave a hard and seemingly immovable ore of unemployment" due to exogenous factors (Hansen, 1939, p33). Steindl never used the term 'secular' but his analysis pointed clearly to a secular and structural tendency towards slower rates of capital accumulation: "with the pattern of adjustment of the profit margin to be expected in modern times (owing

to the predominance of oligopoly) a *primary* decline of capital accumulation will—via a reduced degree of utilisation—lead with a certain time lag to a further reduction in accumulation. This cannot easily lead to an equilibrium” (Steindl, 1976 [1952], p. 245). To Magdoff and Sweezy, “the real story of the system in its monopoly capitalist phase is determined by the interaction of the tendency to stagnation and the forces acting to counteract this tendency” (1987, p.27). Guthrie and Tarascio (1992) broad definition of secular stagnation include “secular changes that diminish the economy’s ability to adapt and to grow”.

The underlying idea behind the concept is of an ageing society that goes through a process of rapid growth and accumulation and then enters a phase of maturity or stagnation. There are two main views of this ageing process. The first, present in the thinking of Malthus, but also Hansen, and in contemporary environmentalism, concerns the exhaustion of natural resources. The second, present in Luxemburg, Veblen or Marx, and then adopted by Robinson, Steindl, Kalecki or the Monopoly Capitalism School, sees this ageing process as the social evolution of capitalism. The main argument is that the concentration and accumulation of capital will generate stagnant tendencies or inevitable crises.

Following this perspective, the study of stagnation should be placed within the problem of capital accumulation, and its distributive impact. The main idea is that the process of accumulation and concentration of capital – in its economic, socio-political and institutional nature – created tendencies that are contrary, not only to the stable functioning of the system, but also to keep its structural long-term pace of growth. Secular stagnation, in this sense, means what Guthrie and Tarascio (1992) suggested: “changes that diminish the economy’s ability to adapt and to grow”.

This line of reasoning is not compatible with the idea that the economy depends, either on the exogenous advances in science and technology, or on one hypothetical equilibrium in saving and investment markets that determine the natural interest rate.

An alternative will be to focus on the historical, or evolutionary, analysis of the cumulative causation process (Veblen, 1908, p.159) that explains the accumulation of capital, its distributive impacts on effective demand, particularly on investment, and its economic consequences in the form of stagnant tendencies.

One important implication of this framework is that capital can’t be, as normally is, seen as a stock of fixed capital (instruments of production) or a mere money fund. Capital embodies relations of power (Nitzan and Bichler, 2009). Its accumulation doesn’t take place through an ascetic market game between entrepreneurs. It is an unequal process, determined by class relations and balances of power, by family heritage and access to finance, at specific historical periods.

If capital is not a physical entity, or its monetary appearance, its accumulation doesn’t always mean economic growth and investment. On the contrary, it might generate undesired economic and distributive outcomes, what Veblen has named sabotage, but that has also been translated in post Keynesian theories.

It is clear now, that the link between the discussion of stagnation and the Cambridge controversies of capital is not only connected to the technical and logical problems of capital measurement and uniqueness of the interest rate, but mostly on the very nature of capital, and the political character of the distribution process that, ultimately, determines effective demand and the realisation of profits.

3. Theories of stagnation

3.1. A prelude: Veblen's capitalist sabotage

In his study of the business enterprise, published in 1904, Veblen outlines the structural differences in the industrial process that came with the *machine process*:

“A further feature of that pre-capitalistic business situation is that business, whether handicraft or trade, was customarily managed with a view to earning a livelihood rather than with a view to profits on investment (...). With a fuller development of the modern close-knit and comprehensive industrial system, the point of chief attention for the business man has shifted from the old fashion surveillance and regulation of a given industrial process, with which his livelihood was once bound up, to an alert redistribution of investments from less to more gainful ventures, and to a strategic control of the conjunctures of business through shrewd investments and coalitions with other business man” (Veblen, 2003 [1904], pp. 17,18).

With the development of the modern industrial system the purpose behind production changed from a matter of survival to the chance of earning profits. The “industry is carried on for the sake of business, and not conversely” (ibid., p.19). Consequently, disturbances in the complex business system are transmitted by business relations without necessarily affecting the mechanical processes of industry. Even more, the financial (pecuniary, in the words of Veblen) nature of production implies that the interests of great businessmen with vast industrial and economic fortunes aren't always coincident with the smooth working of the industrial system. In other words, large capitalists may benefit individually from specific disturbances in the industrial system, even at expense of the general welfare.

The interest of the ‘Captains of Industry’ is to control larger parts of some industry, either permanently or strategically, in order to potentiate further gains, event at expense of damaging competitive wars:

“It is notorious, beyond the need of specific citation, that the great business coalitions and industrial combinations which have characterized the situation of the last few years have commonly been the outcome of a long-drawn struggle, in which the industrial ends, as contrasted with business ends, have not been seriously considered (...)” (ibid., p.24)

The result is a ‘chronic perturbation’ (ibid., p.23) of the industry caused by the business methods of the Captains. Industrial consolidations can be delayed, suspending possible technological and organisational gains, or anticipated, even without any industrial gains. By eliminating competitors, Captains curtail work and reduce business opportunities for other companies. “It is a casting out of business men by the chief of business men” (ibid., p.29).

There are companies operating in competitive markets, however “it is very doubtful if there are successful business ventures within the range of the modern industries from which the monopoly⁴ element is wholly absent. They are, at any rate, few and not of great magnitude. And the endeavour of all such enterprises that look to a permanent continuance of their business is to establish as much of a monopoly as may be” (ibid., p.32)⁵.

Large decisions on industrial organisation are rarely motivated by the “mechanical exigencies of the industrial processes” (p.29), but very often by their perception of possible changes in the value of their investments. Concrete decisions on the production are determined by the Captains’ concern over the realisation of their gains, which is, the conversion of their output into money values. The result is that it is impossible to draw any type of relation between the ‘serviceability’ (in the sense of usefulness for the community) of a certain business activity and its remuneration.

Veblen takes this line of reasoning even further arguing that activities that exist merely to ensure profits to business man and are not engaged in the mechanical process of industrial production are ‘parasitic lines of business’. Eventually, the amount of money directed to those activities will have to be deducted from the income of those who keep the production going.

In the end of the III chapter of *The Theory of Business Enterprise*, Veblen seems to refer to the conditions which could lead the system to stagnation or even decline:

“A disproportionate growth of parasitic industries, such as most advertising and much of the other efforts that go into competitive selling, as well as warlike expenditure and other industries directed to turning out goods for conspicuously wasteful consumption, would lower the effective vitality of the community to such a degree as to jeopardize its chances of advancing or even its life” (ibid., p.36)

Chapter IV analyses the historical antecedents of the modern institution of property, seen as the product of free labour, an individual right, instead of a given privilege. With the growing importance of property contracts, all aspects of the business process came to be expressed and measured in money values. The pecuniary principles of capitalism

⁴ Monopolies can be formed by legal means, by the control of natural resources or by long lasting prestige and branding (good will).

⁵ Veblen admits that production under the modern industrial system carries a large quantity of competitive costs (advertisement, sales and retail), especially when compared to the pre-mechanised industry.

determine that the main goal is no longer the efficiency or quantity of the industrial production, but the capacity to earn profits. It is based on this capacity that the capitalisation of a business organisation is determined, rather than the previous understand of business capital as the sum of the fixed capital invested in the firm.

The use of credit is an intrinsic element of the modern forms of business. Veblen identifies two main situations in which credit plays an important role.

The first is the use of credit to increase business capital, which became a current device in the corporate competitive environment. These credit operations have no aggregate impact on the industrial output and affect only the value of businesses⁶. Moreover, because of interest payments, the use of credit diminishes industrial profits. The injection of new money into businesses swells the value of the collaterals and allows for new credits to take place. This process will go on until the discrepancy between the market value of the collateral and its 'real' material value is noted. Then, a deflation sets in, leading to a wave of liquidations that ultimately change the ownership of industries.

In the case of business 'reorganisations' or 'coalitions', credit markets are crucial to the financing of these complex operations as well as to distribute business capital afterwards. The capital that results from these mergers exceeds the mere addition of the previous existing materials. In fact, these financial operations might not have an industrial counterpart. The greater value of capital is the result of the capitalised goodwill resulting from the reorganisation. Therefore,

“‘Capital’ in the enlightened modern business usage means ‘capitalised presumptive earning-capacity’, and in this capitalization is comprised of usufruct of whatever credit extension that given business concern’s industrial equipment and good-will support. By consequence the effectual capitalization (shown by the market quotations) as contrasted with the nominal capital (shown by the par value of the stock of all descriptions) fluctuates with the fluctuations of the prevalent presumption as to the solvency and earning-capacity of the concern and the good faith of its governing board [emphasis added]” (ibid., p.65).

In sum, the basis of capitalisation of modern enterprises depends not so much on the material employed in production but on the possible future earning capacity. So, a difference emerges between the nominal ('de jure') and the effective capitalisation. A major component of this difference is goodwill, defined as "all the items [that] give a differential advantage to their owners, but (...) are of no aggregate advantage to the community" (ibid., p71). This capitalisation is represented in the market by financial securities, in the form of stocks or bonds.

⁶ Veblen seems to understand the process of endogenous money creation by the banking system. However, his own explanation on why this newly created money can only trigger a process of asset inflation and can never be used to add to industrial uses suggests that he differentiates between different types of money. In chapter VII the discussion on the inflationary processes of changes in the supply of precious metals also point in that direction.

The lack of coincidence between material business and market capital brings two consequences. The first is that interest of managers and owners must not coincide at all. The second is a large room for speculation of the dimension of the existing gap. Furthermore, because credit instruments can be recycled into collateral for new debts, the value of nominal capital is necessarily much larger than the material properties used in the production process.

The characteristics just described are proper from a credit economy (as opposed to a natural economy). In this type of economies, the problem of crises can't be approached from the point of view of the "mechanical facts of production and consumption", but "from the side of business enterprise – the phenomena of price, earning, and capitalization" (ibid., p.90).

In the words of Veblen,

"Depression and industrial stagnation follow only in case the pecuniary existences of the situations are of such a character as to affect the traffic of the business community in a inhibitory way" (ibid., p.103).

Usually, businessmen look at these periods as moments of overproduction or, in other words, underconsumption. However, what is at stake is not an excess of material goods produced but a situation of 'excessive competition'. The problem is that part of the output can only be sold at a price that doesn't cover the desired rate of profit of businessmen. The situation will deteriorate if the amount of outstanding debt obligations increases financial payments amidst the brake in profits.

Because business depression is caused by a discrepancy between the market capitalisation of corporations and their real earning capacity net of financial obligations, the best solution would be to lower the value of the capital market titles. However, that level of organised default would be accepted by creditors. There is therefore an endogenous fragility and instability that arises from the normal functioning of modern business.

