Secular stagnation in the framework of rentier-financier capitalism and globalization

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Summary: Rentier-financier capitalism, neoliberalism and globalization have been in a crisis since 2008. It is characterized by low growth rates, quasi-stagnant wages and increase of inequality since rentiers replaced business entrepreneurs, neoliberalism became the hegemonic ideology, and globalization became the means to achieve the best of all possible worlds. But the rich capitalist world faces the threat of secular stagnation. In this paper, I discuss this threat, the main authors that have been discussing it, and the new historical facts that are behind such threat. Among the threats are the fall of the productivity of capital associated with information and communication technology, the increase of monopoly power, the profusion of capitals, and globalization, which opened room for the competition of developing countries.

Rentier-financier capitalism, neoliberalism and globalization have been in crisis since 2008, and in political crisis since 2016.[1] The economic crisis is associated with a return to the fore of the tendency toward secular stagnation, recently described by Robert Gordon and by Larry Summers, and also associated with the inherent inefficiency and instability of economic liberalism underlined by regulationists and new-developmentalists. The political crisis is most clearly expressed by Brexit, the election of Donald Trump, and the rise of populism. I argue that the economic crisis is a consequence of the return of capitalism to economic liberalism – a form of economic and political organization which is inherently unstable and inefficient. Further, the political discontent is substantively related to the poor economic performance and the increasing economic inequality of the rich countries. That discontent is also a function of the lack of even a minimal degree of social empathy on the part of today's rentier and financier elites toward the workers and the poor. Both the economic and political crises happened after capitalism underwent two major structural changes and turned into a rentier-financier capitalism. One, is old and well-known: the transfer of management of major corporations from business entrepreneurs to professional technobureaucrats. The second, more recent, was the transference of the ownership of such corporations from the same business entrepreneurs to the rentier capitalists associated with a special class of technobureaucrat, the financiers.

Poor economic performance and political malaise are historically recent facts. They succeed the post-war Golden Years of Capitalism (1946-1973), which was characterized by rapid growth rates and a generalized increase in living standards. Why did things change? Why have the growth rates fallen in the developed world, beginning in the 1980s? Why has inequality increased so much? Why did the two major social advancements – the welfare state and labor contracts that protected it come under

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attack? Why has the reasonable level of social solidarity that had been achieved in Golden Years waned and the intensity of class struggle increased? Why was there an inversion in this struggle: it's no longer about the workers fighting business entrepreneurs to achieve higher wages and better working conditions, and all about rentiers and financiers defending reforms that weaken the social or welfare state and reduces workers' entitlements in labor contracts? To explain the shift, we need additional and more specific recent facts that changed capitalism.

To answer these questions, it is essential to understand the changes that happened in the ruling classes and the affirmation of a new class coalition. I call present-day capitalism "rentier-financier capitalism" so that we can analyze it from the standpoint of the nature of its ruling class. It was always a capitalist class, but it is no longer an entrepreneurial class. The constant celebration of entrepreneurs as the heroes of capitalism and the exceptional cases of some very successful entrepreneurs in the information industry show the dynamic character of capitalism, but don't change the increasing lack of relevance of entrepreneurs in rentier-financier capitalism when compared with rentiers, financiers and top executives of the great corporations. Now it is mainly a rentier capitalist class associated with a technobureaucratic class. In entrepreneurial capitalism, the dominant class was formed by business entrepreneurs. The ruling class was comprised of those same entrepreneurs, the professional middle class, and the decadent aristocracy. In technobureaucratic capitalism, technobureaucrats replaced business entrepreneurs in the management of corporations. In rentier-financier capitalism, the entrepreneurs lost space to rentiers, who are now the owners of capital, while technobureaucrats kept their role in managing the corporations (the top executives), and assumed the management of rentiers' wealth (the financiers). As the rentiers form an essentially idle class, they play a similar role to the one played by the aristocracy in the transition from feudalism to capitalism. This change in the ruling classes, plus the change from a capitalism based on domestic markets and international trade to one based on globalization (i.e., to a capitalism based on the formation of a global market, where multinational corporations engender a global productive integration) has had major consequences for the dynamics and stability of capital accumulation and growth.

Rentier-financier capitalism

The change from entrepreneurs' capitalism to technobureaucratic capitalism is well-known. It dates from the Second Industrial Revolution – the dawn of electricity, the combustion engine, the assembly line, and scientific management. There is a large literature on the subject to which I contributed in the 1970s.[2] The new shift in the social formation from capitalist entrepreneurs to technobureaucrats was given many names: managerial capitalism, new middle-class capitalism, knowledge capitalism, state-led capitalism. I called it technobureaucratic capitalism, to emphasize the mixed character of the social formation dominant in the developed countries after World War II, combining market and state economic coordination. It is a type of society that should be distinguished, on the one hand, from liberal or classical capitalism that had existed previous to the Great Depression, and on the other hand, from statism or technobureaucratism, of which the Soviet Union is the paradigmatic case.

Technobureaucratic capitalism turned dominant after the Great Depression and the failure of the liberal or business entrepreneurs' capitalism – the social formation that Marx had analyzed and criticized. Franklyn Delano Roosevelt on the political side, John

Maynard Keynes on the economic side, Henry Ford on the business side, and the new power of the people with the achievement of the universal suffrage opened the door for a social and developmental capitalism after the Second World War, for a broad class coalition that came to be called either Fordism or the Golden Years of Capitalism.

The triumph of this social and developmental class coalition was marked not only by assuringly high growth rates and some reduction of inequality, it had banned major financial crises and proved successful in keeping the world peace. But that very triumph created the conditions for a second major change in capitalism. After the war, the business entrepreneurs who had transferred the management of the major business enterprises to technobureaucrats, saw their ownership transferred to their sons and grandsons, to rentiers, and their political power, to a special kind of technobureaucrat – the financiers –who assumed the increasingly complex task of managing or "investing" the rentiers' huge wealth.

