CRISIS AND PERPLEXITY: THE ECONOMISTS IN FACE OF THE RUPTURE OF THE PATTERN OF GLOBAL GROWTH

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More than four years after the deepening of the most acute international economic crisis verified at the postwar, the world seems to be moving to a prolonged period of low growth. It is argued that this situation results from the high degree of uncertainty caused by the rupture of the pattern of global growth that prevailed in the last quarter century, precipitated by the outbreak of the economic crisis that made clear the unsustainability of the trends towards the strong growth of internal and external indebtedness, especially in the US, which had enabled until then the reproduction of that pattern maintaining satisfactory growth rates. Since the mainstream in economics, perplexed with the outbreak of the crisis, does not recognize on its impact on the confidence in the reproduction of the growth pattern the central element to explain the high degree of uncertainty responsible for the negative prognostic for the world economy, it is suggested it may contribute little in finding outlets for the situation.

Keywords: global crisis; pattern of growth; perplexity.

CRISE E PERPLEXIDADE: OS ECONOMISTAS DIANTE DA RUPTURA DO PADRÃO DE CRESCIMENTO GLOBAL

Mais de quatro anos após o aprofundamento da mais aguda crise econômica internacional verificada no pós-guerra, o mundo parece caminhar para um período prolongado de baixo crescimento. Defende-se que esta situação é resultado do elevado grau de incerteza provocado pela ruptura do padrão de crescimento global vigente no último quarto de século, precipitada pela eclosão da crise econômica que escancarou a insustentabilidade das tendências ao forte crescimento do endividamento interno e externo, especialmente nos Estados Unidos, que haviam permitido a reprodução, até então, daquele padrão, mantendo taxas de crescimento satisfatórias. Mostra-se que a corrente dominante na ciência econômica, perplexa com a irrupção da crise, não reconhece o impacto desta sobre a confiança na reprodução daquele padrão de crescimento o elemento central para explicar o elevado grau de incerteza responsável pelos prognósticos negativos para a economia mundial e, sugere-se, pouco pode contribuir na busca de saídas para a situação.

Palavras-chave: crise global; padrão de crescimento; perplexidade.

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1 INTRODUCTION

In late 2012, the economic outlook in most of the globe for the near future was strongly negative. The United States, in slow recovery from the 2008-2009 recession, found themselves facing the possibility of a 'fiscal cliff', in which legal changes agreed between the two major parties of the country, if effectively implemented, could lead to a generalized increase in taxes and a sharp reduction in public spending, and drive it to a severe recession in the world's largest economy. The euro zone, as a whole in recession since the third quarter of 2012 and with some of its economies facing this situation for years, was facing record levels of unemployment and watching the sustainability of the sovereign debt of several countries, as well as the region's economic and financial governance, being constantly questioned. Likewise, also without yet recovering from the deep crisis in 2009, the United Kingdom and Japan closed 2012 in recession and with bleak expectations to overcome it in the short term. Even China, which had been growing at double-digit rates for almost two decades, with the sharp drop in world demand for manufactured goods and the difficulty in directing quickly a significant portion of the aggregate demand for domestic consumption, greatly reduced the pace and has grown in the last two quarters of 2012 at annual rates close to 8%. The drop in the global demand for raw materials that this movement produced led, in turn, to a decrease in activity level also in many emerging producers of basic materials, which were benefiting from the Chinese growth. With all these elements, it did not seem wrong to say, in line with many analysts in academia and private institutions and officials, that the world was moving to a more or less prolonged period of low growth, in which the uncertainty about the future economy has rarely been greater. The press release that introduced the Global Economic Prospects – the World Bank June, 2012 GEP was, in this sense, revealing: "Developing countries should prepare for a long period of volatility in the global economy (...) and also for harder times" (World Bank, 2012).

The generalization of this perception occurred four years after the bursting of the bubble in the United States housing market, which triggered the deepest global economic crisis recorded in the post-war era, and from which the global economy has not actually recovered. Indeed, although the good economic performance seen in much of the world in 2010 has given a large number of analysts in private and official² institutions the impression that the growth path would be, despite the slowness of the difficulties and strong asymmetries between countries, in the process of being taken over, the fragility of the recovery became

^{1.} The austerity measures were only partly implanted and recession did not occur. However, the growth rate remained only moderate and with uncertain prospects.