The growing discrepancies between market capital and earning capacity (minus costs) can be caused by a lowering interest rate benefiting new companies, or by the worn-out effect of old technologies:

"From the inherent character of the machine industry itself, therefore, it follows that the earning-capacity of any industrial enterprise enters on a decline from the outset, and that its capitalization, based on its initial putative earning-capacity, grows progressively antiquated from the start. (...) It may, therefore, be said, on the basis of this view, that chronic depression, more or less pronounced, is normal to business under the fully developed regime of the machine industry" (ibid., pp.111,112)."

This competitive process, enhanced by industrial innovations and credit operations, pushes corporations into a process of concentration, or coalition, to increase their chances

of survival. Concentration, on its turn, increases the fortune of businessmen. In the presence of deficient consumption outlets, money in excess will be used to initiate new business enterprises, setting the conditions for a situation of increased competition and, therefore, depression.

In an article written in 1921, *The Engineers and The Price System*, Veblen goes back to the argument that the profit generation strategies of businessmen are contrary to the interests of the economy as a whole. The term *Sabotage* is rescued from its ‘unfortunate’ common use to describe the resistance tactics of trade unions and organised workmen and applied also to the strategies of restriction, delay and obstruction carried by businessmen.

Sabotage describes “a resort to peaceable or surreptitious restriction, delay, withdrawal, or obstruction”. Furthermore, “sabotage commonly works within the law. Although it may often be within the letter rather than the spirit of the law. It is used to secure some special advantage or preference, usually of a business-like sort. It commonly has to do with something in the nature of a vested right, which one or another of the parties in the case aims to secure or defend, or to defeat or to diminish; some preferential right or special advantage in respect of income or privilege, something in the way of a vested interest (Veblen, 2001 [1921], p.2).

With the development of the capitalist business enterprise, the power to organise the production process was taken away from the hands of engineers and technological experts to be at the service of ‘one-eyed’ captains of industry, concerned with financial gains. Incapable, or unwilling, to curtail production costs, their profit strategy focused on the restriction of industrial production below the installed productive capacity to sustain artificially higher prices. Strategies of sabotage, also included concentration and cartelization, as well as deception of clients, regulations and governments. Although Veblen admits that sabotage was part of the ‘natural’ method to organise a country’s industry, and to control and regulate output. He was, nevertheless, aware of its detrimental effects in terms of stability and total welfare of the community.

In summary, Veblen’s argument is that the development of modern machine technology, allied to the widespread use of credit, created an inherent unstable system naturally prone to concentration and depression. From a political point of view,

“The quest of profits leads to a predatory national policy. The resulting large fortunes call for a massive government apparatus to secure accumulations, on the one hand, and for large and conspicuous opportunities to spend the resulting income, on the other hand; which means a militant, coercive home administration and something in the way of an imperial court life (...)” (Veblen, 2003 [1904], p.188).

The growing power in the hands of the Captains of industry, whose accumulation strategies are protected by the coercive force of the State will become increasingly incompatible with the system of natural rights and liberties in which modern business is

founded. Although Veblen didn't propose a theory of stagnation per se, he clearly envisaged the capitalist system as inherently unstable, with a natural propensity to concentration and depression. The result is similar to what we will find in both Sweezy and Steindl stagnation theories: extraordinary profits with lower output and production: "Overall, Veblen finds sharp limits to the accumulation tendencies of capitalism in a way that is very reminiscent of Marxian crisis theory, including that of Sweezy" (O'Hara and Sherman, 2004.p. 978).

3.2. Hansen's theory of Secular Stagnation: half exogenous half Keynes

Alvin Hansen, born in 1887, came to be known as the American Keynes and left a life work dedicated to the study of business cycles. His work was theoretical, statistical, and historical, which he tried to apply, very much like Keynes, to solve the economic problems of that time.

Cycles of Prosperity and Depression (2010 [1921]) was his first empirical study. At the time Hansen believed that changes in money and credit determined movements in the cycle. This idea didn't last and end up being replaced by a theory based on exogenous factors. Nevertheless, he never discarded the use of the accelerator, and the view – popular among cycle theorists like Schumpeter, Wicksell, and Keynes – that investment decisions are determinant to the cycle.

Business-Cycle Theory: Its Development and Present Status (1927) reflected already some of the foundations of what came to be known as the 'secular stagnation theory', most clearly developed in his presidential address to the American Economic Association, delivered in Detroit on the 28th of December 1938, published under the title *Economic Progress and Declining Population Growth* in the March 1939 issue of the *American Economic Review*.

Based on the ideas of Albert Aftalion and Arthur Spiethoff, he analysed external forces, such as waves of technological innovation, population changes and territorial expansion as the root causes of the cycle. These forces raised profit expectations which induced investment, favoured by the dynamic effect of the price system, which allocated resources into those sectors with higher profit expectations. The tendency of a free enterprise system was, according to Hansen, to achieve full employment. However, the system was also subject to negative forces, such as credit crises, that would give rise to a cumulative process of recession until a new external force puts the system back on track. In sum, he saw these external factors as the drivers of growth and accumulation and, therefore, as 'smoothers' of the sharp business fluctuations. Although the adjustment of the economy to new waves of technological innovation through the correct function of the price mechanism was the centre of Hansen's theory, he didn't disregard the role of business, enterprise and government spending entering the economy. Later, he came to admit that government spending was a crucial element of a much-needed 'anti-cyclical programme' (Hansen, 1947).

In his speech, presented in 1938, the role of population decline assumed a larger role than in the previous writings. This change resembles the ideas put forward by Keynes in the

seminal Galton Lecture delivered to the Eugenics Society in 1937 (Keynes, 1937) on the effects of declining of population growth on investment: when population growth decreases, investment opportunities will also decrease, and as the saving rises with the ageing of the exiting population, the economy will end up in a low-growth equilibrium, with underemployment⁷.

After a first sceptical reaction to Keynes General Theory, published in 1936, Hansen's acceptance of the ideas proposed by the British economist is well reflected in his Presidential Address in 1939. Most likely, the events in 1937 with the failure of the promised recovery after the Great Recession have also contributed to consolidate Hansen's views on the matter.

He starts by identifying three common factors of economic progress in classic thinking: technological innovations, expansion of new territory and natural resources, and population growth. The relation between economic progress and instability came later in the XIX century. Before that, the prevailing idea, largely influenced by the historical conditions of the XVIII and XIX centuries, was that the economies would automatically be in a stage of equilibrium with full use of the available resources. It was "not until the problem of full employment of our productive resources from the long-run, secular standpoint was upon us, were we compelled to give serious considerations to those factors and forces in our economy which tend to make business recoveries weak and anaemic and which tend to prolong and deepen the course of depressions. *This is the essence of secular stagnation – sick recoveries which die in their infancy and depressions which feed on themselves and leave a hard and seemingly immovable ore of unemployment [emphasis added]*" (Hansen, 1939, p. 333).

The expansion of the economy until then was based on an exceptional growth of capital formation, which was only possible due to those three, already mentioned, external forces. Hansen's main goal was not to discuss the impact of investment in output and full employment of factors, since "it is accepted by all schools of current economic thought that full employment (...) cannot be reached in the modern free enterprise economy without a volume of investment expenditures adequate to fill the gap between consumption expenditures and that level of income which could be achieved were all the factors employed" (ibid., p. 334). The idea was, instead, to discuss the chances of capital formation to secure the necessary use of productive factors, given the prevailing levels of technology, population growth and geographical expansion. It is never too much to stress that, according to Hansen, these were the dominant determinants of investment and employment, contrary, for example, to the role played by the interest rate which "has occupied a larger place than it deserves in our thinking" (ibid.).

Hansen makes use of Hawtrey's (1937) distinction between capital deepening and capital widening⁸ to argue that, in the previous fifty years' capital formation consisted of a widening of capital or, at least, that the deepening of capital in certain areas was not

⁷ Hansen (1939) actually refers to Keynes lecture in a footnote in page 335.

⁸ Capital deepening means that more capital is used per unit of output while capital widening means that capital increases pari passu with output.

enough to compensate for the capital saving innovations in other sectors, therefore reducing the ratio of capital to output. Three factors contributed to this outcome.

First, population growth. It affects capital widening through its impact in final output but also capital deepening, which depends on three aspects: cost reducing innovations, reductions in the rate of interest and changes in the character of output. The rate of population growth must necessarily affect the type of demand and, therefore, the capital requirements of final output. An ageing population for example must require more personal services and less residential buildings, so one can expect that such development must lead to a decline in the ratio of capital to output. On the other hand, population growth may have had also an indirect influence on the volume of capital formation, through its impact on the expansion of new techniques.

Second, the opening of new territories, which is largely intertwined with population growth. Both were “responsible for a very large fraction – possibly somewhere near one half – of the total volume of new capital formation in the nineteenth century” (Hansen, 1939, p.338). Since Hansen didn’t see many possible opportunities in exporting investment, given his analysis of the current state of the new industrialising countries, he was forced to conclude that the opening of new investment outlets was mostly dependent on the progress of technology through the development of new techniques of production.

Finally, the third factor, technological progress. According to Hansen, the development of great new industries and revolutionary techniques comes in big waves. Once the new industries are exhausted and the breakthrough techniques become generalised, it may take a long time before the world has the chance to see something similar. Meanwhile, the simple replacement of capital might not be enough to kick off the economy. This view was mostly influenced by Spiethoff’s idea that, once the demand for investment is satisfied, its rate and level must decline.

Under a regime of ‘vigorous’ price competition one could expect that new cost-saving techniques would constantly break through, filling the need for new investment outlets. However, there are factors blocking such tendency: trade unions, trade associations and, mostly, the development of monopolies. “Thus progress is slowed down, and outlets for new capital formation, available under a more ruthless competitive society, are cut off” (Hansen, 1939, p. 340).

What can then be done to maintain full employment under such external conditions? Hansen admitted that public expenditure – in the form investment programmes and tax cuts – financed through taxation or borrowing could contribute to that end. But he was also conscious of the political and economic risks of that strategy, mostly the harm that it could infringe to the ‘system of free enterprise’. It is worth noting that this view regarding public intervention through fiscal instruments was already a crucial break with his previous orthodox idea that corrective measures should wait until the depression had operated as ‘beneficial liquidator’ in the economy⁹.

⁹ See Hansen, A. H. (1932, p. 189).

In short, Hansen's view of stagnation that resembled Suart Mill's stationary state (Hansen, 2010 [1941], p.310 and Hansen 1954, p.411). Contrary to the early nineteenth century when the growth of capital accumulation was fast but limited to the existing net saving, in the 'mature economy' the stock of capital is vast, the marginal efficiency low and investment is limited by aggregate demand¹⁰. However, because Hansen didn't follow two of the classic arguments - i) that investment opportunities were practically unlimited so the capital stock could increase as long as the interest rate fell; and ii) that this fall in the interest rate would discourage capital accumulation and promote a smooth passage into a circular-flow economy – his view of the stationary state, or the circular-flow economy, where consumption equals net income, didn't include a full-employment equilibrium, but quite the opposite.

Hence, in Hansen's theory, secular stagnation became increasingly associated with the notion of underemployment equilibrium¹¹.