At the same time, in universities and think tanks the old liberals, who had been defeated by the new stability achieved by the Keynesian policies and the Bretton Woods agreement, were waiting for an opportunity to resume their prestige and influence. The fall in profit rates and stagflation in the 1970s was their opportunity. A new Neoclassical macroeconomics soon became dominant. While Keynes' macroeconomics was a blueprint for governments to avoid financial crises, and reduce their length and severity, the new macroeconomics, originally called Monetarist and later either New Classical or New Keynesian economics, was a justification for why government should keep its hands off the economy, keep its fiscal accounts balanced and its central bank independent. Additionally, from the 1970s, the new macroeconomics, now founded in the "rational expectations hypothesis", became the basis for a "new science", and financial macroeconomics focused on the "efficient markets hypothesis". Large and competitive financial markets caused "financial deepening" (an increase of private debt in relation to GDP) and would assure, on the one hand, low inflation and financial stability, and, on the other, increasingly better allocated savings and higher growth. As Robert Lucas, the then president of the American Economic Association and the main name behind the new macroeconomics, famously said in 2003, "the central problem of depression prevention has been solved, for all practical purposes, and has in fact been solved for many decades".[3] Paradoxically, at a moment in which the income and the power of rentiers' and financiers' increased dramatically, the mainstream macroeconomics continued to see money as neutral (having no role in economic equilibrium) and continued to ignore the financial system. As Adair Turner (2016: 31) remarked,

> Modern macroeconomics and central bank practice gravitated to the assumption that the monetary workings of the economy could be captured by models from which the banking system was almost entirely absent.

Keynesian macroeconomics and the 1950s' development economics or classical developmentalism were the two heterodox economic schools that were dominant in Fordism. They took for granted that capitalism was a business entrepreneurs' capitalism, had full employment and growth as their main objectives, with low interest rates and satisfying profit rates as requirements, and defended a moderate intervention of the state in the economy. In contrast, the neoclassical school assumed a rentiers' capitalism, had price stability, satisfactory interest rates and generous distribution of dividends as their requirements, and rejected any intervention of the state in the economy.

In the time of Fordism, at the peak of the American hegemony after the Second World War, top business executives were the American heroes. That changed completely around 1980. From that point, it was the era of shareholders, of so-called "investors". Now the shareholders were supposed to be the principal, and the executive, the agent. As *The Economist* (2013) wrote,

> Activist shareholders are on the march. About time, too. Shareholders own companies. Managers and directors should serve them. If the owners do not like the way their servants are performing, they have a right to do something about it. Trying to improve the way a firm is run is more constructive than the traditional "Wall Street walk", whereby disgruntled shareholders simply sell their shares.

While Keynes, considering the idle character of the rentier capitalists, spoke on the "euthanasia of the rentiers", the shareholders or the investors, often in conflict with the top executives, in rentier-financier capitalism the prevailing view is what Colin Crouch (2011: 103) called the "Anglo-American shareholder maximization concept… under it, and in opposition to stakeholder concept that for some time prevailed in Europe, the sole goal of the corporation is to maximize value for the shareholder".

Why was it, then, that only after the Second World War and particularly after the neoliberal turn in 1980, had rentier-financier capitalism turned into reality? Why had critical economists, such as François Chesnais (1992), Coutinho and Belluzzo (1998), Gerald Epstein (2005), Robert Boyer (2000), Robert Guttmann (2008, 2016) started to write about financial capitalism, finance-led capitalism, and financialization? And why do I choose to call this new reality, rentier-financier capitalism? Financial capitalism is a bad name, because it may lead us to confuse this new reality with Hilferding's (1910) classical concept of financial capital: the predicted fusion of banking and industrial capital under the great banks. This forecast didn't materialize. What happened was an immense growth of the financial sector's share of GDP, of its profits, and of its influence – a growth experienced not only by the major banks, but by the much larger financial system, their financiers and their economists. François Chesnais was the first to detect this new reality. Others followed, but they have put too much emphasis on the financial institutions and on the financiers, and left the rentiers on a second tier.

I propose that these rentiers are the key capitalists of our time. For sure, rentier capitalists have existed since the dawn of capitalism, and it would be reasonable to predict that the incessant capital accumulation would soon lead to an excess of accumulated capital. But, as Schumpeter (1911) recognized so well, the role of the business entrepreneur was so strategic to the national economies that we understand why entrepreneurs were privileged in relation to rentiers. Yet, at the time when Schumpeter published his classical work, top executives were already replacing business entrepreneurs in the United States. On the other hand, two new historical facts (the Keynesian revolution, which offered states a powerful weapon to reduce the severity of economic crises, and the fact that the world does not face major wars since 1945) stopped the chronic and radical destruction of accumulated capital that kept relatively balanced the supply and the demand for capital.

At the same time, the demise of business entrepreneurs continued. Their resurgence in the information and communication technology firms, in firms that required modest capital investment and much innovative capacity, as well as their resilience in the medium-seized German manufacturing firms show that they will not disappear. But we should not be mistaken. Today's capitalism is a rentiers' capitalism, not one belonging to entrepreneurs. And this means that the logic of capitalism changed from a logic based on capital accumulation, innovation and profit, to a logic of control of inflation, rents (interests, dividends and real-state rents), and control of indebtedness.

Rentiers and financiers share the first two of these three objectives; not the third one of indebtedness, which makes their association problematic. The financial sector found other sources of profit, but the logic of finance remains debt. The profits of the banks depend on how much they loan. And debt has increased enormously in rentier-financier capitalism. Adair Turner (2016: 22, 74), who is a firm critic of debt, believes that the 2008 crisis was less a problem of the banks and more one of the private debt of advanced economies, which increased from 55 percent of GDP in 1950 to 160 percent in 2010. As he put it, "…the big problem we faced was not an impaired financial system but a severe debt overhang in the real economy". Was the increase in debt, not only of the private sector but also of the public sector, necessary to growth? In the case of the public sector, the debt was necessary, but not so with the private sector. Some debt is necessary to finance investment of firms and to finance the purchase of homes, but the increase of the private debt went far above the corresponding requirements. The increase in public debt was also sizable, but it was a consequence, not a cause of the 2008 crisis. The cost of bailing out the banks in 2008-09 as well as the cost of the countercyclical policy that all rich countries adopted was the reason why the Great Recession didn't turn into a Great Depression. But that cost was enormous.

