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TRANSITION TOWARDS A NEW PHASE?
The crisis of 2007-2008 and its impact on current metamorphosis of capitalism

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TRANSITION TOWARDS A NEW PHASE?
the crisis of 2007-2008 and its impact on current metamorphosis of capitalism[*]

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SUMÁRIO

ABSTRACT

This manuscript investigates how far has the post-crisis global economy navigated towards a new phase of capitalism. This question is underpinned by a conjecture: capitalism, as a dynamic and flexible economic system, has in their crises a key element for its long-term dynamics. The manuscript is organized in five sections. The first surveys the literature on the role of crises in metamorphoses of capitalism. The second section surveys the structural changes before the crises, the third section summarizes the rescue operation and movements in the epicentre of the crisis, and the fourth section asks whether or not structural reforms of capitalism are in the political agenda. The fifth section evaluates the stage of current transition towards a new phase of global capitalism.

Key Words: crisis; metamorphoses of capitalism; systemic turbulence

RESUMO:

Este manuscrito investiga quanto a economia global navegou rumo a uma nova fase do capitalismo. Esta questão é sustentada por uma conjectura: o capitalismo, como sistema económico dinâmico e flexível, tem em suas crises um elemento-chave para a sua dinâmica de longo prazo. O manuscrito está organizado em cinco seções. A primeira resenha a literatura sobre o papel das crises em metamorfoses do capitalismo. A segunda seção examina as mudanças estruturais em curso antes da crise de 2007-2008, a terceira seção resume a operação salvamento e os movimentos no epicentro da crise, e a quarta seção pergunta se reformas estruturais do capitalismo estão na agenda política. A quinta seção conclui o manuscrito avaliando o estágio da transição para uma eventual nova fase do capitalismo global.

PALAVRAS CHAVE: crises, metamorfoses do capitalismo, turbulência sistêmica

JEL: P16, P51

INTRODUCTION

The crisis of 2007-2008 hit a global economy with very peculiar features: a mixed economy (*The Economist*, 19 March 2011; Piketty, 2013, p. 483), where the United States - and its state - did play a leading role in the internationalization process (Panitch and Gindin, 2012), a global economy already revolutionized by the technologies of information and communication (Freeman and Louçã, 2001), with increasing share of knowledge-related sectors (NSF, 2014), an internationalized economic system - connected by transnational corporations and global value chains, with their global production and global innovation networks (UNCTAD, 2011, 2013; OECD, 2013), with unseen levels of internationalization (Wood, 2003) -, a strong financial system necessary to keep the economic system dynamic - "stock-market Keynesianism" (Brenner, 2006) and financial innovations such as derivatives to "anchoring the global financial system" (Bryan and Rafferty, 2006) -, a global patrimonial capitalism with unprecedented levels of inequality (Piketty, 2013), and an international changing landscape after the collapse of USSR and the rise of China (Arrighi, 2007; Callinicos, 2009). The nature of this global economy defined much of the answer to the crises and the rescue operation organized to contain its spread.

Given this starting point, the question of this manuscript is how far has the post-crisis global economy navigated towards a new phase of capitalism. This question is underpinned by a conjecture: capitalism, as a dynamic and flexible economic system, has in their crises a key element for its long-term dynamics. The emergence of crises, their development, the rescue operations that they provoke, and the structural reforms that they might trigger, reshape capitalism and open new phases in the history of economy. Crises, therefore, are part of a broader process that can open transitions to new phases of capitalism. Hence, this manuscript surveys available literature to investigate clues on a transition towards a new phase of capitalism.

This interpretation of the role of crises in the long-term dynamics of capitalism organizes this manuscript. Three specific questions are asked. First, which are the structural changes within capitalism that were taking place before the crisis of 2007-2008? Second, how did reactions to the crisis change its epicentre? Third: are there structural reforms already implemented or in the agenda?

These three question and their tentative answers - analytical steps in this manuscript's review of the literature - are threads that might be integrated to ask a further question: how far has the capitalist system navigated, since the crisis, towards a new phase? The stage of this transition may help the understanding of features of contemporary conjuncture.

The manuscript is organized in five sections. The first surveys the literature to provide a theoretical and historical background for the manuscript - the role of crises in metamorphoses of capitalism. The following three sections presents the analytical steps in this manuscript: second section surveys the structural changes before the crises, third section summarizes the rescue operation and movements in the crisis epicentre, and the fourth section looks for structural reforms. The fifth section attempts to integrate the analytical steps to evaluate the stage of a transition towards a new phase of capitalism.

I. METAMORPHOSES OF CAPITALISM, CRISES AND NEW PHASES

Metamorphoses of capitalism (Furtado, 2002) show the long term flexibility of the capitalist system as a whole.

Theoretically, this long term systemic flexibility may be understood through the lens of an open-ended and long lasting struggle between factors and counteracting factors that shape the ups and downs of the rate of profit (Marx, 1894, Part III).[1] As Callinicos (2014, p. 270) suggests, analyses should focus on "the unfolding through time of the interplay between tendency and countertendencies". The interpretation that the result of this struggle between factors and counteracting factors may be seen as open-ended might be supported by Marx himself, as he concludes part of Volume III with a short sentence: "Hence crises" ("Daher die Crisen"). His unedited manuscript written in 1863-5, after listing the "cardinal facts about capitalist production", it is worth highlighting, does not mention a collapse of capitalism (MEGA II.4.2, pp. 339-340).[2]

Over time, the counteracting factors have been expanding. The strength of those counteracting factors and the creativity of capitalism to expand them were both grasped three decades later by Grossmann (1929). Given the rich description that Grossmann presented on those counteracting factors - countertendencies -, it is possible to reinterpret his book as an analysis of the flexibility of capitalism, given the growing number and huger strength of available countertendencies to the fall of the profit rate. This reinterpretation might be fair to Grossmann, since he devotes more space to the countertendencies than to the factors that contribute to the fall of the rate of profit - he presents a longer list of countertendencies, divided between "countertendencies internal to the mechanism of capital" and "restoring profitability through world market". However, since Grossmann published his book (1929) before the structural changes that have begun with Roosevelt's New Deal in 1933, he did not include the state intervention in peaceful times. This new powerful countertendency was later explicitly mentioned by Poulantzas: among the "economic functions of the state", Poulantzas (1978, p. 199) points a key role as a countertendency to the fall of the profit rate.

The long term dynamics of capitalism has been investigated by scholars focusing in the technological dimension - long waves of capitalist development (Schumpeter, 1939; Freeman & Louçã, 2001) -, in money and power - systemic cycles of accumulation (Arrighi, 1994) -, and in financial instability - "episodes of severe financial instability" that often trigger "institutional changes" (Minsky, 1986, p. 45).[3] Those investigations show how capitalism as a system has over time reshaped itself. In

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[1] Furthermore, this elaboration based on this long lasting struggle between tendencies and countertendencies to the fall of the profit rate may be part of a dialogue with both the long waves of capitalist development and the systemic cycles of accumulation is presented in Albuquerque (2012, chapter 5) - because movements of the rate of profit are related to technological revolutions and to geographical movements of capital accumulation.

[2] In his Notebooks on the 1866 crises (Boxes B108, B109 and B113, in IISG Archives), Marx takes notes from selected articles from *The Economist* and *The Money Market Review* about reactions from British government, Bank of England and other economic actors. As an example, Marx takes notes from an article ("What a panic is and how it should be mitigated", *The Economist*, 12 May 1866, pp. 554-555) that discusses the intervention of the Bank of England in the aftermath of the 1866 crisis, through the suspension of the 1844 Bank Act - Marx's notes are in pages 55-56 of Notebook B109 (see Paula et al, 2014). Was Marx looking for emerging countertendencies?

[3] Those approaches suggest that capitalism, after the British industrial revolution, has passed through different phases: five, according to the long wave approach (Freeman and Louçã, 2001); two, according to the systemic cycles of accumulation approach (Arrighi, 1994); three, according to an interpretation of imperialism and its ages (Callinicos, 2009). Minsky (1986) concentrates on the transition from the capitalism before the 1929 crises and its post-crises reorganization. For other periodization of capitalism and other elaborations on the role of crises in those phases, see Albritton (2001).

common those approaches stress the role of crises throughout this process of shaping and reshaping the whole system. This process, of course, is not smooth: institutional matching and mismatching are part of the process, and key components of those mismatching that anticipate institutional changes are the state (Jessop, 2002) and the global divide between the capitalist core and its periphery (Furtado, 1978, 2002).

Those works provide the historical and theoretical background to survey the role of crises in the metamorphoses of capitalism. Those reflections suggest two points.

First, crises are moments of adjustment for capitalism. Crises are part of the capitalist dynamics, they grow out of the inner system's logic as a rebalancing tool. A costly rebalancing tool, in social, human and economic terms, but a very effective restructuring tool. The creation of institutional mismatches is part of capitalist dynamics - mismatches that grow out of its technological dynamics, source of unequal development with other dimensions of the system such as finance, state, and geopolitical arrangements. Crises are at the pinnacle of those institutional mismatches.