This is not to say, however, that Hansen came to share Keynes ideas on stagnation and investment. He acknowledged the possible effects on the cycle caused by changes in liquidity or nominal wage rigidity but rejected the emphasis on the influence of institutional and psychological factors and even the interest rate on investment (instead of 'real' factors). More importantly, "Hansen's secular stagnation concept had nothing to do with the notion – often ascribed to Keynes – that the problem is caused by the fact that 'rich people save proportionally more', so that the marginal propensity to consume is lower than the average propensity, with a declining ratio of consumption demand to income as income grows" (Backhouse and Boianovsky, 2015, p.11). According to Hansen, the Keynesian consumption-income schedule could only hold in the short run but there is not to say that demand management, mostly through fiscal policy, is not needed both in the short run, as an anti-cyclical device, as well as in the long-run, as a way for the economy to achieve its potential growth. This idea is clearly elaborated in Hansen's article in defence of a cycle policy in 1947:

"Recent discussions indicate that it is high time that we revert to a serious study of the business cycle and the factors which underlie it. It is, indeed, true that structural reforms and adaptation to changed conditions are highly important for the functioning of the economy. (...) But is it not true that these secular adjustments can prevent the short-run fluctuations of the business cycle. (...) It is, indeed, true that a long-run program of planned expansion will minimize the violence of the cyclical fluctuations (...) But even with a planned long-run program of expansion the primary fluctuations in private investment would still remain to plague us." (...) "It is indeed true that it is not sufficient to 'iron out the cycle.' That might only result in stabilized stagnation and unemployment. A long-range program of expansion, structural

¹⁰ This idea was rejected by Frank Knight (1936, 1944) who argued that the very process of capital accumulation would create the conditions to avoid diminishing returns and, therefore, any limits to aggregate demand.

¹¹ See Backhouse and Boianovsky (2015, p.10) for an account on the evolution of Hansen's association between secular stagnation and underemployment equilibrium.

changes in wage-profits relationship, and in the distribution of income, are necessary” (Hansen, 1947, p. 61-2).

However, for those situations in which a long-term expansion program is not suitable, what is needed is a *cycle policy*, quick and effective, composed of an expansion of public spending - in housing, public works, development projects – and a flexible tax system¹².

Due to his focus on fiscal policy as a remedy for both the short and the long run economic problems, Hansen distinguished himself from other stagnationists, like Steindl, who “tend to the view that the incapacity of the economy adequately to ‘generate its own steam’ stems from malfunctioning of the price system. The remedy must therefore be sought in reducing the interferences imposed upon a free price system by trade unionism, labor reformism, and state interventionism (Schumpeter) or by the elimination or amelioration of monopolistic and oligopolistic distortion of free, competitive price relationships (Steindl)” (Hansen, 1954, p.413).

3.3. Stagnation in Keynes’ theory and the inducement to invest

There is no consensus whether Keynes work, and the General Theory in particular, had implied a view on stagnation. This specific debate faded away, together with the whole discussion on stagnation, with the growth prospects after the World War II. Guthrie and Tarascio (1992) did a comprehensive review of the long debate on this controversy, which deserves attention.

At the beginning we have the thesis, put forward by Schumpeter (2008 [1942]), that not only Keynes’ *General Theory* had a clear stagnationist view but that, in general, this view was completed by 1919. Schumpeter finds in the text of *The Economic Consequences of Peace* (2007 [1919]) evidences of the *modern stagnation thesis* that is also the foundation of the General Theory, he argues. In fact, the extract chosen to illustrate his case has some of the arguments found later in Hansen’s stagnation theory: the exhaustion of the economic conditions that prevailed before the First War and that allowed for an ‘efficient’ absorption of savings - such as population growth, access to new materials and markets, an ‘unprecedented’ international mobility of capital. There is, according to Schumpeter, a progression in the analytical development of the initial idea, already present in the *Economic Consequences*, that economic problems would arise from the diminishing investing opportunities in face of persisting saving habits of the bourgeoisie. The *Tract on Monetary Reform* (2000[1923]) and the *Treatise on Money* (2011[1930]) were, somehow, pre-stages of the complete analytical and theoretical setup found in the *General Theory*: “the social vision first revealed in the *Economic Consequences of Peace*, the vision of an economic process in which investment opportunity flags and saving habits

¹² The benefits of the flexibility of discretionary changes in taxes and spending to respond to economic fluctuations were developed in detail in Hansen (2010[1941]).

persist, is theoretically implemented in the *General Theory*” (Schumpeter, 1951, 278-80 in Guthrie and Tarascio, 1992, p.385).

Alan Sweezy (2010 [1947]) argues quite the opposite: that in the *Economic Consequences* and the *Tract*, Keynes was more concerned with the lack of saving, which should be encouraged, and with the pernicious effects of the monetary instability on the *animal spirits*. Apart from some sporadic references, the hypothesis of declining investment opportunities and its impacts in terms of accumulation were not in Keynes mind until late, around 1935. Keynes stagnationist view came with the *General Theory*. Later, Paul Sweezy (1964) admitted that while Keynes’ theory has showed that, in the event of declining investment activity, capitalism would tend to stagnation and decline, he never managed to show consistently why should the inducement to invest decline. Hence, Keynes stagnationist view was more based on an intuition. Harris (2010 [1947]) shared this vision and stated that was only in 1936 that Keynes presented some of the factors threatening capital accumulation, namely, the lack of demand for capital, the excessive interest rates and the declining marginal efficiency of capital. Later, in 1937, with the paper in the *Eugenics Review* (Keynes, 1937), these conditions were systematised in a more consistent theory of stagnation. In the same lines, Williams (1948) argued that, before the *General Theory*, Keynes was concerned in the normal variations in the business cycle but not yet with a chronic problem of unemployment and accumulation. Klein (1966) argues that Keynes’ system doesn’t imply necessarily a ‘pessimistic’ outcome, it all depends on the economic situation at moment.

Lekachman (1964) distinguishes between two Keynes. One is more optimistic on the hilling powers of economic policy to save the functioning of the capitalism. The other, which is precedes the optimistic one, is less confident on the prospects of capitalism, and more radical. For Minsky (1975), the *General Theory* was an endogenous theory of the business cycle in which instability and the accumulation of imbalances are inherent to the system. Like Hutt (1963) – who was critic of Keynes –, he charges Keynes for being inconsistent with his own claim of novelty, trespassing in some chapters of the *General Theory* the old idea of a structural tendency to declining investment and stagnation. Joan Robinson explicitly refers to a ‘stagnation thesis’ in Keynes: “If in reality the distribution of income between workers and capitalists, are such as to require a rate of accumulation which exceeds the rate of increase in the stock of capital appropriate to technical conditions, then there is a chronic excess of the potential supply of real capital over the demand for it and the system must fall into chronic depression” (in Luxemburg, 1968 [1913], p. 26). Skidelsky (1975), like Schumpeter, saw in Keynes writings a consistent and permanent concern over the changing growth prospects of the XX century, connected with the vanishing investment opportunities. Finally, Patinkin (1976) saw no concern in Keynes over the issue of long run growth, whether Tarascio (1971) claims the opposite: Keynes was concerned with underemployment as the long run effects of the lack of demand, even if the causes of the demand shortage change in his writings.

Like most of the authors reviewed, Guthrie and Tarascio (1992) conclude that although Keynes acknowledged the ongoing structural transition in the economy already in 1919, it was not until 1925 that he linked it to a permanent lack of growth. Schumpeter’s first

thesis is therefore confirmed. As for thesis 2, “is substantiated *if we* define secular stagnation more broadly to incorporate secular changes that diminish the economy’s ability to adapt and to grow. There is sound justification for doing this. The documents from 1925 (perhaps even 1922) onwards reveal that Keynes clearly considered diminished economic growth to be *one part* of the structural transition to which mature economies in the twentieth century would have to adjust” (p.397). Hence, like Schumpeter, Lekahcman and Skidelsky, Guthrie and Tarascio see a connection between structural change and stagnation in Keynes writings.

Skidelsky clearly states that, “in the GT Keynes claimed that an unregulated market, because of its stagnationist tendencies, kept resources scarcer than they would otherwise be” (2015, p. 183).

This interpretation seems consistent with some of the GT crucial points. First, Keynes makes clear that, in his view, the MEC (Marginal Efficiency of Capital) and its movements determine the cycle, sometimes even regardless the level of interest rates:

“I suggest that that a more typical, and often the predominant, explanation of the crisis is, not primarily a rise in the rate of interest, but a sudden collapse in the marginal efficiency of capital (...). Later on, a decline in the rate of interest will be a great aid to recovery and, probably, a necessary condition of it. But, for the moment, the collapse in the marginal efficiency of capital may be so complete that no practicable reduction in the rate of interest will be enough. If a reduction in the rate of interest was capable of proving an effective remedy by itself; it might be possible to achieve a recovery without the elapse of any considerable interval of time and by means more or less directly under the control of the monetary authority. But, in fact, this is not usually the case; and it is not so easy to revive the marginal efficiency of capital, determined, as it is, by the uncontrollable and disobedient psychology of the business world. It is the return of confidence, to speak in ordinary language, which is so insusceptible to control in an economy of individualistic capitalism” (Keynes, 2008 [1936])

Second, he admitted that the underlying forces that determine the schedule of the marginal efficiency of capital have changed since the XIX century:

“I suggest, however, that there are certain definite reasons why, in the case of a typical industrial trade cycle in the nineteen-century environment, fluctuations in the marginal efficiency of capital should have cyclical characteristics” (chapter 22, II)

“During the nineteenth century, the growth of population and of invention, the opening-up of new lands, the state of confidence and the frequency of war over the average of (say) each decade seem to have been sufficient, taken in conjunction with the propensity to consume, to establish a schedule of the marginal efficiency of capital which allowed a reasonably satisfactory average

level of employment to be compatible with a rate of interest high enough to be psychologically acceptable to wealth-owners.

(...) To-day and presumably for the future the schedule of the marginal efficiency of capital is, for a variety of reasons, much lower than it was in the nineteenth century. The acuteness and the peculiarity of our contemporary problem arises, therefore, out of the possibility that the average rate of interest which will allow a reasonable average level of employment is one so unacceptable to wealth-owners that it cannot be readily established merely by manipulating the quantity of money". (chapter 21, VII)

Third, Keynes 'psychological law' suggests that rich economies will face difficulties in finding outlets for the excess saving:

"This analysis supplies us with an explanation of the paradox of poverty in the midst of plenty. (...) Moreover the richer the community, the wider will tend to be the gap between its actual and its potential production; and therefore the more obvious and outrageous the defects of the economic system. For a poor community will be prone to consume by far the greater part of its output, so that a very modest measure of investment will be sufficient to provide full employment; whereas a wealthy community will have to discover much ampler opportunities for investment if the saving propensities of its wealthier members are to be compatible with the employment of its poorer members. If in a potentially wealthy community the inducement to invest is weak, then, in spite of its potential wealth, the working of the principle of effective demand will compel it to reduce its actual output, until, in spite of its potential wealth, it has become so poor that its surplus over its consumption is sufficiently diminished to correspond to the weakness of the inducement to invest. But worse still. Not only is the marginal propensity to consume weaker in a wealthy community, but, owing to its accumulation of capital being already larger, the opportunities for further investment are less attractive unless the rate of interest falls at a sufficiently rapid rate (...)" (Keynes, 2008 [1936], pp. 26,27).