In this world of rentiers and financiers, the excess of debt is associated with the excess of accumulated capital, which I discuss in the next section, and is in the basis of the present debate over the secular stagnation of capitalism. Before that, a word about the relationship between rentier-financier capitalism and globalization.

Instead of speaking of rentier-financier capitalism, we may speak of neoliberalism, if our criterion is ideology, and of globalization, if it is the greater or smaller degree of economic "integration" of capitalism at the world level. The three concepts, which are in the tittle of this essay, are correlated but autonomous. We may say that globalization is consequence of neoliberalism, because the opening of international markets is a demand from economic liberalism and involves greater trade integration, but globalization is more than that. There was already trade integration at the end of the nineteenth century, the so called "first globalization". The novelty brought by globalization was the rise of the multinational corporations after the Second World War, and the increasing productive integration that they caused. Second, the alternative to economic liberalism (pure market coordination of national economies) is developmentalism – a combination of market coordination and state economic coordination, the latter coordinating what the market is unable to do: the non-competitive sectors of the economy and the five macroeconomic prices.[4] Thus, it is a mistake to equate globalization with economic liberalism. The country that most profited from globalization is China, whose state and capitalism are developmental, not liberal. As to rentier-financier capitalism, it is consistent with liberal as well as developmental economies and societies. And it may be dominant in periods of increasing as well as decreasing globalization.

In this paper, my concern is with the prospects of the world economy, or of capitalism. I am specifically interested in discussing the secular stagnation issue and the political crisis issue in terms of these three realities: a narrow class rentier-financier class coalition; a major change in the productive system brought about by globalization; and the ideological hegemony of economic liberalism or neoliberalism.

Supply side explanations

The poor economic performance of capitalism since the 1970s and slow recovery of rich economies following the 2008 crisis brought back the theme of secular stagnation. The thesis was drafted by Adam Smith and theorized by David Ricardo and Marx. For Ricardo, it came from the prediction of a long-term fall in the profit rate due to the decrease of the productivity of land (due to the occupation of less and less fertile lands); for Marx, it was because of the fall in the productivity of capital. Although the two models were logical, their premise – the fall in productivity due to diminishing returns – did not happen at all. The counter-tendencies to the fall in the profit rate – which Marx considered, but left in second tier of explanations – eventually prevailed. Both theories were on the supply side.

In my book *Profit, Accumulation, and Crisis* (1986), I examined on the supply side the problem of secular stagnation and the functional distribution of income (between profits and wages) considering Marx's falling profit rate theory. In this theory, the fall in the productivity of capital (or the fall of the output-capital relation or the process of mechanization) happens because technical progress is "capital-using", that is, because firms adopt new types of machines that replace new types of labour – new machines that have just become more efficient than labour and begun to replace it, but are less efficient than the machines previously turned efficient that replaced corresponding previous types of work. Thus, after all the competitors imitate the company that first adopted the new type of machine, the productivity of capital falls, and the profit rate falls as well.

This fall in the output-capital relation and the ensuing fall in the profit rate (if wages continue to increase with productivity) didn't happen in rich countries between the 1870s to around the Second World War. In this period, technical progress became "neutral" because, in the historical process of capital accumulation, the "capital saving" technical progress has counterbalanced the capital-using progress. Technical progress is capital-saving when it results from the investment in more efficient machines, in the replacement of old machines by more modern machines. As a consequence, the output-capital relationship increases. In the increased productivity of capital caused by capital-saving technology, the relevant substitution is not of machines for labour, but the substitution of more expensive machines for cheaper ones. Growth models usually assume a neutral technological progress because their authors suppose that the two kinds of technical progress compensate one another.

In the classical theory of distribution, including in Marx, the wage rate was supposed to remain at the subsistence level. Marx just added that this subsistence level should not be defined in biological terms but in historical ones. Yet, real wages in the rich countries (taking United Kingdom and France as reference) did not behave as the theory predicted. From 1870 wages began to grow at about the same rate of the rate of increase of the productivity of labour – above the level of subsistence, but not above the social cost of reproduction of labour.[5] That is why I reversed the theory of classical distribution, proposing that the profit rate, not the wage rate was constant in the long-term, and I divided the history of capitalism into phases according to the behaviour of technical progress and the consequent behaviour of the wage rate. I have considered the profit rate as a given, because a positive and satisfactory rate is a condition for the survival of capitalism. Thus, while there is no practical alternative to capitalism, while no economic system superior to capitalism in improving the standards of living of the people arises, policymakers will do whatever is required to maintain a satisfying rate of profit.

By the time I finished writing *Profit, Accumulation and Crisis* in the early 1980s, the rich world had just experienced the Golden Years of Capitalism, and I believed this was due to the fact that computers were becoming increasingly cheaper and there was the substitution of much more efficient machines for old ones. I concluded that technical progress was becoming capital-saving. I was mistaken. I didn't realize then that in the information and communication era the substitution of machines for labour would supplant the substitution of modern for older machines. In other words, I didn't predict that, beginning in the 1970s, the productivity of capital, which had been relatively stable from 1870, would fall again. In two recent papers, I reviewed this analysis to acknowledge the fact that the profit rate had recovered.[6] This fall in the productivity of capital in the 1970s was not enough to lead to capitalism's stagnation, but involved the fall in profit rates and growth rates, which are a main explanation why, in the time of rentier-financier capitalism and globalization, the neoliberal ideology was adopted. The new ideology mounted an assault on the labour contracts and on the welfare state, so as to cause and justify the direct and indirect wages growing below the productivity rate (the low wages, kept stagnant), while the profit rate, that had fallen in the 1970s, recovered to the previous levels.