Second, crises trigger institutional responses. In the beginning - during and after the initial panic - there are rescue operations. Even those rescue operations already trigger changes in the system - unintended or unplanned changes. Over time, sometimes as consequence of limitations of initial rescue operations, sometimes as consequence of institutional and political learning, structural reforms might be introduced, dealing with previous institutional mismatches. Those combined institutional answers - part unintended and unintentional, part unplanned and part politically designed - reshape capitalism: a new phase arises. Those changes involve both the emergence of new "varieties of capitalism" and broad geographical movements of capital - therefore, the economic decay of one country or region, even of a leading country, might not be a system breakdown, on the contrary, it might be an expression of capitalist flexibility.[4]

The best example of this process can be seen in the crisis of 1929 (and its sequence in 1937) and the New Deal reforms, that began in 1933 and went on until Second World War - those reforms transformed the US economy and latter were at least key references for post-war reforms in Europe (with Marshall Plan) and Japan (with the economic policies of Occupation) - that contributed to reshape advanced capitalist economies (Callinicos, 2009, pp.170-171; Panitch & Gindin, 2012, chapters 2 and 3).

The connection between those structural reforms and the overall dynamics of US capitalism may be grasped by the ups and downs of the rate of profit in the US (1869-2011). Figure 1 shows those movements, stressing how the combined effects of structural changes during New Deal and Second World War impacted the rate of profit.[5]

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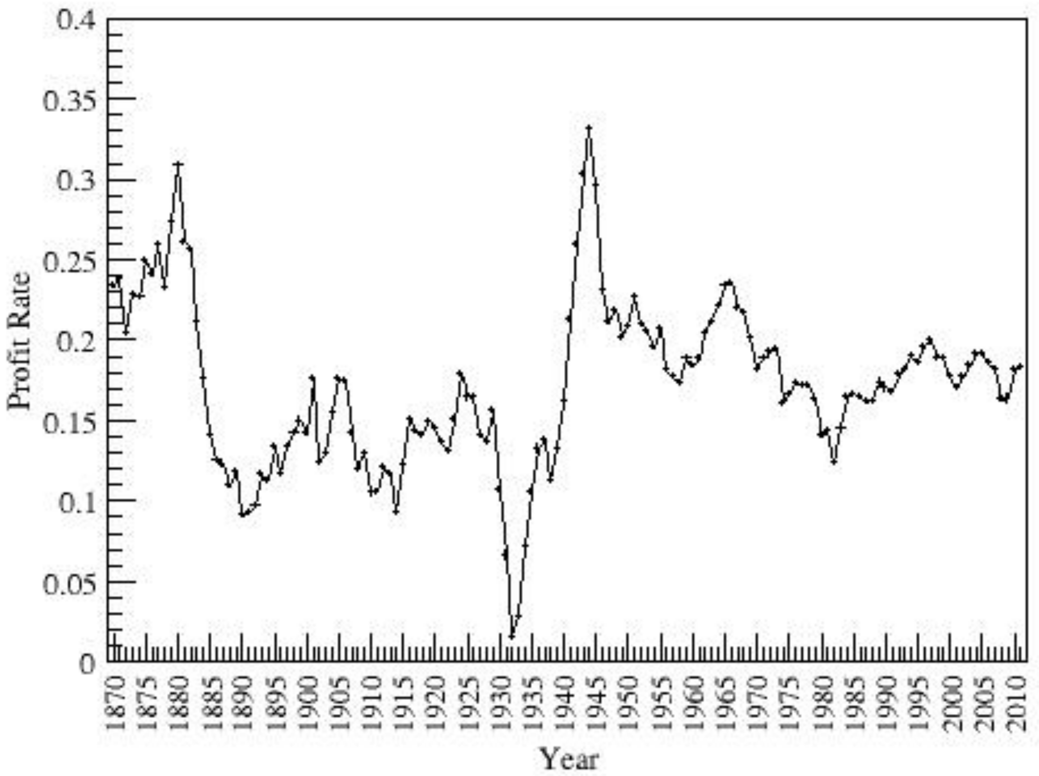
[4] Rosdolsky (1959, pp. 216-218) stresses how important it would have been in the 1910s to differentiate the exhaustion of European bourgeoisie from the ascending energy of US in the world scenario. Probably even Lenin underestimated the stage of changing leadership in international affairs.

[5] For a broader evaluation of those data, see Ribeiro et al (2015a).

FIGURE 1
Rate of profit in the United States
(1869-2011)



Source: Database from Duménil and Levy, acessed through Maito (2012, Methodological Annex. Reference - available at www.jourdan.ens.fr/levy/uslt4x.txt).

This example of the last overall reorganization of capitalism - a process that involved two world wars, the remaking of a leading national state, and the international spread of this remaking - might be helpful to show the temporal sequence of the process - crisis, rescue operations, structural reforms, new phase (and a new variety of capitalism) - but that may not be so helpful to understand emerging new features of today's capitalist reconfiguration. It is necessary to investigate a specific source of institutional mismatch that may have underpinned the last crises, known as the first global financial crises (BIS, 2009, chapter 2): the internationalization drive of capital.

A special source for the 2007-2008 crises is the step forward that capitalism has taken to become more international, more global. The inherent drive of capital towards expansion (Marx, 1867, chapter 23) takes place with complex institutional arrangements that have states - specially national state(s) of leading capitalist nation(s) - connected (or organizing) this overall capitalist expansion logic (Panitch and Gindin, 2012, pp. 1-3). Panitch and Gindin (2012, pp. 1-2) stress that capitalist expansion through the world is not an automatic process and that it needs states to happen - their book describes how the American state and its internationalization led the last globalization process. A corollary to this important interpretation might be that the eventual exhaustion of economic, political, and hegemonic strength of leading capitalist state(s) limits the scale and scope of international expansion. The British state led a round of capitalist expansion, once exhausted it was replaced by the United States. Now, the possible exhaustion of the United States might have opened both a crisis and a call for a new arrangement to go ahead with a new round of global expansion of capital.[6] Probably, both the United Kingdom and the United States had unleashed economic and political forces that later surpass their resources and energy to deal with - capitalism engulfed larger parts of the world, with more complex political and economic problems, with more actors and possibilities of alliances.

This logic of capitalist expansion has to be evaluated in historical perspective. Interpreters of capitalism, investigating the system at different stages of historical evolution, may have highlighted key structural features of this specific dynamics: Marx (1867) unveiled the origin and the start of this basic dynamics of expansion; Rosa Luxemburg (1912) and Bukharin (1915) described to this dynamics in a different framework, pointing to a global drive to include non-capitalist regions in the systemic logic; Grossmann (1929) evaluated the role of international expansion as a key countertendency to the fall of the rate of profit within the framework of classical imperialism; Hymer (1974) introduced the investigation of a new agent for this expansion, the transnational corporation; and Panitch and Gindin (2012) stressed the specific role of the American state for the last round of globalization. Certainly, the level of internationalization of capital is one key component to define phases of capitalism - and this suggests a dialogue between interpretations focused on the international expansion of capital and other periodization of capitalism.

This dialogue is important because the logic of expansion of capital might have a very specific dynamics, with specific timing and logic that need to be investigated. This dynamics might combine phases of pure and energetic expansion followed by phases that may be pauses in previous expansion drive given the exhaustion of those expansionary energies - breathing space for resuming further expansion. There is a literature on "waves of globalization", both in academic (Baldwin and Martin, 1999) and in specialized newspapers (*The Economist*, 12 October 2013),[7] that could help to understand this specific dynamics. Those "waves of globalization" may be connected to other long-term interpretations of capitalism, since each phase - and each "wave of globalization" - may be connected, for instance, with specific features of long waves of capitalist development. Freeman and Soete (1997, pp. 120-125), in a scheme of summing the five long waves, suggest how different types of firm are articulated with different phases of capitalism. In their scheme, the leading firms of the fourth long wave - 1945-1991 - are transnational corporations. Other schemes - even though slightly simplistic - help to visualize how internationalization of capital changes over time, from exports of commodities, to exports of capital, as suggested by the literature on the classical imperialism (Hilferding, 1910; Bukharin, 1915). Certainly, in the post-war period transnational corporations became key drivers of internationalization (Hymer, 1974), a role that has increased over time - pushed by other revolutionary changes such as the ICTs that opened a new long wave (Freeman and Louçã. 2001) - and that have multifarious impacts on other institutions of society (Cantwell, 2009). The growing role of TNCs in the global economy is a key source of institutional mismatches. And this probably opens an important topic for the structural changes necessary to reshape capitalism - the international dimension has a greater importance than earlier systemic reconfigurations.

[6] Panitch and Gindin (2012, p. 2) do not evaluate the US leadership as exhausted, on the contrary, they stress that after the crisis of 2007 there is an "interstate commitment" in "cooperation with the American state in containing the crisis so as to keep capitalist globalization going".

[7] According to *The Economist*, "the forward march of globalization has paused since the financial crisis" (12 October 2013).

This enlarged role of the international dimension, therefore, might be perceived throughout the stages of the sequence crises-rescue operation-structural reforms-new phase.

This section, summarizing the background on the role of crises in metamorphoses of capitalism, introduces the next sections, which will investigate three steps of the process: pre-crisis structural changes, the rescue operation and indications of structural reforms. These three steps prepare the ground for a final question about a new phase of capitalism.

II. ANALYTICAL STEP 1 - PRE-CRISIS STRUCTURAL CHANGES[8]

The features of global capitalism described in the introduction of this manuscript are results from simultaneous and interrelated processes that were taking place within the system - therefore, the level of state intervention, internationalization, connections between finance and industry, rise and fall of leading countries are on the one hand, results of earlier processes and on the other hand starting points for further systemic evolution and change.