Therefore, although there is no explicit reference to secular stagnation, there is ground to support some of Keynes' interpreters, such as Skidelsky, that argue that the *General Theory* has implied a view of the stagnationist tendencies of the modern economies.

In 1937, Keynes writes probably his most quoted work in the debate of secular stagnation. The *Eugenics Review Lecture* has the reputation of having anticipated some of Hansen's arguments in his theory of secular stagnation. The central point is the claim that population growth is essential to expand the market, create investment opportunities and confidence. Without it – like Keynes believed it was happening – the ageing of the existing population would cause higher levels of saving and less demand (investment and consumption). Without the appropriate responses – increased consumption by means of a redistributive policy and lower interest rate – full employment may not be achieved.

There is no intention here to discuss the details, contradictions or historical development of Keynes economic thought. The important is to retain some of his most important contributions to the debate we have in hands: stagnation. It seems clear that Keynes didn't develop a concrete theory of secular stagnation. However, he was, since the beginning, well aware of the structural changes undergoing in the mature capitalist countries. Mostly until the 30's his work covers most of the social and institutional factors that we can find in Hansen as the main drivers of stagnation after the XIX century. After the 30' the analysis becomes more 'refined', as Keynes moves from a framework in which only short run monetary disturbances can affect the - otherwise permanent - state of full employment to more complete theory of investment.

After the *General Theory*, underemployment is not anymore considered to be an exception but the normal outcome of an economy incapable of generating and directing investment flows into productive areas. Keynes explicitly outlined a theory in which richer countries saving habits – in face of the tendency of MEC to decline and the difficulty of bringing down the long-term interest rate – would prevent the output from reaching its potential. This is the may reason why, for some Keynesians, Keynes psychological law is in the origin of modern stagnation theories (Smith, 1949).

The secular tendency for a decline in the MEC constitutes the central element in an otherwise very incomplete theory of the long-term development of capitalism¹³. To understand its behaviour in the long run we need first to review the concept – as Keynes envisaged it. The Marginal Efficiency of Capital is defined as “being equal to that rate of discount which would make the present value of the series of annuities given by the returns expected from the capital-asset during its life just equal to its supply price” (2008 [1936], p.88). The production of an additional unit will be carried as long as this rate exceeds the rate of interest, which is, as long as the return from creating a new capital fixed asset exceeds the advantages of using the same money in a different way (lending it or buying an existing asset).

In 11th Chapter of the *General Theory*, Keynes presents investment decisions depending on the relation between the supply and the demand price of a capital asset. As we have stated before, the MEC is the relation between the expected yields from an asset and the costs associated with its replacement, or its supply price. Changing the terms of the equation we get that the supply price equals the (annualised) prospective yields discounted by the MEC¹⁴. If one considers S to be the outlay or investment expenditure, and q_i as the sum of the expected future revenues net of variable costs, and ρ as the rate that brings both together, or the MEC, the expression would be:

¹³ The practical meaning of Keynes idea doesn't differ much from the very known theory of the falling rate of profit, already present in the works of Adam Smith, Karl Marx, David Ricardo or Stuart Mill. While Ricardo and Mill associated the tendency to the exhaustion of natural resources, Adam Smith, connected it the abundance of capital in modern societies. As for Marx, the law of the declining rate of profit is associated to the inner functioning of capital itself.

¹⁴ Keynes defined the MEC as the element that equals the supply price and the expected returns of an asset, so that, for example, if a set of projects have the same prospective yields but increasing supply prices, the marginal efficiency of each project should be descendent. In the same way, if with descendent prospective yields but equal supply prices, the rate of return should also be descendent.

$$S = \sum_{i=1}^n \frac{q_i}{(1+\rho)^i}$$

The market value of an investment, or its demand price, is thus given by the sum of the prospective yields discounted at the market rate of interest. In sum, the lesser the interest rate, the greater will be the demand price. As the demand price grows, the number of projects for which the demand price exceeds the supply price will also grow (which means that the MEC exceeds the market interest rate), and new investment will take place.

Both the interest rate and the MEC participate in the same process but are independently determined. The interest rate is the result of the prevailing liquidity preferences and the existing quantity of money. It is, according to Keynes, a rather 'sticky' variable, with limited impact on investment. On the other hand, the marginal efficiency of capital depends on the costs of replacing capital and on prospective yields, which are highly unstable, especially in the long-term.

Two further considerations should be added to this short summary of Keynes theory of the Marginal Efficiency of Capital. The first concerning the impact of financial markets on the inducement to invest, and the second concerning its long-term interpretation.

The mere trade of stocks and securities is a balance sheet operation with no impact in terms of real investment. However, Keynes considered that the stock prices at any moment determined the inducement to invest. The higher the market price of a particular stock, the higher would be the marginal efficiency of capital in that sector in relation to the existing interest rate. Since the marginal efficiency varies according to the expectations on future yields that are, in turn, the result of speculative decisions, financial markets contribute decisively to the precarious nature of the investment cycle. All the innovations that enhance financial market activity and contribute to separate management from ownership tend to aggravate this process.

In the long run, one can expect that these cyclical variations will occur around a declining MEC, as prospective yields fall with the increasing accumulation of capital assets in the economy. As long as these rates are still higher than the market interest rate, investment will continue albeit at a slower pace. However, once the interest rate reaches a zero bound, there will be no impediment to capital asset creation and the abundance of capital assets will pull the marginal efficiency to zero¹⁵. This tendency might be offset by the type of special conditions observed in the XIX century, but not eliminated.

3.4. Kalecki theory of investment: going where Keynes didn't

Kalecki reviewed Keynes' General Theory in 1936 but its translation to English was only published in 1982 (Kalecki, 1990 [1936]). The review identifies two blocks in Keynes'

¹⁵ Keynes believed that in the long run, as the MEC tends to zero, the mere ownership of capital assets would stop rendering an income. This 'euthanasia of the rentier' would have to occur with a previous fall in the interest rate or wealth owners would prefer to invest in buying debts instead of capital assets.

book. One dedicated on the determination of short-term equilibrium, with a given level of investment and a known ‘production apparatus’. The second focused on long-term determination of the volume of investment. While the first deserved Kalecki’s recognition (he had reached similar conclusions), the second was more problematic:

“It seems that the first problem [the determination of short period equilibrium] has been solved in Keynes’ theory very satisfactorily (...) The matter is quite different as far as the second fundamental problem is concerned, namely, the analysis of the factors determining the level of investment. It is not only the exposition, but the construction itself, that reveals serious deficiencies, so that the problem remains, as we shall see, at least partially unsolved” (Kalecki in Targetti and Kinda-Hass, 1982, p.245).

One of the main deficiencies, pointed by Kalecki but also Robinson (1962), in Keynes long-term investment theory was its dependence on the concept of the Marginal Efficiency of Capital. As explained above, Keynes defined the MEC as the rate that equalises the expected net revenues of a project with its outlay, or supply price. In Keynes’ long-term theory, the higher the rate of planned investment, lower the MEC, for two reasons. First, given a determined level of installed capacity, the marginal cost will increase with the production of capital goods due to the upward pressure on money wages and diminishing returns to factors of production. Second, current investments increase future installed capacity diminishing the expected returns of future profits.

Recall the expression:

$$S = \sum_{i=1}^n \frac{q_i}{(1+\rho)^i}$$

Hence, in Keynes theory, an increase in investment expenditures in the short term would rise S and require lower levels of ρ , until the moment when ρ would equal the money rate of interest. After that point there would be no incentive to invest. In the same fashion, an increase in today’s investment will lower q_i , requiring future ρ to decline. And here we find Keynes’ arguments for a declining MEC and, consequently, a declining rate of investment in the long term.

Harcourt (2006) introduces Kalecki and Robinson’s critiques to Keynes’ theory of investment by questioning the rational expectations sort of argument present in the two assumptions. First, the equilibrium condition of $\rho = r$, requires investors to use, in their current calculations of expected profits, future equilibrium prices of capital goods. The same reasoning underlies the assumption that present investment will increase the future supply in face of a constant demand schedule, causing prices to decline (lower q_i). Considering, as Keynes did, that present experiences are the best forecast for an unforeseeable future, it is difficult to understand how an increase in the supply of capital goods won’t imply higher expected long-term demand as well.

Contrary to Keynes, Kalecki rejected a static view of investment dynamics where investment is affected by expectations without changing those expectations in turn. Alternatively, he distinguished between *ex ante* and *ex post* facts in relation to investment

decisions. The marginal efficiency of capital is an *ex ante* determinant of investment whereas prices are the *ex post* result of investment. Following this line of thought, if profits are determined by past investment (as Keynes and Kalecki believed), and if the MEC represents the rate of discount of expected profits, then the increase in investment won't lead to a decrease in the MEC. The conclusion is that there is no position of equilibrium for investment, and its behaviour in the long-term is determined by a chain of short-term changes in the economic activity.

Kalecki put together, instead, a theory in which the rate of investment depends, not on rational expectations on future prices, but on the financial conditions faced by firms, the exiting stock of capital and prospects of future profits. Another distinction in relation to Keynes theory is the denial of an environment of perfect competitions, which is replaced by a world where *power* takes the stage. Kalecki's considerations on power included the introduction of concepts such as the *market power*, referring to the capacity of large, oligopolistic firms, to determine mark-ups and, as a consequence, the functional distribution of income; the *power of workers*, meaning the bargaining possibilities for workers to influence their share in the distribution process; but also the *political power* of capital, as a class, to influence the policies in place.

In his famous article *The Political Aspects of Full Employment* (1943), Kalecki explores the existence of a *political business cycle*, which is, the possibility of individual (in the sense of individual representatives of the business class) being able to determine economic policy in such a degree that shapes the conjectural business cycle. In Kalecki argument, presented in the context of the world economy in 1943, the possibility of having policies capable of achieving full employment through public spending was undermined by the will of a coalition between rentiers and big business. Even if this result seems at odds with the overall economic interests of the business class (since it would produce higher levels of income) three reasons determine their opposition to it: i) dislike by the idea of the government interfering in employment as such; ii) dislike by the way public resources are being spent; iii) the concerns over the result of such policy in terms of changes in the balance of power between workers and capital:

“As has already been argued, lasting full employment is not at all to their liking. The workers would ‘get out of hand’ and the ‘captains of industry’ would be anxious to ‘teach them a lesson’. Moreover, the price increase in the upswing is to the disadvantage of small and big rentiers, and makes them ‘boom-tired’.