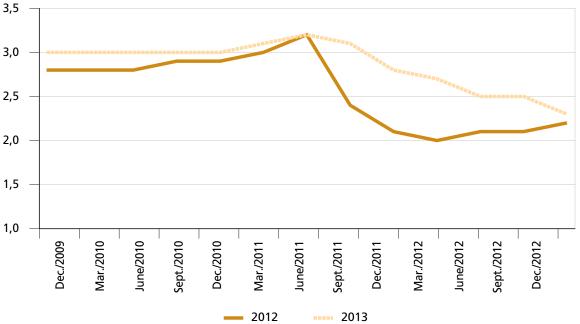
^{2.} See, for example, also in the GEP/World Bank press release, but in the issue that introduced the January/2011 report: "The world economy is moving from a post-crisis bounce-back phase of the recovery to slower but still solid growth of the growth this year and next."

increasingly clear. It is not surprising, therefore, that, from mid-2011, in the wake of increased distrust of the sustainability of the sovereign debt of some European countries, the accumulation of negative evidence meant that the outlook for the global economy (notwithstanding the marked differences between different groups of countries) began to deteriorate rapidly. This movement can be seen in graph 1, which shows the quarterly evolution of gross domestic product (GDP) growth expectations for 2012 and 2013 contained in the forecasts produced by the Economist Intelligence Unit.

GRAPH 1

Evolution of forecasts for the growth rate of the world GDP

(In %)



Source: Global Forecasting Service, Economist Intelligence Unit. Data available by subscription in http://gfs.eiu.com/PastReports.aspx.

The explanations suggested by the mainstream in economics for this situation rely, generally, on the high current degree of uncertainty and the paralysis of existing investments and restraint in consumption it generated. In this view, the high uncertainty is mainly caused by doubts over the sustainability of sovereign debt of several European countries and the region's capacity, to keep in this context the single currency and the financial stability and implement necessary structural reforms to increase the competitiveness of some of its members and, less and less, by the political stalemate in the definition of the public budget in the United States. Recently, the uncertainty about the sustainability of the Chinese growth – and of the political system itself – has also been mentioned with a certain frequency in a scenario in which that growth relies more heavily on the expansion of domestic consumption. Less orthodox currents in economics, in turn, point to the insistence of European governments and community bodies in implementing

austerity policies as responsible for the situation. The downward momentum of the global economy would therefore be largely the result of a series of wrong decisions taken by policy makers in key countries. In all these explanations is the implicit idea that, once resolved some – important – policy coordination issues, and taken the right decisions in the conduct of monetary and especially fiscal³ policies, the conditions would be set for consumption and especially the investment to expand again and thereby the economic growth globally would be, somehow, resumed on a similar basis to those in force until the outbreak of the crisis and, luckly, without the vices which originated it.

This dominant view ignores, as will be discussed later, decisive changes in the working conditions of the global economy. Such changes, directly responsible for the current economic situation, have emerged as a result of the 2008 financial crisis and make the pattern of growth in force in the world until the outbreak of the crisis can no longer be resumed.

The failure to recognize these changes and the insistence on the possibility of return, which the same change necessarily frustrate, to the "normality" provided by this pattern, reveals some myopia of an approach in economics that has increasingly neglected the realism of its propositions. Thus, it is not surprising that the mainstream in economics, characterized by such approach, has received with perplexity the radical change on the conjuncture since the last quarter of 2008. Without, as will be shown below, having foreseen or even entertained the possibility of a crisis of the proportions of the one that befell the world economy, the economic establishment assumed unanimously that the 2009 global recession resulted directly from the financial meltdown of the last quarter of 2008. Nevertheless, it did not recognize in the crisis possible important lasting effects, and did not associate to its development the predicted low growth more than four years after its outbreak. In contrast, it has sought the explanation for this situation in factors that are somehow external to the functioning of the economy.