A review of available interpretations of the 2007-2008 crisis may be enlightening, as they show how multidimensional this crisis is, how broad its causes are. An example of this multidimensionality is the Special Issue of *Cambridge Journal of Economics* (2009): Perez (2009) focuses on technology, Kregel (2009) on financial instability, Wade (2009) in global imbalances.[9] Therefore, there might be forces inherent to the capitalist dynamics that were taking place before the crisis, whose unfolding are at the root of the crisis: forces that were generating the institutional mismatches discussed in section I. This section reviews major structural changes that are still running their courses, changes that were at the root of the crisis, and might be still contributing to mold the next phase of capitalism.

II.1. Science and Technology

During the last century the world witnessed the development of strong national systems of innovation, both at the core and in the periphery of the capitalist system (Nelson, 1995) - institutions that over time implement the "technological application of science" (Marx, 1857-1858, p. 699). The wealth of nations is strictly correlated with these powerful engines of growth, and their global strength can be grasped in the reports delivered by the United States' National Science Foundation - the *Science and Engineering Indicators* (NSB, 2013, and 2014). These technological and institutional factors push a global process of "labor repositioning" - instead of an end of labor, technological revolutions has been creating an increase in the pole of intellectual labor vis-à-vis the pole of manual labor (Albuquerque, 1996, chapter 1).

According to those reports, there are at least 6.3 million researchers employed worldwide (NSB, 2014, p. 3-60). Those numbers are increasing, and they are related to a diagnosis presented in the *Science and Engineering Indicators* regarding the nature of contemporary capitalist economy: they evaluate the

[8] Sections II and III are updated versions of parts of a previous working paper (Albuquerque, 2013, pp. 7-18).

[9] For a review of these papers, see Albuquerque (2012, pp. 111-117).

increasing share of "knowledge- and technology-intensive industries" (NSB, 2014, p. 6-1), which produce 27% of world's GDP (p. 6-10). These statistics show the technological nature of contemporary capitalism and indicate which sectors may grow over time. Other important statistic is R&D expenditure: in 2011, worldwide R&D expenditures were US$ 1,435 billion (current PP dollars) (NSB, 2014, p. 4-17) - ten years earlier those expenditures were only half of that: US$ 753 billion. There is an expansion of the global pool of researchers and resources, a structural feature that signals the emergence of a new pattern of networks - global innovation networks (Ernst, 2009).

Those global resources (workforce and R&D expenditures) push new technological changes that are under way. They combine the continuing exploration of ICT revolution with exploratory developments in emerging technologies as nanotechnology (Bozeman et al, 2007), biotechnology (Pisano, 2006; Ebers et al, 2007), clean energies (NSB, 2012, pp. 6-60/6-68), 3D printing (*The Economist*, 21 April 2012),[10] and the development of a new generation of robots and a new age of flexible automation (*The New York Times*, 18/08/2012) - more sophisticated robots, using systems of visual identification (cameras) and software that allows more flexibility to the implementation of specific tasks.[11] There is an increasing pressure for innovation related to low-carbon economy - a major economic and social change that is both a human need (Klein, 2014, pp. 452-453) and an opportunity to reorient the direction of technological change (Freeman, 1996), which may push alternatives energies to a more central role in our society.[12] This short list of emerging technologies - all *general purpose technologies* - with potential to be new technological paradigms - indicates the endless unfolding of the forces of technological revolutions that shape long waves of capitalist development.

While the world is still processing the impacts of the previous technological revolution - information and communication technologies (ICTs) -[13], those emerging technologies might be a disrupting force in the present economic conjuncture: the emergence of new technological paradigms shake and restructure existing industries, patterns of competition and reorganize production at global level - source of opportunities for countries at the periphery. And, as new technological revolutions take

[10] A *Special report* from *The Economist* suggests that innovations related to 3D printing have consequences that may amount to a third industrial revolution (21 April 2012).

[11] According to *The New York Times* - in an article entitled "skilled work, without the worker" - "[a]t the Philips Electronics factory on the coast of China, hundreds of workers use their hands and specialized tools to assemble electric shavers. That is the old way. At a sister factory here in the Dutch countryside, 128 robot arms do the same work with yoga-like flexibility. Video cameras guide them through feats well beyond the capability of the most dexterous human" (18/08/2012). This new generation of robots might have a large impact, since "[r]apid improvement in vision and touch technologies is putting a wide array of manual jobs within the abilities of robots" (18/08/2012). Effects of those innovations are already taking place, in changes such as the return by some corporations of their manufacturing activities to the United States - a phenomenon named "the boomerang effect" by *The Economist* (21 April 2012). Statistics of the stock of industrial robots are available (*The Economist*, 29 March 2014), showing that before the crises global shipments of industrial robots oscillated around 120,000 units.

[12] This change in the "orientation of technological progress" is not easy, as Klein (2014) puts forward. A look in the list of the 500 largest global firms - by profits - shows seven corporations in the ten first positions (Silva, 2014, pp. 147). Certainly a strong lock-in in the dynamics of technological progress that can only be reoriented by strong social, political and economic forces - part of an alternative to capitalism.

[13] One example of this complex adaptation process, not a smooth one, is the link suggested by the Bank of International Settlements (BIS) between ICT revolution and the crisis of 2007-2008: "financial innovation is connected to credit booms. In the case of the current financial crisis, one could point to information technology as an important link. Without the advances in computer processing speed seen over, say, the past two decades, financial engineers would not have been able to value the complex instruments they were fabricating. And unless you convince investors that you know how to price a new instrument, there is no way to sell it. So, technological innovation that produced low-cost, high-speed computing contributed to the credit boom" (BIS, 2012, p. 4).

place, with their continued substitution of machines for labor, the organic composition of capital resumes a upward trend, igniting, once more, the factors that push down the rate of profit - probably unconsciously, the new "techno-optimist" special report from *The Economist* (4 October 2014, Special Report, p. 6), mentions those forces: "job-destroying effects of technology", "[p]roductivity growth has always meant in cutting down labour" (p. 6), and advances "eliminating the need for human labor" (p. 12) - as an editorial summarizes, "wealth without workers" (4 October 2014, p. 16).

A good evaluation of current S&T conjuncture could be organized through a discussion of R. Gordon's (2012, 2014) papers. They have been used by different writers such as Wolf (2014), Summers (2014), and Streeck (2014) to support their evaluations on stagnation (see section IV). R. Gordon (2014) answers critics and disentangles many subjects that he had put together in his first paper. It may be useful for this manuscript section because it helps to understand the difference from a crisis in one specific country and the destiny of global capitalism. This is a consequence of very important point reiterated by R. Gordon: his discussion is about the US case. This point is relevant both to the past and to the future. Regarding the past, it is very clear that R. Gordon's papers are not about innovation in the capitalist dynamics, but a more limited discussion of the phase that was led by US. What R. Gordon calls First Industrial Revolution (IR#1), based on steam energy, was UK-based - in the first paper, R. Gordon (2012, p. 4) presents data showing UK as the leading nation until 1906, "when the US caught up". But IR#1 is not the focus of his analysis, that concentrate in IR#2 (related to electricity, combustion engine and wireless communication, US-based) and in IR#3 (computers and internet, US-based). His evaluation of the "faltering innovation" in the US is supported by comparisons of growth data between four different phases of US growth: 1891-1972, 1972-1996, 1996-2014, and 2004-2013 (2014, p. 5). In his analyses, he combines general evaluation of the nature of technological change of IR#2 (identified as "multi-dimensional") and IR#3 ("uni-dimensional") - without any references to neo-Schumpeterian literature. Probably, R. Gordon (2012, 2014) underestimates the changes caused by the technological revolution of the ICTs (Freeman and Louçã, 2001), but this is a topic for other discussion (general comments on this are in section II.1). But, his major point are the "headwinds" that "slow future growth" - demographics shifts, education, inequality, and debt, with two additional headwinds mentioned in the previous paper, globalization and energy. R. Gordon stresses that all four headwinds are very specific to the US case - in other words, more appropriate to this manuscript, one may think that they are very specific of the US "variety of capitalism". The problems with demography - this could be a more general important structural change in capitalist societies, advanced and emerging - are not interpreted as challenges to the current innovation system, which could be reoriented under a new determinant of technological progress: expansion of life expectancy. But, as the two other headwinds - education and inequality - they are directly associated to the institutional arrangements related to the US welfare system (Esping-Andersen, 1990). The downgrading of educational attainment and the rise in inequality - connected with a very fine observation from R. Gordon (2014, p. 17) related to how the US structure of health system negatively affects growth - are not problems of innovation as such, but are consequence of a very specific social and economic structure. This evaluation is the finest point in R. Gordon analysis.