In this situation a powerful alliance is likely to be formed between big business and rentier interests, and they would probably find more than one economist to declare that the situation was manifestly unsound. The pressure of all these forces, and in particular of big business -- as a rule influential in government departments -- would most probably induce the government to return to the orthodox policy of cutting down the budget deficit. A slump

would follow in which government spending policy would again come into its own.” (Kalecki, 1943, pp.329,330)

In its essence, Kalecki’s main argument in *The Political Aspects of Full Employment*, is not far from Veblen’s notion of *sabotage*. While Veblen considered the pecuniary interests of individual capitalists engaged in competition wars and strategies to secure profits, Kalecki describes the political behaviour of capitalists to protect their *status quo* as a class. Nevertheless, the result is alike, as involves, in both cases, an impairment to the overall economic activity and welfare.

It is possible now to move to the more ‘technical’ application of the concept of power in Kalecki’s theory. As mentioned before, it is the degree of market power (degree of monopoly/oligopoly) that gives firms the capacity to set prices over costs. Given the existing balance of power between workers and capitalists, the chosen margin of prices over costs will determine wages and profits and, consequently, the distribution of income between both. Since investment decisions depend greatly on profits, firms with market and financial power will carry on the investment that determines aggregate demand and economic fluctuations. Kalecki’s ideas on oligopoly and investment decisions were the foundation of later theories of stagnation, like Steindl’s, and deserve attention.

Kalecki saw the society divided between capitalists (rentiers and entrepreneurs) and workers. Workers live on their wage, which, in Kalecki model, they spend completely in consumption goods. Capitalists spend part of their income, composed exclusively by profits, on capitalist consumption goods and save the rest to spend in investment goods (accumulation of fixed capital). The sum of gross investment (I), capitalists (C_c) and workers (C_w) consumption, plus the State spending (G) give us the gross national income (GNI), that should equal the sum of the associated expenditures: profits (P), wages (W) and taxes (T):

$$GNI = I + C_c + C_w + G = W + P + T$$

If workers spend all their income on consumption, $C_w = W$. If we then subtract government expenditures from taxes, we will get the fiscal deficit. Making the correspondent substitutions in the above equations, the result will be Kalecki profit equation:

$$P = I + C_c + (G - T)$$

If workers were allowed to save, the saving of workers ($W - C_w$) would have to be subtracted from the right-hand side of the equation, in the same way that the trade surplus would be added if the assumption of a closed economy were dropped.

The profits equation is an identity derived from national accounts, with no implied causality. However, Kalecki then notes that capitalists can decide what they will spend in each period in consumption or investment, but not what the future income associated with that spending (profits) will be. Assuming a stable propensity to consume of capitalists, that will balance workers saving, and considering that the fiscal deficit represents a small

part of the GDP, investment decisions are the main determinant of profits¹⁶. This means that aggregate investment and consumption decisions by capitalists determine their profits as a class (Kalecki, 1942). It also means that, collectively, it is the investment spending that generates the profits that can be saved, or used to repay bank credits. As an aggregate, investment isn't constrained by saving in the economy:

“capitalist expenditure ‘forces’ an income equal to the amount of this expenditure. Because this expenditure is formed by consumption and investment, and income is formed by consumption and savings, we can also say that investment ‘forces’ savings whose value is equal to the same value of this investment. Generally, the capitalists who invest are not the same ones who save. The investment of the former creates equal savings of the latter” (Kalecki in Targetti and Kinda-Hass, 1982, p. 249).

Individually, the amount of a firm's internal funds accumulated out of profits can limit investment, mostly in the case of small and medium enterprises. In the case of large corporations, the use of external finance mitigates this restriction but increases financial risk.

At the firm level, profits exist on a persistent basis because each department considered by Kalecki (workers consumption goods, investment goods, capitalists consumption goods) has multiples industries characterised by a certain level of oligopoly power (determined by market imperfections such as transportation costs, consumer sensitivity to price differences and product differentiation but also by the extent of collusion and the specific history of each industry)¹⁷.

Each production unit faces direct costs (materials and labour) and overhead costs (selling costs, depreciation, interests, and so on). Kalecki argued that up to full capacity average direct costs (and marginal costs) were constant while overhead costs declined with increasing levels of capacity utilisation. Given its degree of oligopoly, each firm establishes its price above (marginal) direct costs, so to cover overhead costs and profits, which constitute the Gross Profit Margin (GPM)¹⁸. This means that the share of profits in sales, such as the share of profits in national income depends on the oligopoly power of each firm¹⁹.

¹⁶ The process is similar to the Keynesian multiplier. Kalecki (2003 [1939]) divides the economy into three departments: investment goods (I gds), capitalist consumption goods (C_c gds) and workers consumption goods (C_w gds). The C_c gds department pays out the wages of their workers which come back as income, plus the income associated to the consumption of the workers in other departments. Their profit is then equal to the amount of wages paid in other departments. The profit in the other departments (I gds and C_c gds) equals their income less the cost of paying wages. But that cost, as we have seen, is in fact the profit of the C_w gds department. In order to obtain the total profits of the economy one can add up the individual profits of each department, or simply sum up the output (income) of the I gds and C_c gds departments. Using this method, expenditures in investment and capitalist's consumption goods will still equal the amount of profits. If, for some reason, there is an improvement in capitalist's expectations, production and employment in the I gds department will increase. As a result, workers will consume more, leading to more employment and output in the C_w gds dep. With higher investment and production, capitalists will also consume more, causing new positive spill over effects in the remaining sectors.

¹⁷ In his work on Cartels while in Poland Kalecki concluded that most industries operated below full capacity. His ideas on monopoly power evolved so that he explicitly assumed that perfect competition didn't exist in the economy. In 1938, he publishes *The Distribution of National Income in Econometrica*. In it, he points that monopoly is 'normal case' in capitalism and explores its consequences in the distribution of income.

¹⁸ Kalecki argued for a secular increase in the degree of monopoly.

¹⁹ Usually referred to as 'degree of monopoly', it can be defined as the difference between price level and marginal cost, divided by the price level.

Besides prices, firms also decide the level of investment to undertake. Investment decisions are based on the expected rate of profit of each project (in comparison with the interest rate plus a risk premium) and respect an endogenous limit, ‘the principle of increasing risk’ (Kalecki, 1937).

The idea departs from the understanding that investment must be financed, and that financing through internal funds or external borrowing is not equivalent in terms of costs or risk. Internal funds depend ultimately on the accumulation of profits from past investment and therefore depend on the capacity of a given firm to invest. Apart from previous profits, the greater the size of a firm’s own capital the greater its capacity to obtain borrowed money at a better price. Moreover, the risk of an excessive debt burden increases with the proportion of borrowed money in relation to the size of the firm. Kalecki main argument is that “the size of the firm thus appears to be circumscribed by the amount of its entrepreneurial capital both through its influence on the capacity to borrow capital and through its effect on the degree of risk” (Kalecki, 1971, p. 106)²⁰.

Returning to one of the initial ideas outlined in this section, in Kalecki, the level and rate of investment doesn’t depend, as in Keynes, on expectations of future prices or costs, compounded in an ever-declining rate of marginal efficiency of capital. The present conditions faced by actual firms, determine investment. This, according to Sawyer (1985) and to Targetti and Kinda-Hass (1982) constitutes a meaningful difference between Keynes and Kalecki’ theories of investment.

Finally, we can move to the determination of income and its distribution. Kalecki was particularly concerned about the impacts of a change in the degree of oligopoly in the distribution of income and employment. He predicted that the degree of oligopoly had a countercyclical nature: during a recession, less enterprises would attempt to enter the industry while the remaining ones would maintain prices despite the decrease in average costs, increasing the degree of market power. In the case of a boom, the stickiness of prices would compress profits margins, and the degree of monopoly, as direct costs go up. Real wages would vary according to the firms’ capacity to maintain price-profit margins across the business cycle, but would never determine those margins²¹. The ‘iron law of wages’ states that “given the volume of investment, economy-wide increases (or decreases) in money-wage rates would not alter the distribution of income between workers and capitalists, the worker’s real wage, or the level of aggregate economic activity if the degree of monopoly for all enterprises remains fixed; all that would happen would be an increase in the money wage rate and hence any demand impact on economic activity” (Lee, 1998, p.151).

Kalecki saw the rate of technical progress as a requirement for firms to increase their investment expenditures but also a factor that contributed to enable the size, concentration and market power of firms. In the end “for a full employment economy, there has to be the right balance between the degree of monopoly and the level of investment. The degree

²⁰ Recall that Kalecki views money as endogenous, which means that the money stock is ultimately determined by firms demand for loans.

²¹ Real wages are then determined by the encounter of money wages (the result of workers’ power) and prices (the result of firms’ market power)

of monopoly serves to determine (given foreign prices and fixed costs) the share of profits in net output. At the full employment level of output a particular level of savings would be generated, depending upon the division of income as between wages and profits, which in turn would depend on the degree of monopoly and the propensity to save out of two types of income. For full employment to be secured the level of investment would have to be equal to the level of savings” (Sawyer, 1985, p.86). However, this was not the scenario one could expect from advanced capitalism, since “Kalecki argued that when the historical development of capitalism reached an advanced stage there would be a significant increase in enterprise size and hence in concentration” (Lee, 1998, p. 151). Higher degree levels of oligopoly would depress workers’ wages and, therefore, their capacity to consume. The corresponding decline in national income would then have a negative impact on profit expectations declining investment and future income even further, while increasing even further the market power of the existing firms.

3.5. Steindl response to Kalecki’s challenge

“On one occasion, I talked to Kalecki about the crisis of capitalism. We both, as well as most socialists, took it for granted that capitalism was threatened by a crisis of existence, and we regarded the stagnation of the 1930s as a symptom of such a major crisis. But Kalecki found the reasons, given by Marx, why such a crisis should develop, unconvincing: at the same time he did not have an explanation of his own. I still do not know, he said, why there should be a crisis of capitalism, and he added: Could it have anything to do with monopoly? He subsequently suggested to me and the institute, before he left England, that I should work on this problem. It was a very Marxian problem, but my methods of dealing with it were kaleckian” (Steindl, 1985).

Steindl accepted the intellectual challenge posed by Kalecki and developed a long-term theory of growth based on Kalecki investment theory and its main elements: relative indebtedness, past savings and degree of capacity utilisation. The result was published in 1952 under the name *Maturity and Stagnation in American Capitalism*. In it, Steindl offers an endogenous explanation of the economic trend based on the premise that the accumulation of business savings (internal accumulation) induces investment that generates future savings so that, in practise, investment generates investment: “The most important feature of this explanation of the trend is that it is an *endogenous* theory. It starts from the conviction that in order to explain the historical phenomenon of growth of capital it is not necessary to have recourse to external influences, such as innovations, population growth, wars, etc.” (Steindl, 1976 [1952], p. 192).

The book opens with a discussion of what determines the firms’ excess capacity, and its impact on investment decisions. Steindl proceeds with a discussion of the patterns of competition within industries and the processes under which oligopoly is formed. There

are two distinct situations: one of a competitive industry (with several small producers) and one of an industry where the entry is difficult (oligopoly).