In the next section we analyze the initial impact of the crisis on the world economy and, in the following one, the economists' majority reaction to his outburst. In the fourth and last we discuss the collapse, detonated by it, of the global growth pattern that had prevailed in the last quarter century, identifying in this break the crucial element in the explanation of the uncertain prognosis of overcoming the current situation.

^{3.} The answer to the question about what would be the correct fiscal policy is not, even in the bosom of the economic establishment, unanimous. And there are diametrically opposed recommendations that depend on the theoretical position of the analyst, new Keynesian or new classical.

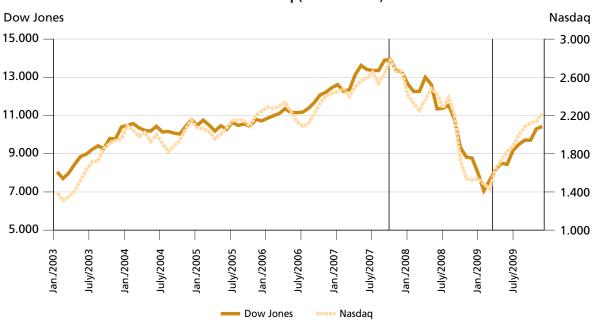
^{4.} See Chernavsky (2011).

2 THE 2008 CRISIS

The break on September 15, 2008 of Lehman Brothers, then the second largest investment bank in the United States and with a long history of 158 years, unleashed a wave of panic in financial markets not seen for decades. The collapse of the traditional institution – occurred just days after the merger of Merrill Lynch (another one of the hitherto largest investment banks in the country) with Bank of America, thereby avoiding its own bankruptcy – is one of the major landmarks in a period of great turbulence along which several major financial institutions of the country suffered extensive losses and saw its own survival as seriously threatened. In that same period, the bankruptcy of both the leading global insurance market firm (American International Group – AIG) as those of the two biggest real estate sector companies (private, but guaranteed by the United States government) of the country (Fannie Mae and Freddie Mac), which together had about half the secondary mortgage market, could only be avoided thanks to the massive injection of funds from the United States Treasury that ended up, in practice, assuming their control.

The difficulties of the United States financial sector, which increased sharply in the last quarter of 2008, had their trigger in the collapse of the subprime mortgage market and the consequent burst, in July 2007, of the bubble that had been formed in the housing market in the country throughout the 2000s. However, far from being restricted to the housing market, the crisis spread itself progressively to the various segments of the financial market, which are tightly integrated: adjustable rate mortgages, commercial papers (short-term, unsecured bonds issued by companies), insurers securities, loans on mortgages, debentures, loans for cars, credit cards, and student loans (Foster, 2008). According to the Bank for International Settlements – BIS – all assets were affected, except the safer ones, and key parts of the international financial system became dysfunctional (BIS, 2008, p. 1). The questioning of the ability of financial institutions, including the largest, in keeping themselves solvent in the face of the accumulation of heavy losses, then became a central focus of tension.

The traditional stock index Dow Jones intensely reflected this movement, losing a third of its value in 2008, the biggest drop in any post-war year, exceeding therefore the large falls observed during the oil crises of the decade 1970 and the bursting of the technology bubble in the early 2000s. The decline continued until mid-March 2009, causing the accumulated losses in just over a year to exceed 50%. The great losses of the United States stock exchanges can be seen in graph 2, which shows the evolution of the Dow Jones (with left axis) and Nasdaq (right) between the beginning of 2003, when the numbers reached before the crisis early in the decade had been recovered, and the end of 2009.



GRAPH 2 Stock indices – Dow Jones and Nasdaq (20013-2009)

Source: Bloomberg. Available in http://www.bloomberg.com/markets/stocks/movers_index_ibov.html.