Robert J. Gordon's view of the problem is different, but the subject of secular stagnation is the same. It is a supply-side analysis, but it has nothing to do with the tendency of the profit rate to fall that we just discussed. He became interested in the problem of secular stagnation as early as 1999, when he pointed out that productivity in the United States and other rich countries had fallen sharply since the mid-1970s. In his further work, "Is US economic growth over? Faltering innovation confronts the six headwinds", Gordon (2012: 1) made his stagnationist thesis clear by questioning the assumption that has become dominant since World War II, namely that economic development would be an ongoing process without an end in sight. "In fact, there was virtually no growth before 1750, and there is no guarantee that growth will continue indefinitely. Instead, I suggest that the rapid growth of the last 250 years is likely to be a unique episode in the history of mankind." In *The Rise and Fall of American Growth* (2016) Gordon develops and deepens his thesis. Its subtitle, "The American Standard of Living Since the Civil War," makes it clear that he understands economic development to mean rising standards of living and sees strong signs of stagnation because it is no longer rising. There can be no doubt that growth has declined since the mid-1970s. But is it possible to speak of secular stagnation?

Gordon sees the century beginning in the 1870s with the Second Industrial Revolution as a "special century, although taking some time to produce effects", because it was a period of great growth for the United States. But the interval between 1920 and 1970, which he termed the "Great Leap", was even more dynamic. The annual growth rate of income per person was 2.4% per annum, but there was a long gestation period between the harnessing of electricity and the result in terms of economic development: four decades. It is interesting that the Great Depression of the 1930s did not stop the Great Leap. On the contrary, as he argues in Chapter 16, "the normal operation of the economy, which was obscured by the Great Depression, was followed by the economic miracle of World War II ..." and by growth in the 1950s and 1960s that "clearly exceeded what would be expected based on the analysis of trends in the six decades prior to 1928" (Gordon 2016: 536). For Gordon, the Great Leap must be explained from a long-term perspective, by the innovations that were unleashed with the invention of electricity and the explosion motor, by the increased power of the unions during the New Deal and by the acceleration of inventions and innovations that occurred during the Great Depression, the three phenomena preceding World War II. And Gordon (2016: 537) sums up: “The case for interpretation of ‘economic support’ for World War II is very strong, expressing itself in all dimensions, from education to the GI Law on raising public spending financed by deficits that gave the new middle-class ability to buy the consumer goods that the Second Industrial Revolution provided.”

The great turning point in the American standard of living came after 1870. At that time, “the life of the housewives was characterized by staggering work, and of husbands, for dangerous and exhausting work. Life was short, large families crowded into small houses, much of the food and clothing was produced at home” (p.28). From 1870 to 1940, the breakthrough in the standard of living of the American working family did not occur in food and clothing, but in homes, which grew and became connected to water, electricity, sewerage, gas and, finally, telephones. At the same time, we see a rapid and widespread diffusion of durable consumer goods – automobiles, radios, refrigerators, and washing machines, which greatly eased the housewives’ work. Due to the availability of magazines and books, reading rates also increased dramatically. Social indicators also improved dramatically: infant mortality decreased, life expectancy increased, child and youth labour decreased, hours worked and education levels increased dramatically.

In the Great Leap (1920-1970), the period from 1940 to 1970 is the moment of mass consumption in supermarkets and department stores; of eating more and more away from home; and of the displacement of the new middle class to the suburbs. But Gordon (2016: 370) remarks that “the pace of economic progress since the 1940s and particularly since 1970 was neither as comprehensive nor as revolutionary as it was between 1870 and 1940. This is evident in relation to three basic needs: housing, clothing and feeding”. Gordon then goes on to describe the arrival of the automobile, air travel, amusements (mainly cinema, television, records or CDs) and the communications revolution, with the computer, e-mail, the internet, cell phone, streaming, advances in medicine, and the health care system. And he comes close to the pessimistic conclusion of secular stagnation, because the “head winds to development” start to blow stronger. The most serious of them is the wind of inequality. The other headwinds that are reducing the growth rate of the American standard of living are education, which does not improve as it should, the aging population, increased public debt, and globalization, global warming and increasing pollution.

Against those headwinds, what should be done? Gordon bets more on education and measures against inequality, especially progressive taxes at the top and raising the minimum wage and basic income system at the base of society. In any case, he does not believe that the US economy will grow strongly again. The growth of the total factor productivity (TPF) fell and there is no prospect of recovery. While TPF grew at an annual rate of 1.8% between 1920 and 1970, it grew only 0.4% annually from 2004 to 2014. The Third Industrial Revolution, the information and communication technology revolution, did not have the strength to maintain productivity growth at a satisfactory level. Gordon (2016: 577-78) quotes Robert Solow (1987) on the problem: "we can see computers everywhere except in productivity statistics", and offers this explanation:

> Although the Third Industrial Revolution was indeed revolutionary, its effects were felt only in a limited sphere of human activity, in contrast to the Second Industrial Revolution, which changed everything. Categories of personal consumption expenditures that were not influenced by information technology and communication were purchases of food at home and away from home, clothing and shoes,

> automobiles and energy to move them, furniture, supplies for the home, appliances. By 2014, two-thirds of consumer spending went to services, including rent, health, education, and personal care.

Is Robert Gordon's theory of secular stagnation persuasive enough? He could not explain how profits remain high as capitalism moves into stagnation. He recognizes that they are high, but companies don't increase their investments to expand production. His central thesis is that the innovations of the Second Industrial Revolution, from light and tap water in homes to cars and air travel, were more striking in terms of improving quality of life, employment, and in requiring increase of investments, than the innovations of the Third Industrial Revolution. This can be readily observed, especially in relation to investments, which in the rich countries have not been sustained at a high level since the 1970s. Machinery does not cease to replace workers, but this does not imply that production become more and more capital-intensive, as one would expect. One of the reasons must be that the great profits and the building of immense wealth for a few happened in the information and communication technology and internet, in Microsoft, Google and Facebook, without corresponding investments. The successful history of these companies had the effect of reducing the strong relationship between capital accumulation and growth.