In the first type of industry there are several firms with different sizes and, hence, due to economies of scale, different profit margins. The group formed by the lowest size firms is subject to ‘normal profits’ and faces the strong competition of new entrants. The group of larger firms, which obtains more than normal profits and is more likely to develop cost-reducing techniques, faces better conditions to expand relatively to the group of small firms. If the industry, as a whole, expands at least as fast as the group of ‘progressive firms’²², then the share of the small firms in the industry can be kept. If the opposite happens, the later will lose part of their share of the market to the former. This additional share of the market can only be captured if the group of progressive firms engage in some kind of *sales effort*²³ and, hence, reduce their profit margin by an amount equivalent to a part of the initial advantage given by the initial innovations. There is a special case in which the internal accumulation of large firms surpasses a certain limit and their expansion can only happen at expense of the existence of other (small) firms: “There will be then be *absolute concentration*, i.e. an elimination of a certain number of existing firms. (...) We are dealing essentially with a long run phenomenon, and therefore with an elimination which may occur neither in boom or slump, but which is *not* reversible, because price-cost relations established do not permit the re-entry of similar firms” (ibid., pp. 43, 44).

This process of absolute concentration will come to an end when the sales effort by progressive firms causes a decline in the industry profit margins. This decline will bring the rate of internal accumulation back to a level consistent with industry rate of expansion.

“The conclusion is then that the rate of internal accumulation and consequently the net profit margin at given levels of capacity utilisation will *tend* to a (maximum) level determined by the rate of growth of the industry, the rate of capital intensification²⁴, and the rate at which existing capacity is being eliminated” (ibid., p.51).

In other words, the accumulation of internal funds generates a competitive pressure that imposes limits to the share of profits in the product and brings about processes of absolute concentration.

In the second type of industry even the marginal firms have ‘abnormal profits’, which make them more resistant to any attempt by the progressive firms to throw them out of the market. For a price war to be effective, progressive firms will have to cut prices by an amount that exceeds marginal firms net profit margin at a given level of capacity utilisation. Since this strategy would probably offset any partial gains coming from cost cut innovations, it is not likely that progressive firms will choose it. In oligopolistic industries, “the internal accumulation therefore tends to exceed the amount required for

²² ‘Firms which initiate new methods (Steindl, 1976 [1952], p.45)

²³ Sell at lower prices, engage in quality competition or invest in advertisement.

²⁴ “Capital intensification proved an outlet of funds in the industry, just like the expansion of the industry does” (Steindl, 1976 [1952] p. 48)

expansion of capital equipment in these industries. The flow of the ‘surplus’ funds into other industries is impeded by the additional effort required for entering new lines which weakens the incentive to invest for the owners of these funds” (ibid. p. 55).

Chapter IX extends the analysis outlined above to the economy as a whole. Investment is presented as a function of the internal accumulation of the firm, the degree of utilisation of capacity, the gearing ratio (relative indebtedness) and the rate of profit. The rate of growth of capital affects these factors in a transversal way. If, for example, there is a decline in the rate of growth of capital, internal accumulation will be reduced as a consequence of a reduction in the rate of profit. If competitive industries prevail, the adjustment that allows the profit rate to fall will take place without a reduction in the degree of capacity utilisation (competition through prices and elimination of marginal firms). However, in the case of mostly oligopolistic industries, there is no mechanism to bring the rate of profit down, and the result will be the decline in the degree of capacity utilisation that doesn’t come without a fall in national income and employment. Unemployment weakens effective demand increasing even more the excess capacity and forcing new cut backs in investment. The effects of this further reduction in effective demand will be felt in both types of industries – competitive and oligopolistic – however, while in the former the result will be a reduction in the profit rate²⁵, in the second utilisation will be reduced so to maintain the rate of profit. The result will be a shift from profits from the competitive to the oligopolistic sector. The investment lost in the first sector won’t be compensated by new investment in the second, causing total investment to decline.

“The conclusion is that the maldistribution of profits and internal savings consequent on the growth of oligopoly will have a depressing effect on the rate of real capital accumulation” (ibid., p.127).

In sum,

“Stripped down to its fundamentals, Steindl’s *Maturity and Stagnation* argued that monopoly capital could use its control of markets to prevent the elimination of excess capacity in industry. In competitive capitalism, getting rid of excess capacity is the precondition of an economic recovery when firms’ investment restarts, if only to replace worn-out equipment. According to Steindl, corporations continue operating under excess capacity, covering the higher costs of that excess from their monopoly profits. However, the unused capacity discourages fixed investment in the economy, and hence maintains a regime of economic stagnation due to under-investment” (Toporowski, 2016).

Steindl also tries to address the impact of the development of the joint stock system on the trend of capital accumulation. He suggests that there are two contradictory effects.

²⁵ This process of falling rates of profit is worsened by the effect that unexpected declines in the rate of internal accumulation have on the gearing ratio of firms, especially the most fragile. The argument is presented in the following way: “Assuming that outsider savings are relatively inelastic, the further drop in the accumulation of real capital will not be accompanied by a corresponding drop in the accumulation of outsider savings, and consequently internal accumulation must drop more than total capital accumulation, and the entrepreneurs will find that their relative indebtedness (gearing ratio) continues to grow” (Steindl 1976 [1952], p.114).

First, it makes it possible to increase internal savings (accumulation) by issuing new shares. However, this positive impact on investment may be offset by the distribution of dividends and high wages which increase outside savings. There was a period when the first effect prevailed, counteracting the tendency of the rate of profit and of capital growth to decline. However, by the time the book was written, that effect was exhausted.

Finally, other types of accumulation besides private business investment (budget deficits, residential house building and foreign investment) are considered. In this case, a fall in business accumulation can be compensated by borrowing in other sectors, as to avoid an excess of outside savings in relation to the degree of accumulation. Steindl argues that this 'compensatory borrowing' will be able to prevent the ratio of total saving to business capital to rise, and therefore, to avoid an increased gearing ratio. However, it cannot stop the profit rate from falling. Non-business capital (or debt capital) grew as a consequence of the decline in business accumulation and rise of compensatory borrowing due to war efforts, rise in consumers debt and deficit finance by governments during the Great Depression.

Concluding,

“Stagnation didn't come over-night. Preceding it there had been a long process of secular change, which passed almost unnoticed, because memories are short and comparisons over long periods are difficult to make. Hardly anybody during the 'New Era' was aware of the fact that the annual rate of growth of business capital then was only half of what it had been thirty years earlier!” (op. cit., p.166).

In the introduction to the *Monthly Review* reprint of *Maturity and Stagnation*, written in 1976, Steindl adds a third argument and modifies a structural assumption. The argument, not present in the book, “does not depend on oligopoly, but on the growth of big business generally. It says that the preference for safety increases with size, and that profit is bartered for safety, with resulting reluctance to go into debt and a consequent weakening of the incentive to invest” (ibid, p. xv). The structural assumption that is dropped concerns the role of technological developments on accumulation and the possibility that the primary decline in the accumulation of capital might be related to the exhaustion of the long technological wave that went from the Industrial Revolution to the maturity of the railway age.

3.6. Veblen, Kalecki and Steindl in the Monopoly Capitalism Theory

The finance-monopoly capital theory provides an explanation for stagnation in modern economies based on the very contradictions of capitalism. In short,

“[it] is a theory which, stripped to its barest essentials, sees the mature monopoly capitalist economy as one that is subject to, and indeed dominated by, a basic contradiction: the very growth of its productive potential puts insuperable obstacles in the way of making full use of available human and

material resources for the satisfaction of the needs of the great mass of the population. What this means is (1) that in the absence of sufficiently powerful counteracting forces, the normal state of the economy is stagnation; and (2) that the real history of the system in its monopoly capitalist phase is determined by the interaction of the tendency to stagnation and the forces acting counter to this tendency” (Magdoff and Sweezy, 1987, p.23).

In the words of Kalecki,

“the tragedy of investment is that it causes crisis because it is useful. Doubtless many people will consider this theory paradoxical. But it is not the theory which is paradoxical, but its subject - the capitalist economy” (2003 [1939], p.149).

According to the Marxist reproduction scheme, the generated surplus will only find enough investment outlets if the department of means of production is growing faster than the department of consumer goods. As the stock of capital builds up, the previous condition is less likely to occur and every new cut in investment or increase in the rate of overexploitation of the working class will only aggravate the problem. Demand won't be enough to realise the surplus value, which is, to buy back all the potential output.

The system has, however, found new forms to offset this constant tendency to stagnation, which Baran and Sweezy denominate *waste*, a concept that resembles Veblen's idea of 'wasteful expenditure': marketing and all types of sales efforts; public spending, especially on defence; consumer debt and financial activities²⁶.

The poor treatment the financial sector received in 1966 Monopoly Capital was compensated in a series of subsequent writings, mostly with the contribution of Harry Magdoff²⁷. Finance became, in the monopoly theory, the most important form of 'systemic waste'. It can have, as it is recognised, a partial positive effect on production and employment, due to the 'wealth effect'²⁸ but in the long-term will always be a destabilising force. It will moreover be the source of new contradictions since the accumulation of financial gains is the source of bubbles which tend inevitably to burst. The concentration of financial wealth has also important impacts, aggravating the already unequal distribution of income.

From the end of the XIX century, with the development of large corporations, the issuance of several type of securities and the growth in stock markets, the productive areas became more and more intertwined with the financial sphere, that rose proportionally more than the first. Contrary to the common thinking: “there is no presumption, let alone assurance, that money invested in any of these instruments will find its way, directly or indirectly, into real capital formation. It may just as well remain in the form of money capital

²⁶ Veblen, already in 1902, understood the possible effects of productivity increasing technologies in terms of capacity utilisation: “Wasteful expenditure on a scale adequate to offset the surplus productivity of modern industry is nearly out of the question. Private initiative cannot carry the waste of goods and services to nearly the point required by the business situation. (...) But however extraordinary this public waste of substance latterly has been, it is apparently altogether inadequate to offset the surplus productivity of the machine industry, particularly when this productivity is seconded by the great facility which the modern business organisation affords for the accumulation of savings in relatively few hands (Veblen, 2013 [1904], pp. 255-57).

²⁷ See Magdoff and Sweezy (1972, 1984) and Sweezy and Magdoff (1983).

²⁸ Financial gains increase capitalist's consumption and, therefore, the chances of surplus absorption.

circulating around in the financial sector, fuelling the growth of financial markets which increasingly take on a life of their own” (Magdoff and Sweezy, 1987, p.97).

Non-financial corporations were a crucial part of this process. Not because finance eroded productive investment but because “unable to find profitable productive investment opportunities in the face of excess capacity and flagging demand, they have been eager participants in the merger, takeover, and leveraged buyout frenzy that has swept the country in recent years, becoming in the process both lenders and borrowers on an enormous scale” (ibid. p. 17).