Initiated in the United States, tensions quickly crossed the country's borders and began to intensely shake financial markets around the world. Also in Europe, the indexes of major stock markets, and also the other securities markets, collapsed. The stock exchanges in the United Kingdom, France and Germany fell, respectively, 31%, 43% and 40% over 2008,⁵ and almost 14 percentage points more by mid-March of the following year, at which time the stock exchanges around the world reached the lowest values. As in the United States, the heavy financial losses and liquidity problems over 2008 led traditional European financial institutions to face serious difficulties from which they released themselves, and only partially so, when they surrendered into state control. In Asia, the Tokyo and Hong Kong stock exchanges fell, respectively, 42% and 48% in 2008, and more than 11% in the weeks that followed. Falls also happened in Latin America: the Mexico City stock exchange fell 24% in 2008 and over 18% by mid-March 2009, while the Sao Paulo stock exchange, that already in December 2008 had practically stabilized, accumulated an annual fall of 41%. In Brazil, as in other developing countries, the liquidity problems caused by the widespread difficulties in renewing and raising of new funds abroad that followed the abrupt reversal in financial flows, associated with heavy losses in the domestic and foreign capital markets and cash pressures that some important domestic financial institutions faced, led to the occurrence of major assets reforms in the financial sector.

^{5.} The data relating to movements in the stock exchanges have been taken from the site Bloomberg.com, available at http://www.bloomberg.com/markets/stocks/movers_index_ibov.html.

Those had to rely on a significant participation of the State and caused an increase in the degree of concentration of the sector.⁶ Meanwhile, some of the largest exporters, in addition to a considerable number of medium-sized companies that, strongly encouraged by banks, had ventured in previous years in business with foreign exchange derivatives, suffered considerable non operating losses that eventually led to their sale or merger.⁷

With the deepening of the international financial crisis after the collapse of Lehman Brothers, the difficulties rapidly reached the real sector across the globe. The transmission was primarily through the mistrust that befell a large number of financial institutions and the very high aversion to risk that was spreading rapidly in the markets, leading to a sudden contraction in global liquidity. Reflecting the reduction in the volume of loans and the recognition of heavy losses, banks' balance sheets shrunk at record levels during the fourth quarter of 2008 (BIS, 2009, p. 19). The volume of assets held by them, which had expanded considerably over the decade, was reduced in the third (basically in September) and fourth quarters of 2008, more than 10%.8 In the first quarter of 2009, despite the unprecedented measures taken by governments and central banks around the world seeking to inject liquidity into the system,9 the banks' assets lost over 5.5%. The bonds issuance, heavily affected by the fall in the share price, faced similar restrictions. With extremely scarce credit and an atmosphere of colossal uncertainty, new private investment ceased immediately and the real global economy walked quickly to recession, as can be noted in graph 3.

The output growth rate for the world as a whole, whose average was around 3% per year in the 1980s and 1990s and exceeded 4% in the 2000s (and 5% in 2006 and 2007), declined in 2008, with the strong shock occurred in the last quarter of the year, to little less than 3% and plummeted in 2009, - 0.6%, featuring *the first global recession of the post-war period*. In the case of the developed countries, the growth rate fell from an average of just over 3% in 1980s and around 2.5% in the years 1990 and 2000 to only 0.2% in 2008 and -3.4% in 2009, an unprecedented rate in the post-war period. Although it most strongly affected developed countries, the abrupt reversal also befell the developing countries, which after growing at an annual average of nearly 3.5% in the 1980s and 1990s, grew in the 2000s, under the impetus of Asian countries, especially China, at rates above 6%. After a sharp decline in growth

^{6.} The most important examples – but not the only ones; in fact, many smaller institutions were heavily affected during the period – involve Itaú and Unibanco banks, which were merged on November 3, 2008 giving rise to the largest national financial group, and bankVotorantim, 49.9% of which was sold to Bank of Brazil next January. See about Freitas (2009).

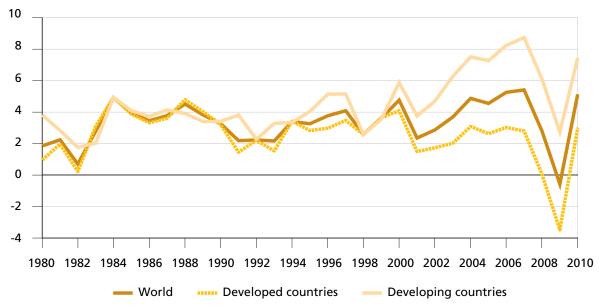
^{7.} Regarding the financial losses of productive enterprises, see Farhi and Borghi (2009).