Gordon seems to forget the problem of demand when he says that companies show no willingness to invest more and does not explain why. And yet, the Keynesian problem of the tendency to insufficient demand remains fundamental. When there is a lack of investment, it is a sign that there is a lack of demand in relation to the supply of capital.

Demand side explanations

We have also the demand side explanations for secular stagnation, beginning with Marx. Although Marx did not leave a theory of the collapse of the capitalism on the side of the demand, he left a clue: the tendency to the overproduction or the underconsumption, that would be intrinsic to the capitalism. This is because Marx realized clearly that capitalism is not only a market economy, but a monetary economy in which the surplus value expressed in money is the essential. Capitalism does not imply exchange M - D - M ' (commodity - money - more commodity), but an exchange D - M - D' (money - commodity - more money or profit). There is thus a purely monetary surplus, the profit, for which a destiny had to be given, because the very circular flow of production does not contain within it the demand to permit the sale of all production. Marx's analysis is complemented by the theory of disproportion, which is another way of expressing the capacity of the economy to absorb all production. For this, Marx divided the capitalist economy into two sectors: Department I, producer of capital goods; and Department II, producer of consumer goods. In the expansion phase, Department I, which in the period of decline almost paralyzed, tended to grow faster than Department II. Its more moderate growth is related to the more stable nature of the demand for consumer goods, but it is also caused by slower growth of wages than of profits in the first phase of expansion and, consequently, by an insufficient growth in the demand for goods consumption by the workers. Once the demand for Department I goods is met, the continuation of its growth at a faster rate than Department II will lead to overproduction and then to paralysis of the investments in Department I, triggering the cyclical reversal.

Two economists, Rosa Luxemburg and John M. Keynes, have taken from this second thesis of Marx his fundamental theory. The first, in the context of Marxism, realized that, understanding the capitalist system as a closed system, consumers and investors would not constitute sufficient demand for the continuity of the accumulation process. She solved the problem with her theory of imperialism by taking advantage of the path that had been pioneered by John Hobson (1902) and Lenin (1917): colonies functioned as new markets to be occupied by production and surplus capital — without cost-effective implementation in central countries. In the same direction, another "outward" expansion for capitalism was war expenditures.

After capitalism overcame the crisis caused by the First World War, secular stagnation theories lost strength. In 1929, the liberal economic regime, which since the 1830s prevailed in the rich world, collapsed and the problem returned. It was Keynes who brought it back. In the first chapter of *The General Theory* he criticized Say's Law, the law of the circular flow of production, by which all production becomes profit or salary; these necessarily turn into investment or consumption and, in this way, supply would create their demand. Keynes saw that the thesis was absurd from an empirical point of view and found an explanation for the fact that supply does not create its demand fully – a fact already recognized by Marx that in a capitalist economy money can be hoarded. Keynes knew Marx's theory and, in a preparatory work to *The General Theory*, referred in a complimentary manner to the D-M-D' system. But Keynes did not deduce much from this the secular stagnation, except simply the tendency to cyclical economic and financial crises, which a fiscal and monetary policy could moderate. Paul Sweezy, in his *Theory of Capitalist Development* (1956: 222), associated Rosa Luxemburg with Keynes. For him, "as the increase in capitalist consumption is a decreasing proportion of total accumulation, it follows that the growth rate of consumption declines relative to the rate of growth of the means of production". Sweezy devoted an entire chapter to the counterbalancing forces of the underconsumption tendency and concluded that they avoided secular stagnation but not cyclical crises.

During the Golden Years of Capitalism, which were also the Keynesian years, theories of secular stagnation were once again left aside, if not forgotten, not only because growth was strong, but also because crises almost disappeared. Yet, from the 1980s, under a rentier-financier class coalition and globalization, capitalism returned to the pre-Keynesian regime of high financial instability; after the 2008 crisis and the Great Recession, the concern with secular stagnation roared back.

In 2014, Lawrence Summers brought the theme back to life. He proposed that rich countries are no longer experiencing a mere economic cycle, and there are signs that we would face a problem of secular stagnation. In his words, "First, the United States and other industrial economies are currently experiencing difficulty in simultaneously achieving adequate growth, capacity utilization, and financial stability. Second, this must be related to a large drop in the natural rate of real interest." He justifies this difficulty with several data: potential output has fallen, the employment-population ratio of people between 25 and 54 years has been falling, the fall in total factor productivity has been caused by the decline in investment rather than the decline in technical progress, inflation did not accelerate despite the warming of the economy between 2002 and 2007. The warning was due to a credit bubble for housing construction rather than increased investment in production. Summing up, Summers has been unable to find any satisfactory growth since the beginning of the 21st century in the United States and other rich countries.

The central problem for Summers was the drop in the interest rates. How to explain it besides the central banks' decision of engaging in quantitative easing? First, interest rates have fallen because there was a decrease in the demand for investments financed by debt. The cases of Google and Facebook are paradigmatic in relation to this problem. Their immense growth and transformation in quasi-monopolies in their respective areas required very little capital. Second, the decline in the population growth rate also causes a decrease in the demand for investments. Third, the concentration of income in the higher layer increased the propensity to save and increased the retained earnings of companies. Fourth, relative prices of capital goods fell in relation to other prices. Finally, there was a large increase in the countries' international reserves, which also meant a decrease in investments. These five factors contributed to reducing investments that, in turn, caused the interest rate to fall. Is this a theory of secular stagnation? For it to be a theory it would be necessary, following Ricardo and Marx, that the profit rate expected by the companies be falling, but that did not happen. As Summers shows, the profit rate, which fell in the 1970s and, after a recovery, fell back moderately in the 1990s, has been rising since the early 2000s, but this has not led companies to invest more. In this way, the basic motivation for investments – a satisfactory difference between the expected profit rate and the interest rate – has not been confirmed in practice. The corporations have been investing little even though profits increased and interest rates fell.