Hence, Magdoff and Sweezy criticise orthodox economics for its poor understanding of money and financial factors. It isn’t possible, as it was suggested by the mainstream theories of the 80’s, to separate the economy into a real and monetary world, so that money won’t interfere with ‘real’ production decisions. Instead, the distinction should be between one productive base and one financial superstructure. The content is that the financial realm can expand while the productive one remains stagnant. In face of idle capacity and stagnant demand, excess money will most like end up contributing to a process of price-asset inflation in financial markets.

We can then summarise the monopoly-finance theory by adding the previous inputs of Steindl and Kalecki to the contributions of Baran, Magdoff and Sweezy. Monopoly finance capital has the capacity to generate a great amount of profits²⁹ which will translate in excess saving and capacity³⁰ and a corresponding lack of investment opportunities. The result is the production of waste which can mask the problem for a certain period, but won’t solve the inner contradictions of the system so even the supposedly successes of the financialised capitalism are not but a reflex of stagnation.

This is not to say that we won’t find specific sectors expanding rapidly: “where vigorous markets exist (...) money is available and investment is flourishing” (Sweezy and Magdoff, 1987, p. 58). This won’t be enough, however, to compensate for the excessive capacity in the manufacturing industries in general. Mostly because these new industries, like new electronics and communicating technologies, have minor effects in terms of manufacturing and have mostly helped to expand finance even further:

“It is the nature of an investment boom to exhaust itself. But it is equally clear from the experiences of the 1930s and the 1970s that the stagnation phase of a long wave does not generate any “forces of reversal.” If and when such forces do emerge, they originate not in the internal logic of the economy but in the larger historical context within which the economy functions” (Baran and Sweezy, 1966).

4. Capital Accumulation and Stagnation: A framework

²⁹ It is in fact an hierarchy of profits rates according to the size and relative power of each firm.

³⁰ Since adjustments won’t happen by means of price changes but chosen levels of capacity utilisation.

4.1. A critical view on the nature of capital and its accumulation

It was made clear, by now, that the study of long-term stagnation should be placed within the process of capital accumulation and concentration. However, these concepts are far from consensual.

Capital has had many faces and meanings in the economic literature, depending on school of thought, but also on the context and methodological necessities of the moment. Consider, as an example, the use of the term ‘capital’ by Joan Robinson. Although she certainly understood and defended the political and immaterial nature of capital, she has also referred to its accumulation as a growing stock of physical goods (whether measured in market value or labour-hours). The same definition is, by rule, used in all type of post-Keynesian growth and distribution models. The reason is of practical nature: any other definition would be of difficult statistical treatment, especially if the purpose is to measure capital’s productive contribution.

The ambiguity around the concept of capital, as well as its confusion with a stock of fixed assets – a production factor -, is a source of misunderstandings. Namely, it has served to argue that accumulation and concentration of capital are equivalents, or necessary conditions, to an increase in production and economic growth.

Keynes investment theory suggests that, in the long term, the accumulation of capital – in the sense of investment in fixed assets – will lead to a decline of its marginal efficiency and, therefore, on the inducement to invest. However, this accumulation is seen as a macroeconomic aggregate, without any consideration on the property system behind and underlying it. In fact, the theory is built on the assumption of perfect competition. Moreover, the mechanisms by which the Marginal Efficiency of Capital is supposed to be brought to a long-term decline require gifts of perfect foresight.

These shortcomings were identified, and avoided, in Robinson, Kalecki and, later, Steindl contributions. The long-term result is similar, but the method is different. In the presence of oligopoly power, the system will remain in a situation of excess capacity and under-investment. Capitalists make investment decisions based on the concrete conditions of the moment and not to match today’s costs with future hypothetical equilibrium prices.

One important - and often disregarded - question is, thus, formation and meaning of such oligopolistic power. It shouldn’t be matter of disagreement to state that oligopolies, or large dominant firms, are the outcome of a process of concentration and accumulation of capital. However, as their power isn’t just the power to produce and set prices in a market economy, it is also political, social and financial power; the process of concentration and accumulation isn’t just the collection of larger stocks of physical assets. More so if one considers that, today, the power of companies like *Amazon* or *Google* is not based on their large stocks of industrial assets.

It is necessary, therefore, to go back to a broader definition of Capital, in the light of Veblen and Robinson’s ideas. Capital must be understood as an economic but also socio-political entity, with a dual nature.

In form capital is, as it can only be, money. Money as finance, or debt, embodied in tangible and intangible assets, in stocks issued or in the financial assets kept in the balance sheet. Capital as money can be measured using the par value of a certain balance sheet or, more correctly, its market value – or capitalisation. Capitalisation is the process by which the capitalist system converts different aspects of the society, more or less linked to the economic or financial realm, into universal money quantities (Nitzan and Bichler, p.166). In this sense, capital is ‘capitalised presumptive earning capacity’ (Veblen) and “for the capitalist, the real thing is the *nominal capitalisation of future earnings*. This capitalisation is not ‘connected’ to reality: it is the reality” (ibid., p.182).

In substance, capital is power, or dominance. Power to control and dominate the production process, to influence and determine public policies, to exploit labour and shape the process of social reproduction.

The accumulation and concentration of capital is, therefore, the accumulation and concentration of capitalised wealth and power. In certain periods in history the capitalist drive for accumulation and concentration matches the accumulation of fixed ‘productive’ assets and the development of the productive system. However, contrary to the neoclassical - and its modern interpretations - beliefs, the accumulation of capital in hands of the ‘Captains’ is not a pre-condition of more or better investment. On the contrary, in the long run, or for long periods of time, a counterproductive accumulation process can emerge, as the pecuniary and strategic interests of the capitalist class damage economic stability and the general welfare.

Given this clarification, two questions arise. The first question is how the accumulation and concentration processes take place, historically. The second concerns the economic impacts of such processes.

4.2. The historical process of capital accumulation and concentration

In Steindl and Kaleckian theories, monopoly power is determined by the capacity to set mark-ups. The mark-up price theory explains – from the strict point of view of the firm - how the monopoly power is exerted but not how is formed. The formation and reproduction of large conglomerates differs between different historical and socio-political contexts:

“The potential rate of profits on capital arises from differing power and social relationships in production, and the realisation of profits is brought about by effective demand associated with saving and spending behaviours of the different classes and the ‘animal spirits’ of capitalists. The rate of profits is thus an outcome of a historically specific accumulation process” (Cohen, 2014, p. 1505).

Toporowski (2016) also argues that accumulation and concentration are more than the outcome of the production process, and points to the important role of capital markets:

“Monopoly is not the outcome of operations in markets for goods and services, where monopolists may happen to have a dominant position, but is instead the result of their operations in the capital market. The dominant corporations of today, such as General Electric, Tata, Boeing, or Microsoft, did not achieve their pre-eminence through their ability to produce electrical equipment, steel, aircraft, or software better than their competitors, but by buying up those competitors in the stock market” (Toporowski, 2016).

The process accumulation and concentration of capital requires combinations of three main elements - finance, the State, and family heritage - and one ancillary - fraud.

Finance plays a crucial role in the process. Capital market operations allow large firms to turn into conglomerates, as they satisfy two simultaneous necessities: the generation of financial means through debt and the transformation of property into liquid assets. As pointed by Steindl, larger companies can issue shares at relatively lower yields, facilitating processes of ‘financial concentration’. Holding company structures allow new share issues avoiding the risk of diluting the shareholder control of the dominant firms. Corporate Finance developed to manage these large and complex structures, with three goals. The first is to minimize, or save, equity. The second is to maximize leverage and to keep a constant flow of financial payments to sustain the debt structures. The third is to obtain short-term financial gains through capital and stock market operations.

The second element, the State, is often disregarded in the post-keynesian analyses. As it has been thoroughly argued, the capitalist mode of production isn’t simply an economic or productive set of relations. It requires a legal, ideological, cultural and political superstructure that ensures its own acceptance, organization and reproduction. The State is crucial in the organization of this multileveled power, and it shouldn’t be seen as independent entity that has either surrendered or been co-opted by the Captains of Industry and Finance. Every nation is the exercise of national bourgeois political power (and its interaction with the working class), legitimized by the State. This idea was carefully explored by Veblen, who always understood the State as a social institution, inseparable from other economic institutions: “A constitutional government is a business government [. . .] representative government means, chiefly, representation of business interests.” Moreover, the identification between the State and the interests of the capitalist class is such that the interests of the later are often presented as those of the Nation: “The largest [. . .] factor of cultural discipline [. . .] over which business principle rule is national politics [. . .] Business interests urge an aggressive national policy and business man direct it” (Veblen 2013 [1904], 391).

In this conception, any Nation, or national social formation, is always the product of, and influenced by, the specific forms of organisation of capital under a State. Underlying these forms of organisation are those laws and relations that shape and coerce individual capitals into the greater functioning of the capitalist mode of production. Marx saw competition as a disciplinary instrument that pushes individual capitalists to follow act as a class. However, as described by Steindl, as the competition process occurs, especially among smaller units, there is also a concurrent development of concentration in the largest

companies and economic groups. This process isn't only 'natural', as it requires the coercive hand of the State to open up new territories and exploit natural resources, to operate in activities that constitute natural monopolies, to control and limit external and internal competition ensuring profit rates, to obtain public rents, etc. The instruments and ways of intervention are practically unlimited.

The 'family element' has also been absent from the literature. That fact was recognized in a special report on family companies published by 'The Economist' in 2015. While calling the attention to the importance of this type of companies - 40% of German and French companies with revenues above 1\$million a year – the Report also pointed to one of key issues to the accumulation process: "Academic theorists reflecting on the reasons why firms exist will need to add one more: their role as a mechanism for the transmission of property to future generations" (The Economist, 2015).

The transmission and enlargement of property and wealth from generation to generation is crucial to the concentration of capital in the hands of the Captains. Furthermore, as mentioned in the Report, the organization of the family fortune in pyramidal-style structures allows single large companies to be transformed in enormous conglomerates, with interests in different areas and industries. Furthermore, being part of a family conglomerate means, not only, the transmission of property, but also the reproduction of financial and political relations. In other words, family and heritage are also power instruments that should be accounted for in the analysis of the any specific process of concentration and accumulation of capital.

There is one fourth element, which has only been superficially mentioned by Veblen in his description of sabotage, that is fraud, or fraud-like behaviours. These practises are commonly used to enlarge market shares and destroy competitors; to raise funds and increase the companies' market capitalisation; to minimize tax payments or even to obtain the shareholder control of a specific conglomerate. Although it can be argued that fraud is equally available to all kind of individuals and firms, these practices, in their scope and complexity, are enabled by the concentration of financial and political power. On the other hand, they also serve that same process of concentration and accumulation. Fraud is certainly a more empirical than theoretical aspect of the functioning of the capitalist economic system. It is exactly the knowledge based on the recent experience – take the examples of the subprime crisis or the bankruptcy of the Espírito Santo Bank in Portugal - that advices to take fraud in consideration.

4.3. Capitalist Sabotage: how accumulation brings stagnation

One can now move to the second question: in what ways did the process of accumulation and concentration of capital affected the overall economic activity and contributed to generate stagnant tendencies. The key to the answer relies in the concept of sabotage, although not strictly in Veblen's terms. More generally, sabotage will be used to refer to the negative impacts of decisions based on the pecuniary and strategic interests of capitalists, concerned with their accumulation and concentration of capital.