^{8.} See Statistical Annex, BIS (2008) and BIS (2009).

^{9.} For the Brazilian case, concerning the Bank of Brazil, Caixa Economica Federal, the BNDES and the Credit Guarantee Fund, and other government measures during the crisis, see Chinamea *et al.* (2010). On the role of the Central Bank during the crisis, see Mesquita and Toros (2010).

already in 2008, the average rate for this group of countries in 2009 fell to 2.8%. The fall was particularly acute, indicating a deep recession in the countries of the former Soviet Union (-6.4% in 2009) and Central and Eastern Europe (-3.6%).





Source: World Economic Outlook Database October 2012. International Monetary Fund. Available in http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx.

In this context, the unemployment rate, which had been declining in the years preceding the crisis in virtually all regions of the world, was reversed and began to grow. If at the global scale the estimated numbers indicated a still relatively contained growth just under 1% between 2008 and 2009 (ILO, 2010), the growth rate for OECD member countries already showed a significantly higher growth (2.2%). Thus, in 2009 it grew up to 8.1% in these countries, the highest since data began to be harmonized and consolidated in 1988 (for the G7 countries, the rate of 8.0% was highest from the beginning of the series harmonized 1978). Although with a lesser impact, many countries in other regions, especially – but not only – in Eastern Europe and the former Soviet Union, were also strongly affected by the rising unemployment, with the aggravating circumstance that, in these cases, its effects are more perverse due to the lower reach of their social protection nets if compared with developed countries. Far from being reversed quickly, the negative impacts of the global crisis on employment levels remained intense. Accordingly, in early 2011, data from the International Labour

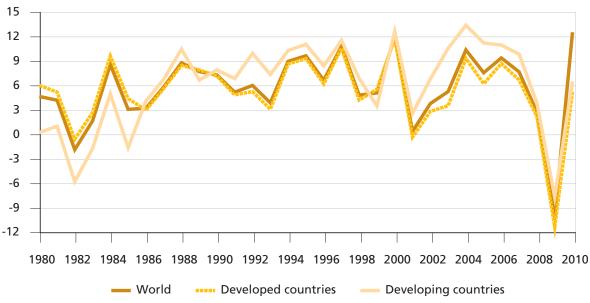
^{10.} Data extracted from OECD.StatExtracts. Available in http://stats.oecd.org.

^{11.} For a recent study on the subject see for example, Cook (2010).

Organisation (ILO)¹² for 2010 still showed an increase in the unemployment rate in most countries for which data were available, although some improvements have been identified in certain cases, particularly in Brazil, Russia, and among the developed countries, Germany.

Even more than in the labor markets, the sharp reduction in the growth rate of the global product was reflected most acutely in the volume of international trade, which after growing at rates always above 5% since the mid-1980s and, after overcoming the crisis in the early 2000s, grew at an average rate of 7% next year — therefore higher than the average rate of product growth. With the worsening of the crisis, the global trade grew only 2.8% in 2008 and fell, in 2009, by almost 11%, by far the largest annual decline recorded in the post-war period. As we see in graph 4, which shows data on world exports from the beginning of the 1980s, the fall in foreign trade in 2009 was especially acute in the case of developed countries (about 13.5%), where it was growing up in the 2000s at rates slightly lower than the growth of the global average. The trade of developing countries, in turn, which had been growing driven by Asian countries (particularly China) since 2000 to the staggering average rates of about 10%, more than three points above the global average, also saw a sharp decline of 8% in 2009.

GRAPH 4
Exports of goods and services – per year variation
(In %)



Source: World Economic Outlook Database October 2012. International Monetary Fund. Available in http://www.imf.org/external/pubs/ft/weo/2012/01/weodata/index.aspx.

^{12.} Data taken from International Labour — ILO Department of Statistics. Short term indicators of the labor market. Available in http://laborsta.ilo.org/sti/sti_E.html.