Three analyses on the left

How does the left see the problem of secular stagnation? Michel Aglietta of the French School of Regulation, in review of Gordon's book in the *New Left Review* (2016, 124), was not convinced by the arguments put forward. For him, a new cycle of innovations is likely to take place, taking as its axis the large investments needed to cope with global warming and environmental pollution. Aglietta predicts that China will lead the process: "The industrial revolution that will be needed to mitigate environmental damage and adapt hostile habitats would involve transnational public goods, heavy investments, and institutions to deal with new systemic risks. Not only does China have an acute need, but also the financial resources and political will to allocate large savings reserves to this supreme priority."

Wolfang Streeck (2014: 46-47), in the same magazine, is less optimistic. For him three negative tendencies will lead capitalism to collapse: the increase of public debt and private debt (of consumers), the increase of inequality, and financial instability. Often, he says, we foresaw the end of capitalism, but this time the picture is different "because his most notable technicians do not know how to make him healthy again ... The image I have of the end of capitalism – an end that, I believe, is already underway – is that of a social system in chronic disarray, for reasons that are internal to it and independent of the existence of a viable alternative." Five systemic disorders would define this chronic derangement: secular stagnation; the plutocracy, in that there is no prospect that the tendency to increase inequality will be interrupted; looting of public assets; fraud and corruption, which, according to Max Weber, have always been accompanied by covetousness; and the lack of a "safe centre", that is, of a hegemonic power that ensures order, given the loss of power by the United States.

In a 2013 book, *Buying Time*, Streeck argues that capitalism postpones collapse by, successively, incurring in inflation, in increased public debt, and in increased private debt. Actually, inflation is just a distortion, the rise in public debt is a response to the increase in government expenditures without increasing taxes; only the increase in the private debt is a way of buying time, because it keeps consumption strong, despite quasi-stagnant wages and low salaries. But besides perverse, is a dangerous way of postponing crisis. We know well that the substitution of private for wages was one of the direct causes of the 2008 global crisis. Streeck (2013: 46) argues that the last forty years of consumer-based capitalism were essentially an attempt to free capitalism "from the kind of mass democracy that was part of the postwar democratic capitalism". His analysis is fascinating, but it fails to account for its title: it is not a theory of its end, but rather an acute critique of capitalism.

Immanuel Wallerstein (2017: 53-54) also claims to have a theory of collapse. He believes that every system, and therefore capitalism (which he calls a "world-system") follows a necessary trajectory consisting of "three phases: birth, long period of normal functioning, and inevitable structural crisis." And he concludes that capitalism has already reached this last stage "because production costs have increased on a regular basis in relation to market prices (effective demand)." But this explanation is peculiar, to say the least. As productivity increases in capitalism, or in other words, as capitalism has so far shown increase in per capita income, production costs decreased and prices also decreased. Would profit margins have been reduced? There is no indication of such change. A long time ago, Paul Baran and Paul Sweezy (1966) titled their book, *Monopoly Capitalism.* After that, nothing changed toward "free enterprise". The corporations don't cease to get engaged into mergers and acquisition whose core objective is monopolist power. More interesting is his thesis that long cycles within the normal phase "always end with the formation of a quasi-monopoly; now, quasi-monopolies are necessarily limited in time because they end up self-destructing." This is true, but they only emphasize the cyclical and inherently unstable nature of capitalism.

The crucial problem

Afterward, what to conclude in relation to secular stagnation? The fall in the profit rate predicted by Ricardo and Marx did not occur. On the supply side, the Marxian empirical literature on this problem is united on the fact that, despite the fall in the productivity of capital, the profit rate recovered. But it does not have a good explanation for it. This literature is equally consensual in relating the low growth rates to the quasi-stagnation of wages. Gordon's explanation is also on the supply side, and is impressive, but eventually he does not say that capitalist economies are stagnant; they are just condemned to low growth. What is there to say on the explanations on the demand side? Marx's D-M-D' model, which is in the second volume of *Capital*, is not a theory of secular stagnation; it is just a way of criticizing Say's law. Following Keynes, Larry Summers' analysis is attractive, but he does not offer any historical new fact to explain the insufficiency of demand and the fall in the interest rates except that the employment-population ratio has been falling in rich countries.

Thus, the theories, either from the supply side or the demand side don't predict persuasively secular stagnation. In Aglietta's bet on a new frontier of innovation oriented to the protection of the environment rests the hope of a new long wave of growth. But if the third and fourth industrial revolutions, the revolution of air travel and television, and the revolution of the information technology and the internet didn't bring fast growth, if the growth after the war is better explained by the optimism that took hold of capitalism after the victory over Nazism, why count on a fifth revolution? Besides low growth rates, what I see in the economies of the rich world is low investment rates, falling productivity of capital, quasi-stagnant wages, financial instability, and increasing inequality. In politics, I see nations without a project, individuals without a utopia, frustrated consumerism, social atomism, and radical individualism. Instead of secular stagnation I see quasi-stagnation and political uneasiness if not anomie. How are we to explain it? What are the new historical facts?

From the discussion above, I believe that we must retain the fall of employment-population rate as a factor. The aging of the population is necessarily an obstacle to growth. Second, we must retain Gordon's contention that the new innovations don't bring an improvement in the standards of living as big as the one brought by the new residences, with water and sewage, electricity, and household appliances equipment; by the automobile and air transportation. Third, also on the supply side, we must acknowledge the fall in the productivity of capital, of the output-capital ratio. The Fourth Industrial Revolution, instead of involving an increase in the productivity of capital, caused a fall in its productivity. Information technology and the internet made capital-using technology dominant again, caused a new and powerful wave of mechanization – of substitution of capital for labour – which brought cost reductions together with the adoption of new machines that replaced new types of labour by capital; new machines are, in principle, less efficient than the old machines that previously replaced other types of labour. There was, initially, a great substitution of capital for office work; then, for bank work through ATMs; now, for all types of jobs through robots. The new machines are efficient enough to justify their purchase and replacement of new types of labour, but they are inefficient when compared to the machines previously adopted to replace other types of work. The inevitable consequence was the fall in the output-capital relationship and either, the fall of the profit rate, or of the wage rate.