Regarding the future of innovation as such, probably this is one weak point is his evaluation. Although he is correct in his criticism of "techno-optimists" (such as Brynjolfsson and McAffe, 2014), his overall evaluation could be more carefully organized. R. Gordon forecasts "medical and pharmaceutical advances", "small robots, artificial intelligence, and 3D printing", "big data", and "driverless cars" (pp. 31-34). The list may be biased by the lists prepared by "techno-optimists" (it is noteworthy to point the lack of nanotechnology and the underestimation of energy-related innovations)[14] and by the frustrations related to high (and misleading) expectations from the biotechnological revolution. This topic of R. Gordon's analysis, however, may be embedded in his underestimation of the impact of current ICT revolution, which is deeply related to future technological changes. But, in this topic, uncertainty matters - sometimes it is ignorance, given the level of uncertainty (see Rosenberg, 1996). Regarding the future of US growth, this may be one strong point in his analysis - R. Gordon might be suggesting that the US specific variety of capitalism is faltering, not because innovation is slowing down by itself, but because other social and economic factors block or contain the previous innovative push of US economy. This variety of capitalism might have reached its limits, one could conclude from his papers, like the UK in the late 19th Century. In the conclusion of his last paper, it is stressed that other varieties of capitalism (R. Gordon mentions Nordic countries) "suffer less from the headwinds than does the US" (p. 38) and that "slower growth" in America might result in a "passing lane in which one country after another exceeds real GDP per capita of the United States" - this passing lane could include "one or more nations from Europe, East Asia, or our neighbor to the north" (2014, p. 39). Therefore, R. Gordon's analysis could be read not as being about global capitalism, but about the US case. And this interpretation brings the discussion, once more, to the subject of the stage of current hegemonic transition - a transition in which the US might be overcome by other countries (see sections IV and V)

II.2. Internationalization of Capital

Transnational corporations (TNCs) are contemporary drivers of internationalization of capital. Certainly there is a history of the growth and spread of TNCs, that one beginning may be the transformation of large multidivisional firms from US into firms with divisions located overseas (Chandler, 1977). The path of international firms with initially productive activities located abroad to international firms with R&D activities dispersed globally (Dunning, 1994) summarizes an evolutionary trajectory (Ernst, 2009; NSB, 2012, p. 4-25), which was deeply affected by the ICT technological revolution. As Cantwell (2009, p. 424) puts forward, "[a]t one time MNEs may have been simply the providers of technology and finance for scattered international production; today they have become global organizers of economic systems".

According to UNCTAD (2014, p. 30), sales of foreign affiliates pre-crisis average (2005-2007) reached 40% of world GDP. The expansion of the networks of production within TNCs is complemented by the surge in global value chains, that involves non-equity forms of internationalization of production (UNCTAD, 2011, 2013) - those forms of international production shows a growing maneuvering room for TNCs, that may decide to organize their production internationally through affiliates or through other forms of external contracting, like non-equity forms (UNCTAD, 2011, p. 124-125). The end result of

[14] R. Gordon (2014, p. 17) suggests that innovations "that has the sole purpose of improving energy efficiency and fuel economy" might not be "true innovations". To avoid climate change a real and deep technology revolution will necessary to generate a low-carbon economy (see Klein, 2014, pp. 452-453). Therefore, climate change and demographic shifts may become to key "focusing devices for technological change" - but whether or not this may be achieved within capitalism could be the subject of other texts.

this process, according to OECD (2013, p. 14), is a "new phase in economic globalization" - "[t]he general perception is that economic globalization has expanded greatly during the past two decades and may have entered a new phase due to the unbundling of activities in GVCs" (p. 14). This two-decade long process of internationalization has transformed the global economy by expanding the connectivity and interdependence among countries. The report from OECD stresses how the growth of international production did change the dynamics of international economy, creating even new avenues to emergence of crises - those connections are source of new systemic risk: "Global links and geographically concentrated production due to increasing specialization allow a local event to become a global disruption. National economies have therefore become more vulnerable to so-called systemic risk, i.e. the risk of the breakdown of an entire system" (OECD, 2013, p. 244). The crisis of 2007-2008 is shown as an example of this new form of systemic risk: according to OECD (2013, pp. 249-250), there is a link between global value chains and the "2008-2009 collapse in trade". Those new systemic risks, products of the growing internationalization of capital, impacts the nature of the crises in itself, as global value chains become mechanisms for international crisis diffusion and contribute to its international synchronization.

The expansion of international production (UNCTAD, 2011, p, 24) and its corollary - the increased powers of TNCs - have political impacts. Crouch (2011, p. 126-130) discusses how TNCs "enhanced (their) capacity to translate their economic strength into political power" (p. 126), with skills to act "right inside the room of decision-making" (p. 131). Piketty (2013, p. 561) stresses how TNCs may manipulate current national tax systems, "paying ridiculously small amounts because they can assign all their profits artificially to a subsidiary located in a place where tax are very low". Piketty points to an important institutional mismatch, since the growing internationalization and interdependence between economies has meant losses in national state(s) skills to tax capital. This affects the income distribution and the financial health of national states. A "global tax on capital" proposed by Piketty (2013, chapter 15) might be a starting point to solve one specific (and key) institutional mismatch.

II.3. Finance

The size and complexity of financial systems - including their globalization drive - are not an anomaly, but an indication of the changing role of credit system for capitalist production. This point is important, for Marx (1857-1858) puts forward a specific dynamics of "reciprocal effects" between industry and credit. Financial innovations may be seen as a source of flexibility and resources for industry and innovation. But, financial innovations are sources of crises in general (Marx, 1894, chapter 27) and of this last crisis (*The Economist*, 24 January 2009, p. 2).

The international structure of contemporary financial system is broadly assumed and is one of the key issues for system reorganization, according to the BIS: "finding the best way to manage the risks arising from an increasingly global and intricate financial system remains a challenge for the world's policymakers" (BIS, 2013, p. 10).

The growth of the financial dimension is statistically described by the growth of banking assets, from an average of 50% of GDP during the 1960s to 200% in 2008 (*The Economist*, 11 May 2013, p. 3). This growth is also described in the BIS Annual Reports that highlight the problem of overall levels of debt (BIS, 2009, 2013).

One of the drivers of this growth of finance is the internationalization of capital. According to *The Economist*, "[a]s large companies started doing business in ever more countries, they needed large banks that could follow them across borders, financing factories, paying employees and hedging their exposures to currency movements or interest-rate changes" (*The Economist*, 11 May 2013, p. 4).[15]

The restructuring of the financial system after the crisis is general - it is necessary to manage the high levels of debt and to answer to post-crisis adjustments and new regulations. The central problem for BIS is the global system as such - "[t]he evolving standards governing the global financial system must be based on simple principles: internalize systemic risks; require enough capital and liquidity to align private incentives with the public interest; set risk sensitivity to reduce shifts into high-risk assets; extend prudential reach to keep risks within view of supervisors (and managers); and allow the regulatory system to evolve along with the financial system" (p. 10).

The current banking reorganization probably suggests the need to build new matches between finance and TNCs. According to *The Economist*, on the one hand universal banks may grow, "as big multinational companies have become ever more global, they have become more reliant on large banks to help them manage cash and payments across many countries". On the other hand, increases the importance of specific type of banking: "global transaction banking" (*The Economist*, 11 May 2013, p. 15).

The international landscape is also affected by the crisis: "[t]he crisis in Western banking, still reverberating in southern Europe, seems to have accelerated the shift in banking muscle from rich countries to the developing world" (*The Economist*, 15 May 2010, p. 1).

Finally, one of pre-crisis developments in the finance sector was the emergence of the so-called shadow banking - the financial assets classified under this type of banking were 100% of US GDP in 2011 (2011b, Graph 2) [16] - an indication of the persistence of pre-crisis problems.

II.4. Labor and Social Movements

Beyond the ever ongoing process of "labor repositioning" (Albuquerque, 1996, chapter 1) - a corollary of technological innovation - one of the most important events of the last decade of the twentieth century was the establishment of a global labor market, according to Richard Freeman (2007), with its duplication resulting from the inclusion of the economies of China, India and the former USSR - an important step forward in the internationalization of capital, and a strong countertendency to the fall of the rate of profit, given the low organic composition of the capital in China, India and Russia ate

[15] McNally (2011, pp. 92-97) presents links between TNCs after the end of Bretton Woods and the emergence of derivatives as a financial tool in international money markets. Bryan and Rafertty (2006) present a broad study that shows how derivatives are essential tools for TNCs to navigate contemporary global economy.

[16] Bhatia (2011) is the source of data quoted by *The Economist*.

the end of the 20th century. The global labor force in early 2012 consists of 3.3 billion workers and 200 million unemployed (ILO, 2012a, p. 31).

The heterogeneity of this labor force is huge: 900 million live below the poverty line of $ 2.00 a day line (ILO, 2012a, p 31.). The dynamics of technological revolutions contributes to the expansion of the heterogeneity in the working world, permanently pushing ahead a broad process of labor repositioning: at one extreme there are scientists and engineers working to develop more sophisticated robots (*The New York Times*, 18/08/2012: Skilled work, without the worker), in other extreme workers of textile factories in Bangladesh that provide products for global brands (*The New York Times*, 6/12/2012, Horrible fire revealed a gap in safety for global brands). A new surge in the process of polarization between high-skilled and low-skilled labor, "the changing nature of many jobs", and a "growing reservoir of less-skilled labor" is illustrated by *The Economist* (4 October 2014, p. 11). Furthermore, "a generation of workers the world over is facing underemployment and stagnant pay" (p. 16).[17]

Piketty (2013, pp. 294-296) describes the rise in inequality in the US - a structural component of pre-crisis global capitalism - that may be one of the causes of 2007-2008 crisis (2013, pp. 297-298).