In Kaleckian and Steindlian terms, sabotage materialises in the form of excess unused capacity – due to the prevalence of oligopolies - that can't be eliminated through the normal mechanism of competition. Excessive capacity discourages new investments and threatens the generation of demand necessary to realise future profits.

On the other hand, overcapacity cohabits with unemployment and downward pressure in wages, which contribute to lower demand through consumption spending. The growing importance of 'wasteful expenditures' as an escape route to rarer investment opportunities is present in the writings of Veblen, Steindl and the Monopoly Capitalism school.

In a famous debate with Schumpeter in 1947, Sweezy noted that the economic system has no automatic mechanism to adjust investment opportunities to capitalist's accumulation needs (Foster and McChesney, 2012). Once the chances for investment wear down relatively to the accumulation of 'investment-seeking surplus', these oligopolies (and the economy) will rely on external stimuli – government spending (mostly military), sales efforts and financial activities. Magdoff and Foster (2009), as well as Foster and McChesney (2012), followed up on Sweezy's stagnation theory to argue that the decline in real growth rates led to an increase in speculative activities – finance, insurance and real estate – responsible for higher shares of the GDP. Despite the focus on other activities, the economy remained in a situation of over accumulation, reflected in excess productive capacity, pressuring investment and employment down. A key aspect in the long-term situation of lower growth and stagnation is the continuous rise in mark-ups relatively to unit labour costs, or the continuous rise in the surplus capital relatively to the declining investment opportunities. The side effect of this turn to speculative activities is the generation of a permanent and systemic instability.

In the Monopoly (Finance) Capital theory of stagnation the causal relation goes from the decline in investment opportunities to the rise of finance and speculative activities as a 'compensation' mechanism. In the post-keynesian literature on financialisation, the argument seems to go in a slightly different direction. Both the shareholder and the internal means of finance effects describe the detrimental effects of finance on productive investment. The main idea, here, is of a crowding out effect of financial payments on investment expenditures.

Both theories have solid empirical and theoretical grounds, and the causality must not, and it is not, one directional. The development and growth of finance didn't occur at expense or as a consequence of the process of industrial development and maturity. It was, instead, part of that process. It was the means and, frequently, the aim of concentration and accumulation processes. Therefore, unless one believes in some kind of predisposition of the capitalist class towards 'productive' investments, other types of financial investments may as well serve the purpose of capital accumulation. Regardless of the technological conditions of production, it might be the case that the problem is not the limited supply of (fixed) investment opportunities, or its declining returns, but the unlimited or excessive supply of alternative and more profitable investments. The economic problem remains: without productive investment and consumption, how can

this surplus be absorbed without being locked in an upward spiral of debt-financed speculation?

This consideration brings back Kalecki and Steindl theories of investment, based on the principle of increasing risk. The core idea is related to Keynes theory of liquidity preference, however not as a determinant of the interest rate, but of investment decisions. As argued by Toporowski, “Kalecki’s principle of increasing risk, as developed by Steindl, suggests a liquidity preference theory of investment” (2005, pp.125,126).

The starting point is the idea that firms must regulate their capacity to meet future financial commitments or, in other words, that firms must regulate their liquidity. There are two ways to do it. The first is to manage investment decisions, postponing or anticipating new projects, according to the need to have more or less liquid reserves available. The second is through credit and capital markets, by borrowing or issuing new stocks.

If firms chose to reduce fixed investment to maintain reserves, Kalecki reflux theory suggests a cumulative negative effect on future investment due to a decline in profits. The second option is to finance the balance sheet through loans, bonds or stocks. Issuing new capital is the safest way to meet financial needs, but it is also expensive, largely reliant on demand and has the downside of diluting the existing shareholders’ position. Debt is, therefore, the most common solution. Although financing investment through borrowing is possible, the consequent increase of financial liabilities brings additional risk and higher future financial payments, putting more pressure on future investment projects. It should also be considered that there is no rule by which borrowing is linked uniquely to investment. Financial liabilities can be issued to back other financial investments, namely for speculative reasons, to take advantage of good market conditions, or to support concentration, through mergers and acquisitions. In this case, not only a decline in fixed investment relative to finance – financial assets and liabilities - can raise indebtedness, as predicted by Steindl, but the rise in finance relative to the same investment would have the same consequence. The overall long run result would be a downward tendency in investment: “In Kalecki and Steindl, the reflux of investment comes to profits, and external indebtedness increases by the amount by which investment fell short of saving” (Toporowski, 2005, p. 129).

Steindl theory of stagnation allows to take this reasoning further by questioning how this process affects firms according to their relative size, or power, in Kalecki’ terms. Here, too, coexist several cumulative depressing pressures on investment. Small and medium enterprises are less capable of having access to financial markets and finance investment mostly through retained profits. According to principle of increasing risk, their financial ‘elasticity’ is lower and, therefore, these firms are also more prone to use the postponement of investment projects to manage liquidity. Despite their rely on internal savings, they obtain a relatively smaller share of the return of past investments in the form of profits. This fact doesn’t imply that these companies are necessarily responsible for a smaller share of investment, only that the additional profits are unevenly distributed, in favour of large companies, according to their degree of monopoly.

The consequence of this process is the concentration of profits in a reduced number of companies, which won't be invested in the same proportion, generating a pool of condensed surplus. The overall effect is a decrease in investment and increase in indebtedness, or, in other words, the emergence of strong stagnation tendencies in the accumulation of fixed capital, even if capitalist accumulation proceeds and prospers.

5. Accumulation and Stagnation: preliminary notes on the Portuguese case

The development of capitalism in Portugal came hand in hand with the formation of a handful of powerful oligopolistic groups. This process of accumulation and concentration of capital can't be reduced to, or confused with, the accumulation of factors of production.

In the past hundred years, Portugal went from a colonial monarchy to a member state of the European Union. In between there were 40 years of dictatorship ended by a political and military Revolution. Despite these profound political and social changes, the origins of the main national economic groups in the verge of the Great Recession in 2008 are in the fortunes created in the late XIX beginning of the XX centuries. Throughout the decades, the strategies for accumulation and concentration have changed and adapted, from the exploitation of colonial markets to the exploitation of natural monopolies, like energy. They have, nevertheless, common elements, already identified.

The constitution of the main Portuguese fortunes is, in most cases, linked to direct privileges granted by the State, namely to explore the tobacco or money issuing monopolies. For decades, and centuries, these fortunes were protected and promoted by the power of the ruler. Whether during the monarchy, the fascist period or the subsequent liberal democracy, the State created and opened up new markets and business areas, sometimes by keeping colonial territories, or by conceding its own areas of activity to be exploited by private interests. It also created the rules that weakened competition and favoured concentration, most clearly during the fascist period, and protected profits, for example by subsidising prices. The most important national economic groups were always protected by and the product of political and state power.

Given the historical poor development of the Portuguese capital market, non-financial conglomerates fulfilled their deficient access to finance by guaranteeing the ownership of important national banks. To defend their shareholder structure from hostile take-overs, financial based groups were forced to expand, both in size and diversification of activities. The result was a rapid process of concentration in enormous mixed conglomerates that controlled an important share of the Portuguese GDP and economic activity. Apart from the State protection, the permanent and practically unlimited access to banking funds was crucial to achieve this outcome.

The family link tied financial and political power together, through time, guaranteeing its continuity and enlargement. Before the Revolution of 1974, the main private conglomerates shared same structure: on family, and two 'arms', one financial and one non-financial. After the nationalisations of 1974 and 1975, these conglomerates were dismantled and reorganised in large state-owned holding companies. Privatisations

promoted the return of most of the previous groups, albeit with different characteristics. The traditional structure of mixed conglomerates was lost in some cases, with exceptions. Nevertheless, the participation in the shareholding of banks, as well as the efforts to control these institutions remained as part of the strategy of the largest groups. This strategy was complimented by the growing importance of speculative holdings, sometimes to obtain short-term gains in the stock markets, but also to participate, and sometimes control, 'cash cows' - important privatised companies with a large potential of dividend distribution.

Finally, it should be noted that, in the process of concentration, reproduction and accumulation of capital, fraud emerges as more than a random or occasional phenomenon. It seems, instead, to have one structural nature and many appearances, that go from grabbing, to complex tax and financial schemes to increase profits or guarantee liquidity in times of distress.

This process accumulation and concentration of capital in Portugal, can should also be interpreted in the light of the theory of sabotage. The prevalence of excess capacity is one of the main theoretical hypothesis and, related to that is the maintenance of inefficient productive structures by conglomerates that, due to their market power, have no incentive to invest in modernisation. But there are other links between private accumulation strategies and the overall economic performance. The symbiotic relation between the State and private groups generated situations in which the economic priorities are influenced by the interests of the later, even at expense of the general interest of the nation. This bias occurred in several ways: the definition of wrong investment priorities - for example towards a housing market based on ownership instead of renting or public housing -, the loss of important public financial funds and decision capacity through the concession of profitable natural monopolies, the privatisation of important companies, or the establishment of disastrous Private-Public Partnership Contracts. This hypothesis suggests the continuous channelling of financial and public resources to serve the strategies of private groups, namely to finance speculative and non-productive activities, might have had a long-term damaging effect on fixed investment and growth.

This (damaging) process of concentration and accumulation of capital determined the characteristics of the Portuguese economic structure: a myriad of small and medium firms which thrive to subsist and invest, cohabiting with a minority of large conglomerates with abnormal profits, able to appropriate largest shares of the surplus generated in the economy.

The mechanisms supporting the unequal distribution of surplus were, on the one side, the capacity to determine mark-ups, and, on the other, the privileged capacity to accede and exploit financial markets, as well as rents guaranteed by the State. The share of appropriated surplus was relatively larger than these conglomerate's capacity or willingness to invest in fixed assets, aggravated by a situation of excess capacity.

Contrary to large conglomerates, small and medium enterprises invested under their putative intentions. Their size made them relatively more dependent on the accumulation of profits, appropriated by large groups. In the absence of sufficient internal funds, these firms had to rely more on external debt financing, becoming more permeable to changes

in financial markets and less capable of securing future investments. Nevertheless, both groups of firms went through a process of increasing indebtedness, with different characteristics.

Large companies were allowed to combine bank loans with other types of market debt, namely bonds. This long-term debt, it is supposed, was not channelled to productive investments but to financial speculation or finance-related activities, including mergers and acquisitions. This period of euphoria was fuelled by a wave of privatisations of profitable state-owned companies in strategic sectors, like energy and communications, and by the opening of financial and capital markets following the process of European monetary integration.

Smaller companies, on the other hand, relied on short term bank loans to manage their liquidity. As debt increased relatively to the accumulation of profits, these firm's investment capacity was weakened.

Without counterforces, such as large public investment programmes, the combination of these simultaneous effects pushes to a cumulative situation of higher indebtedness, financial fragility and lower investment.

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