A crucial fourth new historical fact, on the demand side, is the quasi-stagnation of wages. Its cause was the reduction of demand for labour caused by the fall of the productivity of capital, on the one hand, and, on the other, the need to check the fall of the profit rate causing the generalization of the capital-using technical progress. The consequence was a new and powerful source of insufficiency of demand. One fact astutely expresses the contradictory character of the economy: the quasi-stagnation of wages is consistent with satisfying profit rates, but threatens it as it produces a fall in the demand.

The fifth new historical fact is the *profusion* of accumulated capital. I mean by this the increase in the stock of capital and the dramatic increase in its liquidity. The increase in the stock of capital was negatively caused by the absence of great wars and depressions. As Thomas Piketty noted, before 1945 two great wars and the Great Depression destroyed capital on a large scale, thus for a time neutralizing the incessant process of capital accumulation that characterizes capitalism. After the 1970s' crisis, the profit rate recovered and the stock of capital resumed growth, now in a more stable way. The 2008 crisis could have been a major episode of capital elimination, had the governments not adopted strong countercyclical or Keynesian macroeconomic policies. The fact that corporations relentlessly continue to buy back shares and to increase dividends is an acknowledgment of excess capital in relation to investment opportunities.

To this overabundance of capital, we must add a major increase in its liquidity which derived from the securitization of almost all fixed assets – their transformation in financial capital. This is the non-speculative side of the process of financialization; when you transform assets into securities, they automatically become more liquid. Such securitization happened by changing the ownership of firms and of much of the real-state from households and from privately held corporations, to public corporations, and by the huge increase in debts. The speculative if not fraudulent side of financialization was the creation of fictitious capital – a concept originated in Marx that expresses the multiplication of the wealth of rentiers by the increase of the public and, principally, of the private debt, the creation of new instruments of credit, and pure speculation. In this speculative process, big banks played an active role, because, as Robert Guttmann (2008: 11) underlies, "the phenomenal expansion of fictitious capital has thus been sustained by banks directing a lot of credit towards asset buyers to finance their speculative trading with a high degree of leverage and thus on a much-enlarged scale". What got more out of control was not the public debt, despite arguments by the liberal orthodoxy that this was the case, but the private debt. While the public debt in rich countries is closely controlled, there are practically no controls on private debt, nor on the current account of the countries, due to the belief that the market efficiently controls the private debt. It is a belief that has been permanently falsified by the facts.

This profusion of capitals in the hands of rentiers and financiers turns into a problem because it makes the search for investments opportunities more aggressive —and more frustrating. The privatization of state monopolies, which the market definitely does not coordinate, is a solution. Their owners are not business entrepreneurs but rentiers; profits don't derive from innovation and risk, but are mere rents. The other solution is deregulation, pure speculation and fraud. Both solutions are perverse.

The sixth new historical facts is the competition originated from low-wage developing countries. Globalization was strongly supported by liberal economists and rich countries because it would improve the international allocation of resources and because it would reward the more efficient countries, which were supposed to be rich ones. The opening of international markets and the great increase in international trade that happens from the 1980s benefited the low-wage developing countries that proved able to export manufactured goods. The competition waged by developing countries began in the 1970s, when the Golden Years of Capitalism were ending. The first warriors' developmental strategy was not limited to industrial policy; as the new-developmental approach defends, the essential thing was to fiscal and exchange rate responsibility[7], and to keep a firm control of the five macroeconomic prices – were the four "tigers" (South Korea, Taiwan, Singapore and Hong Kong), Brazil and Mexico. In the 1980s, Indonesia, Thailand and Malaysia joined.

But the great change happened from the 1990s, with the admission of two giant countries in the trade of manufactured goods and of services: first, China, and, second, India, besides a third small but forceful one, Vietnam. In this process, the Asian countries liberalized but remained basically developmental; they improved fiscal responsibility by keeping the public debt under control, and managed their exchange rates responsibility, by keeping their current account deficits balanced or showing a surplus – a condition for a competitive exchange rate. While East Asian countries opened their economy, combining industrial policy with developmental macroeconomic regime, which kept right the five macroeconomic prices, chiefly the exchange rate, the Latin American countries simply liberalized and, victims of exchange rate populism (often coupled with fiscal populism), fell behind.

Thus, globalization was not the road toward a new paradise that liberal economists and the West predicted, but caused a boomerang effect that became one of the causes of low growth rates. Liberal economists and politicians in the rich world assumed their countries had an inherently superior efficiency vis-a-vis developing countries, a belief that was shared by old developmentalists. For that reason, the former fought for trade liberalization, while the latter rejected it and advocated protection. Yet, from the 1970s, such protectionist assumptions proved false. Protection was required, but only in the very beginning of industrialization, when the argument concerning an infant industry holds. After that phase, a middle-income country requires levelling the playing field, by neutralizing the tendency existing in practically all developing countries, mainly in exporters of commodities: the tendency to the cyclical and chronic overvaluation of the exchange rate. The East Asian countries, which have the advantage of not facing the Dutch disease, understood well the opportunity that their low wages and the open international markets represented. They were the great winners of globalization, not the United States, or other rich countries, as liberal economists predicted and old developmental economists feared. They followed the logic of "new developmentalism" and succeeded. Despite possessing the worst level of education, despite their poor institutions, despite their poor infrastructure, despite the poor domestic financial system, the countries that were able to neutralize the tendency to the cyclical and chronic overvaluation of the exchange rate profited from the advantage of low wages by exporting manufactured goods and industrializing. They kept their five macroeconomic prices right: a low interest rate, a competitive exchange rate and a wage rate that increased with productivity, which, combined with fiscal and exchange rate discipline, produced a satisfying profit rate and low inflation. They have grown mostly with financing from their own capital and thereby avoided the long-term appreciation of the exchange rate as well as the financial instability that is associated with current account deficits. And they had the great advantage of not being rich in natural resources. This meant that, while they had to control their current account, they did not have to neutralize the Dutch disease to keep their exchange rate competitive. By maintaining fiscal and exchange rate discipline, by rejecting current account deficits and by limiting budget deficits to finance public investment, they made their manufacturing industry competitive and dynamic.