There is a significant mismatch between the international organization of production (presented in section II.2) and the international organization of labor movements. Probably here lies the most important mismatching for labor, which gives a large maneuvering room for capital.

In the global workforce highlights the problem of unemployment and job insecurity of youth (ILO, 2013) - a global issue that can be in one of the roots of the social mobilizations that have begun in 2011. The problems of employment for youth are a component of the heterogeneity of the working world.

Workers movements did achieve important gains during the, improving living and working, achievements that combined with technological changes in health care led to the development of new institutional arrangements and welfare systems, which had repercussions on the conditions of life and contributed to a major twentieth-century phenomenon that persists in the early twenty-first century - the expansion of life expectancy (Lee and Mason, 2011). This decisive human achievement - longer and healthier lives - poses new challenges for states and their welfare systems. *The Economist*'s concern with this issue is remarkable, either in relation to the prospects of growth of health spending (2011a, p. 14th) and pensions (2011b). Furthermore, this demographic shift may put forward a strong pressure to become a new "focusing device" for technological progress.

The long-term impact of these issues on the consequences of recent rescue operation to contain the crises is highlighted by a BIS Annual Report: public debt reached "levels unprecedented in peacetime", but the situation in the coming decades is even more disturbing because of promises made by governments "that imply major increases in pension and health care spending over the coming decades" (BIS, 2013, p. 38). New questions regarding the prospect of structural reforms in welfare systems, innovation systems and their nation-states, deal with the emergency that intergenerational

[17] The process described by *The Economist* (4 October 2014) - the capitalist orientation of technological progress - puts forward new challenges but also opens room for alternatives to capitalism, certainly based in a radical reduction of working hours - and a corresponding reorganization of society to implement this.

issues to a prominent position in contemporary debates (Miller, 2011) - possibly an important challenge for the current reconfiguration of global capitalism.

II. 5. Changes in World Power

The evaluation of US hegemony is not a simple question. Probably, since 1945, this hegemony may be divided between a reconstruction phase - a phase when the US led an advanced capitalist world destructed by the Second WW (Europe and Japan), related to the fourth long wave of capitalist development (Freeman and Louçã, 2001) - and a post-reconstruction phase - when the advanced capitalist economies had catch up with US and decolonization (almost) completed in Asia and Africa, a phase that the US led a new technological revolution, the fifth long wave, based on ICTs during the 1990s (Freeman and Louçã, 2001). Indeed, the nature of the leadership should be different in each of those phases.

Angus Maddison contributes to a chronology of previous hegemonic systemic transition. Its starting point - using GDP as a criterion - could be 1872, when the United States overtook the United Kingdom - (Maddison, 2003, p. 49 and p. 84). The end point of this transition could be demarcated by the definition of the dollar as world money (Bretton Woods in 1944 and the end of Second World War in 1945). This transition unfolded during 73 years (and involved two world wars). This can be a simple indicator - which of course must be taken with all caution - for an assessment of how far the global capitalism may be from the end of the current transition of hegemony. It is important to remember that according to *The Economist* (2011c, p. 2), only in 2020 China's GDP would overtake the United States' GDP (in current dollars).[18] B. Adams (1900) might be a good example of a reflection before the last hegemonic transition. His evaluation identifies long-term changes in "the economic center of civilization" (pp. 63-64). For Adams, between 1815 and 1890 Great Britain had the "seat of empire", but this "period of preponderance lasted until 1890". The international conjuncture in 1900 was defined by "an impression (that) has gained ground that England is relatively losing vitality" and "therefore a period of instability is impending" (Adams, 1900, p. 135). This period, of course, is "momentous to America" (p. 135).[19]

An indication of current problems in this regard is the discussion of world money and their transformations - an indicator of systemic transition. Helleiner & Kirshner (2009) and Eichengreen (2011) indicate the long journey that the Chinese currency should pursue to eventually replace the dollar as world money. Eichengreen (2011), although less emphatic than Arrighi in relation to the declining hegemony of the United States, points to an important change underway - "no more monopoly" is the title of his Chapter 5, where he explains the relationship between global money and global power (2011, p. 133). His analysis suggests that the 2008 crisis has accelerated the transition of an international system dominated by the dollar to a more multipolar successor (2011, p. 150). Other indications of changes in

[18] According to Maddison (2003, p. 61 and p. 87), in 1872, when the USA overtook UK's GDP, their GDP per capita was 73% of UK's. Only in 1905 the USA overtook UK's GDP per capita (p. 61 and p. 87). To present a comparison with the current hegemonic transition, in 2013 the Chinese GDP per capita was 13% of the USA's (World Bank, 2014).

[19] This book - *America's economic supremacy* - deserves a careful analysis, but this is beyond the subject of this manuscript. The reference to this book is interesting here, just to have a clue about how contemporary analysts could have been identifying and analysing previous transition while they were taking place. This might be our position now.

the previous hegemonic position of the United States are discussions on the costs of dollar as an international reserve currency - a burden and not a privilege, according to Pettis (2011) - and the concrete problems on an eventual ride of renminbi (*Financial Times*, 30 September 2014 - The future of renminbi).

A document prepared by the *National Intelligence Council* (2012, p. iv) can be taken as evidence of these changes on the world scene: "[t]he diffusion of power among countries will have a dramatic impact by 2030. Asia will have surpassed North America and Europe combined in terms of global power, based upon GDP, population size, military spending, and technological investment. China alone will probably have the largest economy, surpassing that of the United States a few years before 2030. In a tectonic shift, the health of the global economy increasingly will be linked to how well the developing world does—more so than the traditional West". This tectonic shift involves not only China, but also other peripheral countries in general - the "rise of the South", according a UNDP (2013) analysis.

III. ANALYTICAL STEP 2 - RESCUE OPERATION AND EPICENTRE MOVEMENTS

BIS (2009) describes the crisis spiral, which ends reaching the global financial system: "from August 2007 the stress in the financial system increased in waves. By March 2008, Bear Stearns had to be rescued; six months later, on 15 September, Lehman Brothers went bankrupt; and by the end of September, the global financial system itself was on the verge of collapse" (BIS, 2009, p. 4). This global financial crisis has been contained, according to the BIS because "in response, governments conducted successive rounds of intervention on an unprecedented scale" (BIS, 2009, p. 16).

III.1. "Unprecedented" Intervention: Size and Level of Coordination

The size of this "unprecedented" intervention is already a demonstration of an important difference with the crisis of 1929: the Minskyan "Big Government", built between the response to the 1929 crisis, World War II and the early post-war (Minsky, 1986), was present and able to act in containing the crisis. The public sector in the United States has committed $ 9.90 trillion and spent $ 2.20 trillion, until March 18, 2009, to contain the financial crisis of 2007-2008 (*The New York Times*, 19/03/2009). Nation states spent a total of $ 20 trillion, according to McNally (2011, p. 2).

Beyond this quantitative element - the scale of this unprecedented intervention - there is a crucial qualitative novelty in this rescue operation: a cross-border coordinated rescue operation. According to the narrative of the Bank of International Settlements, on October 8, 2008 "[m]ajor central banks undertake a coordinated round of policy rate cuts; the UK authorities announce a comprehensive support package, including capital injections for UK-incorporated banks". On October 13, 2008, "[m]ajor central banks jointly announce the provision of unlimited amounts of US dollar funds to ease tensions in money markets; euro area governments pledge system-wide bank recapitalizations; reports say that the US Treasury plans to invest $125 billion to buy stakes in nine major banks" (BIS, 2009, p. 18). BIS highlights what was new in this coordinated operation: "the first ever round of coordinated cuts in policy rates by six major central banks, including the ECB, the Bank of England and the Federal Reserve. Efforts to implement additional, broad-based policy measures continued in the following weeks" (BIS, 2009, p. 30).

If the nature of the crisis is global, the response must also come across national borders. This point is captured by the analysis of Streeck (2011): “the crises and contradictions of democratic capitalism have finally become internationalized, playing themselves out not just within states but also between them, in combinations and permutations as yet unexplored” (p. 26).

III.2. Shifts in the Epicenter of Crisis

The "unprecedented" government intervention in 2008 and 2009 determines the emergence of new problems and subsequent displacements at the epicenter of the crisis, now in a more volatile environment, shorter-term horizon vis-à-vis post-war framework - as discussed by Streeck (2011). A survey of BIS Annual Reports offers a good itinerary of these changes. In 2008 the goal was to contain the crisis (BIS, 2009, p 30) - in this phase central banks acted under the slogan "whatever it takes" to contain the crisis (BIS, 2013, p. 3). In 2009, after global economy had left the "emergency unit", the focus turned to "the side effects of the ongoing macroeconomic and financial support measures" (BIS, 2010, p. 7). In 2010 the concern turns to the "over-indebtedness", to the "global imbalances in the balance of payments" and for central banks that now face the risks associated with the resulting large size and complexity of their own balance sheets" (BIS, 2011, pp. xi-xii). In 2011 the emphasis shifted to the combination of the persistence of "structural challenges", to "overburdened central banks", to the prospect of an "abysmal fiscal outlook" - public debt jumped from 75% of GDP of developed economies to 110% of GDP -, to a new financial sphere, and to the crisis in Europe. According to BIS, several "vicious cycles" should be broken for the resumption of growth - central banks that are already overburdened cannot overcome the main weaknesses of advanced economies (2012, pp. 1-9). Finally, in 2012, the Annual Report assesses that ""[w]hat central bank accommodation has done during the recovery is to borrow time – time for balance sheet repair, time for fiscal consolidation, and time for reforms to restore productivity growth. But the time has not been well used" (2013, p. 5) and the new emphasis of the Report is structural reform (pp. 27-37).

These dislocations can also be captured by the changing subjects of *The Economist* - an indicator of emerging new concerns: in 2010 there is a Special report on debt, with special emphasis on public debt (*The Economist*, 2010b); in 2011, it publishes a Special report on the future of the state (*The Economist*, 2011a); in 2012, a Special report on state capitalism (*The Economist*, 2012b). Certainly new regulatory functions for the states in central capitalist countries will be defined: problems arising from public debt management should determine a new expansion of states and a reorganization of its functions.

The overall result of the concerted action of national states (BIS, 2009, p 18), a key intervention to contain the crisis, at least sets a new stage for state action in the central capitalist countries - "[n]ow state capitalism has returned, sometimes accidentally (several banks have become government-controlled) but often intentionally" (*The Economist*, 19 March 2011, p. 3). This leads to a broad evaluation: "[t]he rise of state capitalism constitutes one of the biggest changes in the world economy in recent years" (*The Economist*, 21 January 2012, p. 13). Those changes may point to a new phase of capitalism as a mixed economy, with new dynamics between markets and states.

III.3. Uneven Impact, Uneven Recovery

The effects of this "unprecedented" government intervention can be initially evaluated by following the ups and downs of market capitalization - a statistical indicator of one key component of fictitious capital (see WFE, 2013, 2014). In 2007 the global equity market capitalization reached a historic peak: US$ 60.8 trillion - a result of what Brenner (2006, p. 293) calls "stock market Keynesianism". The initial impact of the crisis was huge because at the end of 2008, this had dropped to US$ 32.5 trillion. State interventions on financial and monetary markets did contain this destruction of fictitious capital, pulling global market capitalization to US$ 47.7 trillion at the end of 2009 and to US$ 54.9 trillion at the end of 2010 The recovery problems of the global economic in 2011 were reflected in the decrease to US$ 47.4 trillion at the end of 2011 (WFE, 2011, p. 50th). During the next year a recovery, which reached US$ 54.6 trillion at the end of 2012 (WFE, 2013, p. 1) and US$ 68.7 in the end of the first half of 2014 (WFE, 2014, p. 5).

The geographical breakdown of data from the World Federation of Exchanges allows identification of ongoing structural changes in global capitalism. In 2000, the market capitalization of the exchanges of the Americas was more than three times the capitalization of the Asia-Pacific region, which in turn was approximately half the capitalization of the Europe-Middle East-Africa. During the crisis in 2008, the market capitalization of the Asia-Pacific reaches the level of Europe-Middle East-Africa. From 2008, the Asia-Pacific region is consolidated in the second position (WFE, 2011, p. 50th). In the end of the first half of 2014, the market capitalization of Asia Pacific totaled US$ 19.4 trillion, compared with US$ 18.8 trillion for Europe-Middle East-Africa (WFE, 2014, p. 5). It is also noteworthy that the Americas region, with US$ 30.4 trillion, is far from being three times the market capitalization of the Asia-Pacific as in 2000.

The BIS reports underscore the uneven nature of the impact of the crisis and the economic recovery (BIS, 2010, p. 24th) a "two-speed recovery," source of destabilization of balance of payments and volatility in capital flows (BIS, 2012, p. 1). The differentiation between the rhythms of advanced and emerging economies persists before, during and after the crisis: the emerging economies obtained higher growth rates until 2007, the decline in these rates was lower in emerging economies in 2008 and they returned to pre-crisis level more quickly (BIS, 2013, p. 6). The biggest difference is the data on unemployment: unemployment rates were similar until the crisis in 2008, after the crisis there is a gap in these rates from 2009 - in 2012 the unemployment rate in advanced countries reached more than 8 % while in emerging countries reached nearly 5% - a level below the pre-crisis rate (BIS, 2013, p. 6).

Reports of the International Labor Organization (ILO, 2013, p. 1 and p. 6) also highlight this differentiation of rhythms: "[f] ive years after the global financial crisis, the global employment situation remains uneven, with emerging and developing Economies recovering much faster than the majority of advanced economies" (p. 1).

This "two-speed recovery" (BIS, 2012, p. 1) is also seen in the rankings of the largest global companies. Before the crisis in 2005, in the *Global Fortune 500* data, the United States led with 176 companies, followed by Japan with 81, France with 39 and Germany with 37 companies, and China had 16 companies. In 2013, the United States keep the leading role, but with 132 companies, followed now by China with 89 companies, Japan with 62 and Germany with 29 companies.

This "two-speed recovery" is also reflected in an important variable for an investigation of reconfiguration of global capitalism: the flows of foreign direct investment (FDI) - an indicator of the movement of internationalization of production. According to UNCTAD, these flows are sensitive to the dynamics of crisis - while world GDP fell 2.1% in 2009, global FDI inflows fell 33.0% (UNCTAD, 2013, p. 2). In 2007, global FDI flows reached $ 2 trillion, falling in 2009 to $ 1.2 trillion (p. 213). The UNCTAD report states a regularity between the vicissitudes of global FDI: the increased participation of developing countries and economies in transition vis-à-vis the developed economies: developed economies in 2000 were the source of 88% of global FDI, while in 2012 their global share fell to 65% (UNCTAD, 2013, p. 4).

III.4. The Political Nature of the Rescue Operation

The rescue operation based on public funds may have contributed to changes in global political situation. Heillener et al (2010, p. 11) consider that "the large-scale use of taxpayers' money to rescue financial institutions had the effect of politicizing financial regulation to an unprecedented level in the US and Europe, thus unleashing popular pressures in favor of stronger regulation and increasing the involvement of legislative bodies". This popular pressure may end up imposing the end of self-regulation in sectors such as financial derivatives and hedge funds, according Heillener and Pagliari (2010, p. 90) - new roles for post-crisis states?

The nature of the rescue operation should be understood as the result of a dynamic in which the reciprocal effects (or interplay) between the state and the market are processed in a manner in which the negotiations predominate between sectors of the elites - the ruling classes - with little popular participation: universal suffrage has been important to put some limits to anti-popular measures - preventing what *The Economist* has called a free-market Stalin (2010b, p. 13). The current reorganization of state functions, of the interaction between state and market, takes place in a political conjuncture in which popular pressure is present only in the defensive side - preservation of institutions constructed in previous phases - and absent in propositional side (the result of the weakness of the programmatic development of alternatives to capitalism).

The political paralysis of the labor and social movements popular in the aftermath of the crisis is described by Watkins (2010, p. 20). The *New Left Review*, in January 2010, commented that "[p] erhaps the most striking feature of the 2008 crisis so far has been its combination of economic turmoil and political stasis". Since then this political stasis has changed, with the onset of an international series of protests, often with strong youth participation: Tunisia in December 2010, Egypt in January 2011 and June 2013, Spain in May 2011, Greece in June 2011, the United States in September 2011 - the Occupy Wall Street movement - France in October 2011, Turkey and Brazil in May 2013. The reasons behind those movements still need a lot of research, but there seems to be a combination of elements related to internationalization of social movements, the global phenomenon of youth unemployment - a generation at risk, according to the ILO (2013) -, as well as specific national policy issues. These movements may be at least indirectly related to the crisis and the rescue operation. The question that remains open is to what extent these movements can influence the construction of a post-crisis agenda changing the elitist nature of current responses.

III.5. Post-Crisis Measures and Unintended Changes in Global Capitalism

A final question for this section: is the interplay between the crisis, the rescue operation and other post-crisis measures accelerating a transition to a new phase of global capitalism? How does this interplay contribute to shape a new phase?

It could be possible to hint the following transformations: 1) an expansion in the role and functions of the state - illustrated by *The Economist* and its diagnosis of a return, by accident or intentionally, of "state capitalism" (2011, p. 3); 2) the "two speed recovery" (BIS, 2012, p. 1) implies the transfer of more economic power to the East; 3) the increasing internationalization of economic activities (internationalization of capital may be the most important single change - a sort of "dominant phenomenon"), especially in the global financial system, leading to concerns with a global institutional mismatch between the reality and the dynamics of the global economy and the weakness - or lack - of global governance - a key institutional mismatch that seems to have grown after the crisis; 4) the emergence of new social movements, driven by issues directly or indirectly caused by the crisis and the rescue operation.

IV. ANALYTICAL STEP 3 - THE TIMING OF STRUCTURAL REFORMS

Section III concludes with an evaluation of how the post-crisis measures unintentionally have changed global capitalism so far. This section investigates the intentional side of changes, investigating evidences of structural reforms in the global agenda.

It is interesting to begin these reflections with the two questions that Oliver Blanchard puts forward to Ben Bernanke, Stanley Fischer, Lawrence Summers and Kenneth Rogoff in the 2013 IMF Annual Research Conference: "what lessons we have drawn from the crisis?" and "are we ready for the next one?" (IMF, 2013).