Conclusion

I believe that I have been able to show that a series of new historical facts threat the profit rate of developing countries, and explain the wages growing below the increase of productivity, and long-term low rates of growth:

1. the aging of the population and the fall of the employment-population ratio;
2. Gordon's contention that the new innovations don't bring an improvement in the standards of living as big as the one brought by the new residences, with water and sewage, electricity, and household appliances equipment; by the automobile and air transportation;
3. the huge new wave of capital-using technical progress resulting into substitution of capital for labour and into fall in the productivity of capital;
4. salaries growing below the productivity and quasi-stagnant wages, both factors depressing effective demand;
5. the *profusion* of accumulated capital in relation to the available profit opportunities;
6. competition of low-wage developing countries (the boomerang of globalization).

In the framework of these six new historical facts, the priority rentier-financier capitalism turned to recovering and maintaining the profit rate at a satisfying level. And the means to achieve this were, on one side, to deepen the monopoly power of the corporations and, on the other, to uphold neoliberal reforms aimed at reducing direct and indirect wages.

Deepening monopoly power through mergers and acquisitions is an old capitalist practice. We may view it as form of obtaining extraordinary profits, but in unfriendly conditions – although demand remains insufficient, investment opportunities are small in relation to the availability of capital, the productivity of capital has fallen – the profit rates remain satisfying due to monopolist power. This is the argument of Baran and Sweezy's *Monopoly Capitalism* (1966), who were just confirming Marx's analysis on that matter. After that, the process of concentrating capital continued strong. The secret of capitalism's efficiency is competition, but each corporation is permanently looking for monopolist advantages if not pure monopoly.

As to the reduction of direct and indirect wages, rentier-financier capitalism recurs both to labour reforms, whose objective is to make labour contracts flexible, and to the reduction of the social expenditures of the state and the corresponding indirect wages. A sounder alternative is the state to engage in managerial reforms, particularly public-private partnerships, that make the great social and scientific services of the welfare state more efficient or less costly. In Brazil, the managerial reform that began in 1995, and continues to be implemented, was a means to legitimize the social or welfare state.[8]

Capitalism, therefore, faces a crisis of low growth and quasi-stagnant wages, where monopolist power and neoliberal reforms keep the profit rate at a satisfying rate to keep companies investing. On the supply side, the strong substitution of capital for labour brought by the information and communication technology is causing the fall in the productivity of capital, or, to put it differently, the innovations associated with the Second Industrial Revolution were superior to those of the Third and Fourth Industrial Revolutions. The fall in the productivity of capital is "resolved" either by the fall of the profit rate, or by the wage rate growing below the increase in the productivity of labour – which is what is happening. On the demand side, the stagnant wages are a problem, not a solution. Keynesian policies remain fundamental to solving the problem of excess capital in times of economic crisis. Out of crises, the rentier-financier elites adopt the strategies to deal with the excess of capital either by resorting to mergers and acquisitions that increase monopoly power, by privatizing public monopolies, by increasing the consumers' debt, or by some combination of these. These are intrinsically perverse strategies, because they don't involve increased investment. Instead, they involve increased inefficiency and inequality. The beneficiaries are a small but powerful class of rentier capitalists, financiers and senior executives.

All this does not result in secular stagnation *sensu stricto*, but causes low growth associated with quasi-stagnating wages, the increase of inequality and the reduction of the growth rate. And it creates a growing popular dissatisfaction with globalization or rentier-financier capitalism, dominant since the 1980s. There would be secular stagnation if profits were falling, but profits remain high because of an incessant increase in the monopoly power of large companies and the possibility of reducing wages.

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[1] I discussed recently the political crisis of globalization, expressed in the Brexit and the election of Donald Trump to the presidency of the United States in Bresser-Pereira (2017b).

[2] See Berle and Means (1932), Burnham (1941), John K. Galbraith (1967), Peter F. Drucker (1968, 1993), Bresser-Pereira (1972, 1990).

[3] Lucas (2003). In a visit that Roberto Lucas made to São Paulo in the early 1990s I heard him utter practically the same phrase to a small group of economists.

[4] The five macroeconomic prices are the interest rate, the wage rate, the exchange rate, the profit rate and the inflation rate. Keynes showed that the market is unable to get them right, and asked for fiscal and monetary policy; new developmentalism added the tendency to the cyclical and chronic overvaluation of the exchange rate and asked additionally for exchange rate policy (Bresser-Pereira, 2010, 2011; Bresser-Pereira, Oreiro and Marconi, 2014).

[5] Although not above the cost of reproduction of labour, as I have been arguing recently (Bresser-Pereira 2017a; 2018).

[6] Bresser-Pereira (2010, 2018); Bresser-Pereira, Oreiro and Marconi (2014).

[7] Fiscal responsibility is keeping the primary surplus consistent with a confortable public debt; exchange rate responsibility is to avoid current account deficits because these deficits not only increase the country's foreign debt, but also appreciate the national currency in the long-term (while the country is incurring in deficit) and make the competent manufacturing companies non-competitive (Bresser-Pereira 2010; Bresser-Pereira, Oreiro and Marconi (2014).

[8] Bresser-Pereira (2017a).