One initial point to is related to the capability of the US to go on as an international crisis firefighter - as Panitch and Gindin (2012) point as an evidence as a continuity of US hegemony. A tentative answer to this may be a difference between US resources to contain a crisis in Mexico, Turkey, Brazil or South Korea and their resources to contain a crisis in China or India. If the US have limits to contain an eventual crisis of such proportion, this might suggest both the rise of new actors large enough to impact global economy in different ways and the limits of US to deal with those new actors and related problems. By the way, even in the last crisis (2007-2008), US alone could not contain it -

remember the 8 October 2008 international coordinated action between the FED, the ECB, BofE, BofJ and even Bank of China (BIS, 2009). The US coordinated the rescue operation, but it could not deal with it alone. This problem is present in the agenda of IMF Conference: Bernanke quotes Fischer (1999) - a paper that elaborates "on the need for an international lender of last resource", while evaluating the limits that IMF have to perform this function. Implicitly, there might be an evaluation of the limits that the US would have to perform alone this role of "international lender of last resource". According to Fischer (1999, p. 95), "critics of international capital mobility are correct to this extent: its potential economic benefit can only be realized if the frequency and scale of financial crises can be reduced". Therefore, the need to internationalize Bagehot (p. 101): certainly not an easy institutional formation process. The lack of such institution in 2014 is a sign of the lack of structural reforms to deal with the post-crisis environment.

Seven years after the beginning of the crisis, it is possible to summarize the main evaluations as pointing to a conjuncture in which the crisis has been contained but not yet overcome. As the BIS puts forward, "the overall impression is that the global economy is healing but remains unbalanced" (BIS, 2014, p. 10), the "longer-term outlook is far from bright" (p. 8) and the global economy is still in "search of a new compass" - the title of the first chapter of the 2014 Annual Report (p. 7).

Reports, prepared by the specialized press and by mainstream institutions and organizations, have been focusing in post-crisis problems, and they seem to concur in identifying a future that is "bleak" - an adjective used by a *The Economist* in a review of Kissinger's book (*The Economist*, 6 September 2014, p. 80). Martin Wolf (2014, p. 325) writes that "[i]t is easy to believe that the scale of current rescue operation might lead to bigger crises down the road, as critics argue". Lawrence Summers may also help to form a diagnosis of the predominant feeling among important institutions. Summers (2014, *Financial Times*, 8 September 2014, p. 11) has resurrected the concept of "secular stagnation", according to him "in response to the observation that five years after financial hemorrhaging had been staunched, the business cycle was beneath what was thought as normal levels of output". Among the arguments list in a short article, Summers cites Robert Gordon's papers on the "innovation slowdown". Streeck (2014, p. 56) remarks, "[s]ix years after Lehman, predictions of long-lasting economic stagnation are *en vogue*", and R. Gordon would be a "prominent example".[20]

The list of diagnoses gives an idea of the general feeling of those analysts: "in search of a new compass", "secular stagnation", "innovation slowdown", "bigger crises down the road".

Each of those evaluations may be read as pointing to a specific feature of the post-crisis phase.

Martin Wolf (2014) presents a well-informed evaluation of the crisis, the shifts prior to its emergence and the post-crisis management. It is well-informed, because it incorporates Minsky's lessons on financial instability (p. 218), Piketty's investigation on rising inequality (p. 336), Stiglitz's comments on unemployment, inequality and problems in aggregate demand (p. 277), R. Gordon's "slowdown in growth" (p. 275) and Mazzucato on the role of state in R&D activities (p. 276). In his analysis the crisis was a result of financial fragility (chapter 4) and of shifts in the world economy (chapter 5). At least three major post-crisis changes have taken place in the global economy, some as result of the rescue

[20] Streeck (2014) may be read, also, as an evaluation of a specific variety of capitalism, probably an analysis that involve a broader institutional scenario - something that could be called by "Western advanced capitalism". Therefore, Streeck, in his very fine paper, discusses not the "end of capitalism", but the end of the leading role of a set of "varieties of capitalism".

operation to contain it. First, for Wolf (2014, pp. 8-9) "the most obvious of all changes is the transformation of the financial system. The crisis established the dependence of the world's most significant institutions on government support". Wolf highlights the importance of the G7 Ministerial Meeting in 10 October 2008, a "turning point", "not just in the crisis, but also in the broader relationship between state and market" (p. 28). Second, "[t]hese crises also accelerated a transition in economic power and influence that was already under way... It is plausible that China's economy already is the biggest in the world.... The crisis has accelerated the world economy towards this profound transition" (pp. 9-10). Wolf highlights two points related to this transition: the "rise of China" explains "global imbalances" that helped to "cause the crises" and "transitions in global power are always fraught with geo-political and geo-economic peril" (p. 10). Third, "the crises have generated, in addition, fundamental challenges to the operation of the global economy", inter allia, problems related to the "recycling of current account surpluses" (p. 10). Those background points in Wolf's view lead him to analyze critically both the actions of leading national and international institutions during and after the crisis, describing the "crisis mismanagement" and "post-crisis mismanagement" (pp. 324). Those actions, in his analysis are very insufficient to deal with the current situation and Wolf presents arguments for action and states "that radical reform must be on the agenda" (p. 288).[21] Since Martin Wolf is a well-informed analyst, for the purposes of this manuscript his book may be read as a diagnosis of the lack of structural reforms necessary to deal with post-crisis environment. This lack of structural reforms leads Wolf to reiterate a scenario with crises in the near future (p. 288, p. 324, p. 325).[22] The book concludes with a discussion on failures of "Western elites" (p. 351).

This is the main subject of Henry Kissinger (2014), certainly a well-informed analyst. A connection with R. Gordon's analysis could be made with Kissinger's analysis of the scientific and technological global dynamics: once upon a time the West led and other nations "fall behind technologically. This period has now ended" (p. 364). Kissinger goes a little farther: "The rest of the world is pursuing science and technology... with perhaps more energy and flexibility than the West, at least in countries like China and the 'Asian tigers'" (p. 364). In sum: in "the world of geopolitics" there is a "turning point" (p. 364). This analysis of global science and technology is preceded by a broad discussion of global regions, which helps to understand the nature of current hegemonic transition: "the nature of the emerging world order is itself in dispute" (p. 93). US and China are "both indispensable pillars of world order", but both experience now unprecedented challenges (p. 226). Neither the US nor China "is in a position to fill itself the world leadership role of the sort the US occupied in the immediate post-Cold War period" (p. 232). While the "nature of the emerging world order is itself in dispute", it "is not simply a multipolarity of power but a world of increasingly contradictory realities" (p. 365). One major cause of "an international order's crisis is when it proves unable to accommodate a major change in power relations" (p. 366), a challenge that, according to Kissinger, Germany posed in the twentieth century in Europe, and "[t]he emergence of China poses a comparable structural challenge in the twenty-first century" (p. 367). This is the background to a discussion of what is lacking in the twenty-first century world order: organization of states, political and economic organizations of the world that are

[21] In a *Financial Times* article, Wolf makes a "call to arms", suggesting that "more radical action is needed" (4 September 2014, p. 11).

[22] The reviewer for *The Economist* writes that one of the flaws of Wolf's book is that "he spends too little time explaining his reform proposals" (6 September 2014, p. 80)

"at variance with each other" - "the international economic system has become global, while the political structure has remained based on the nation-state" (p. 368) -, "absence of an effective mechanism for great powers to consult and cooperate", and the American leadership as "indispensable" (p. 370). The conclusion is: "[a] reconstruction of the international system is the ultimate challenge to statesmanship in our time" (p. 371).

For the argument of this manuscript, those analyses are informed and useful evidence that there are no impending structural reforms in the short-term agenda of key actors of the contemporary global capitalist order. Kissinger's analysis may help to understand why there are no structural reforms in the short-term political agenda now - the nature of this transition and associated geopolitical problems may be postponing the real talks necessary to deal with the post-crisis scenario.

It is amazing how limited have been the proposals for "structural reforms" by leading figures of the "establishment" (see, as good examples, Summers, 2014; and BIS, 2014). There seems to be more complains about the lack of structural reforms than proposals about them. And the return to business as usual seems to be also strong, with structural reforms meaning "more of the same" - the old neoliberal agenda. This is captured even by writers such as Martin Wolf, with his diagnosis of "failures of Western elites" (2014, p. 351).

One further question, consequence of this evaluation of the limits of "Western elites" in leading real structural reforms: what are the factors that block this capability to implement reforms in global capitalism? Probably there is a sort of vicious cycle operating here. Given the level of internationalization of production, finance and even of science and technology, one key component for the elaboration of those structural reforms should be international cooperation among relevant actors. Without this international coordination, probably it will not be possible to elaborate the necessary long-term response.

This lack of structural reforms to overcome institutional mismatches - presented in sections II and III - is a key element to tentatively conclude an evaluation of current transition towards a new phase of capitalism: this is the blocking (and missing) link of the sequence that connects crises to new phases of capitalism. This key element becomes a crucial component to an evaluation of present international conjuncture - "there's the rub".

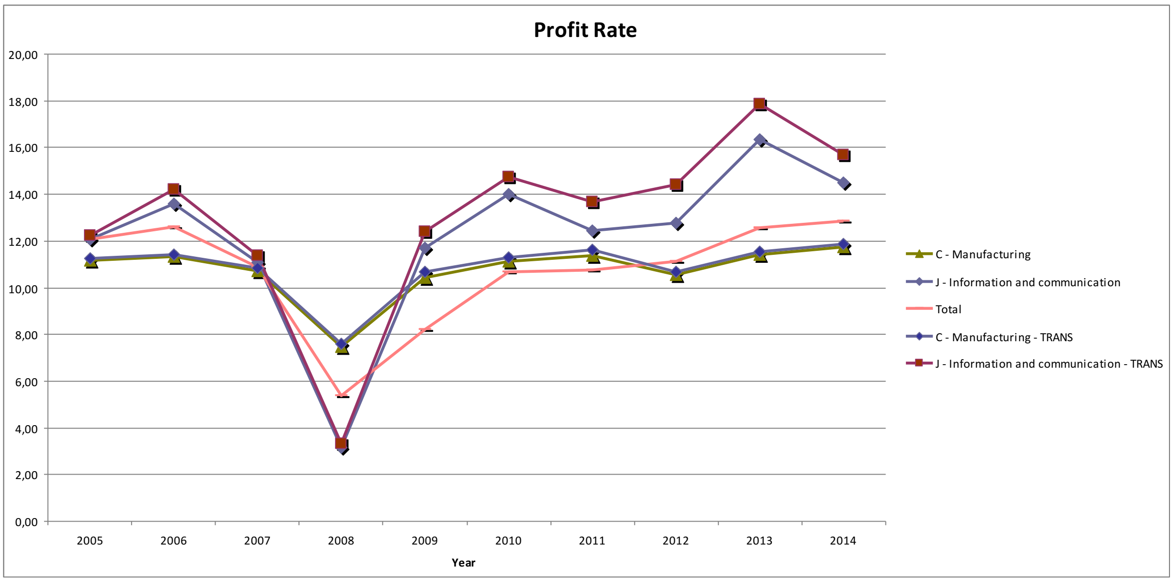
V. TOWARDS A NEW PHASE?

The pre-crisis capitalism is gone, but the complete framework of new one is not yet in sight. This concluding section tries to put together the preliminary conclusions of section III and IV.

A preliminary step in this conclusion could be a look on data about profit rate in the US - a complement to Figure 1. Figure 2 presents data on "profit margin" of US firms between 2005 and 2014.[23]

[23] The connection between data presented in Figure 1 and Figure 2 is presented in Ribeiro et al (2015b).

FIGURE 2
Rate of profit in the United States, average and selected sectors.
(2005-2014)



Source: ORBIS, authors' elaboration.

Figure 2 shows how the rate of profit had fallen after 2007 and had recoverd after 2008. However, this recovery shows how inter-sectoral differentiation has takne place in the US economy: 1) Information and communication broadened the gap vis-à-vis the general average and the manufacturing sector; 2) transnational firms in the information and communication sector now have a gap over domestic firms in the sector. Figure 2, therefore, illustrates the nature of the recovery in the US, highlighting the differentiation that took place under this process (as discussed in sections III and IV): the rise of new sectors and new steps towards internationalization of production.

Section III indicates how the rescue operation has impacted contemporary capitalism, especially by accelerating or pushing forward the structural changes described in section II. Its conclusion shows how the unintended consequences are molding features that may be seen in the next phase: 1) growth of the size of states (measured by public expenditures) with a corresponding new level of interplay between states and markets; 2) acceleration of the rise of East Asia; 3) a persistent rise in the level of internationalization of capital[24] - source of one major institutional mismatch: the level of international of capital already achieved vis-à-vis the weakness of existing international governance. This institutional mismatch is very important also for labor movements, since there is a strong gap between the level of international organization of capital and its weakness in the side of labor movements - that are still limited to national agendas. It remains to be seen how the post-crisis social movements will evolve to a more international agenda.

[24] Jessop (2010, p. 68) describes this new issue, as he identifies the moment "when the world market became sufficiently unified that it was both possible and necessary to write a history of world capitalism rather than to focus on the dynamics of a plurality of more or less autonomous space economies distributed across the globe"

Section IV indicates the lack of structural reforms in the post-crisis agenda. The international scenario - with the international mismatch between internationalization of capital and international governance at the background - might be still a blocking factor for the elaboration, coordination and implementation of those reforms. The present conjuncture can also be the beginning of a learning process of global elites to shape this new agenda.

However, this hole in the sequence crisis-rescue operations-structural reforms-new phase does not block further (unintended) steps away from the last variety of capitalism. Of course it is not possible a return to solutions based in one single (even the new leading) national state. The reason for this is the level of internationalization already achieved - interdependence does not take a step backwards.

The end result of this preliminary analyses is that, on the one hand inherent dynamics of capital and unintended consequences of post-crisis rescue operations are shaping elements of a new phase, but, on the other hand, the lack of structural reforms - similar to New Deal in 1929 post-crisis - shows, that until now, the planned and intended elements for a new phase are not shaping the new phase.[25] Over time this is a key element that may change, as elites' learning process go ahead - or new surges in economic and political crises push them to act.

The resulting conjuncture probably is best defined by Arrighi's concept of "systemic turbulence" - a period that may be long, when this transition takes place (remember that the last transition took 75 years to conclude - 1870-1945). This puts forward a new issue: what are the specificities of this current "systemic transition"? At least three specifities may be identified. First, given the level of internationalization of the economy, Arrghi's sequence of leading nation-states may be over. The next hegemon may be at least a coordination of nation-states, not a single one, a more globalized hegemon - this could be one way to solve the mismatch between internationalization of the economic and the lack of international governance. Second, recent technological progress combined with the internationalization of capital and its power to shape a new international division of labor might give room to another new possibility of systemic transition, breaking Arrighi's classic sequence. With the intensification of the "technological application of science", it could be possible to think of a division between a country that is the "world's workshop" and another that is the "world's laboratory" - therefore the sequence would not be only between a "world's workshop" and "world's bank", as in previous transitions. The process of labor repositioning, now with its polarization between intellectual labor and manual labor at global scale, might open room for US, Europe and Japan to preserve its position as "world's laboratory" as the world's workshop stays at East Asia. Certainly a more complex route - but an example of new possibilities for this transition. Third, the global capitalist economy is more heterogeneous today - the end of the USSR and the rise of capitalist China combine a globalized economy with more varieties of capitalism (King et al, 2005). Fourth, this increased heterogeneity involves a more intra-differentiated periphery that, for example, is headquarter of a growing number of global firms (Silva, 2014), process that might be already influencing the current reconfiguration of capitalism - a "boomerang effect" might be taking place now (Marques, 2014). But this is the subject of another working paper.

Those specificities of the current "systemic turbulence" indicate the need of further research - and the limits of analogies with past transitions to the understanding of contemporary capitalism.

[25] Of course, structural reforms will trigger unintended consequences of their actions.

On the one hand, the eventual exhaustion of hegemonic energies of the USA must be evaluated. If the USA hegemony may be divided in two phases (section II.5), it might be understood that the Cold War was very functional for the USA leadership - at that time the USA had no condition to lead the whole world. After the end of the Cold War, with the inclusion of Russia, Eastern European countries and China in global capitalism, the limits of the USA leadership capabilities began to surface. Overburden of success? Imposing capitalism everywhere - the making of global capitalism, to mention Panitch and Gindin (2012) - demands a lot of additional energy to answer to new issued, for instance, what variety of capitalism should develop in Russia and China? The influence on this might be beyond present capabilities of USA. Without resources for those new global tasks, after previous successes, the USA should search for a requalification of their leadership, and therefore the present restructuring of global order.

On the other hand, given the long transition - remember that the last hegemonic transition lasted for 73 years (section II.5) - it may be enough for contemporary analysis to discuss an eventual "tentative and provisional transition settlement": a "symbiotic relationship" between the USA and China - a negotiated stalemate? In this "symbiotic relationship" both USA and China assume their mutual dependence, but elements of the centre-periphery divide might be there: China is poised for the leading position in GDP, but the USA retain a GDP per capita five times larger; China is the world's workshop, but the USA are the laboratory of the world; China has the largest global reserves, but those reserves are in USA government bonds and dollars. This "symbiotic relationship", being a symbiosis across the centre-periphery divide, would be in itself a very specific and distinctive feature of current hegemonic transition. If this diagnosis makes sense, the next question should be how long might this "symbiotic relationship" last.

Finally, the internationalization of capital as the "dominant factor" in the current transition puts forward an important change in the framework within which takes place the struggle between the tendencies and countertendencies to the fall of the profit rate. Now, as capitalism involves the whole world - not anymore a world with a lot of non-capitalist areas, as during the life of Rosa Luxemburg -, there is less space for escape of capital towards areas where the competition may be less intense. One result of this integration is the globalization of intercapitalist competition: capital seeking new areas in which profit rates would be higher will increasingly be faced by other capitals that also seek such outlets, including local capitals - that might be looking for outlets elsewhere. This may be an important structural change *already in operation* - see, for instance, the perspectives of (premature?) automation in Foxconn Chinese factories (*The Economist*, 4 October 2014, p. 12).

In sum, the present conjuncture may be in a learning phase for global "elites", to define a set of structural reforms that would lead to a new variety of capitalism. Of course, for the working classes, social and popular movements, it is high time to elaborate alternatives to capitalism, an alternative to contemporary capitalism. An important subject, but a topic for another text.

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