The aggregated data leave no doubt as to the depth of the crisis that hit the world economy from the end of 2008. Not only its severity was unprecedented in the post-war period, as its consequences, certainly different between countries, were then – and still are – largely unknown. Even after four years of its most acute moment, the uncertainty about the future has never been greater.

3 FROM ERRONEOUS PREDICTIONS TO PERPLEXITY IN FACE OF THE CRISIS

Given the depth of the crisis and its impact on the lives of billions of people around the world, it seems perfectly reasonable to ask, as did the Queen of England on her visit to the London School of Economics on November 5, 2008, "why did nobody see it coming?" (Greenhill, 2008). This question is even more appropriate if we consider that the crisis that worsened in the last quarter of 2008, although it is certainly by far the most serious since the 1930s, could not then be seen as especially unique, ¹³ since the last three decades have seen an unprecedented increase in the frequency and severity with which financial crises were arising around the world (Bordo *et al.*, 2001). Considering the vast amount of resources used in economic research in academia, governments and the private sector around the world, it remains puzzling that the developments that have taken on such importance have not been seen in advance by a significant number of researchers working in public and private organisms so that, ultimately, it could even have been avoided.

A forecast is not interpreted here as early identification of the precise moment at which a particular fact or economic process – in the case examined, the collapse of global financial markets – will occur or start, which in most cases is even impossible. ¹⁴ In contrast, it is understood as forecast the identification that the conditions necessary for these events or processes to occur are or will be present in a given situation and time, which makes its effective occurrence possible or even probable. ¹⁵ From this prediction, measures can be taken to prevent it from materializing or to decrease its possible adverse effects. In this sense, if the mechanisms that govern the operation of financial markets had effectively been well understood by the economics science, the conditions – that were present and – ultimately allowed the collapse would have been identified and its occurrence in the sense adopted here, would have been expected.

^{13.} While having elements in common to other financial crises that preceded it, however, the consequences of the 2008 crisis are fundamentally different. Indeed, given the size of the financial imbalances that detonated it, and the conditions which prevailed in the real economy, its start, unlike previous crises, initiated the process of collapse of the global growth pattern which prevailed until then.

^{14.} On the limits to forecasting and behavior in the face of rare events with extreme impacts as are financial crises, see Taleb (2007).

^{15.} Thus, one does not expect it to be possible to predict that the x phenomenon *will* occur in y date, but that the conditions are present so the x phenomenon *may* occur over the z period.

However, as pointed out by Rodrik (2009) and Spaventa (2009), few have been those who clearly warned for the accelerated growth of the systemic risks that made the specter of a serious global crisis increasingly present. "Most economists failed to prevent the policy makers about the threatening crisis in the system and ignored the work of those who have" (Colander et al., 2008, p. 2). Among those who anticipated the arrival of the crisis from the theoretical framework of mainstream economics, the one who achieved greater notoriety certainly was Nouriel Roubini, ¹⁶ who since 2005 had been predicting the financial collapse that ended up occurring in 2008. Also noteworthy are the works of Robert Shiller (2005; 2007), who since 2005 showed that the growth in housing prices in the United States that occurred since the 1980s was unsustainable, and Raghuram Rajan (2005) that, within the IMF showed how recent developments in the operation of financial markets accentuated real fluctuations and could easily degenerate into crises. Also worth mentioning are some studies from economists from the Bank of International Settlements -BIS, the only official institution expressing growing concerns about the financial situation (Borio, 2006; White, 2006). Such warnings, however, aroused generally little or no attention in academia and government, even sometimes being ridiculed.

Instead, the dominant perception was similar to that represented by the position of the International Monetary Fund - IMF expressed at the World Economic Outlook Update in July 2008 (IMF, 2008a). The institution just a few months before the collapse of the financial markets in September, unable to predict the severity of the crisis that was approaching at a rapid pace, hoped that the slow-down in the global growth rate observed since the last quarter of 2007 would end in the second half of 2008, with the recovery taking place during 2009. Even more shocking is the statement made in the introduction to the report, that the *top priority* for policymakers, less than three months before the collapse of global financial markets that led to the deepest economic crisis of the post-war period, should be placed in the combat against rising inflationary pressures:

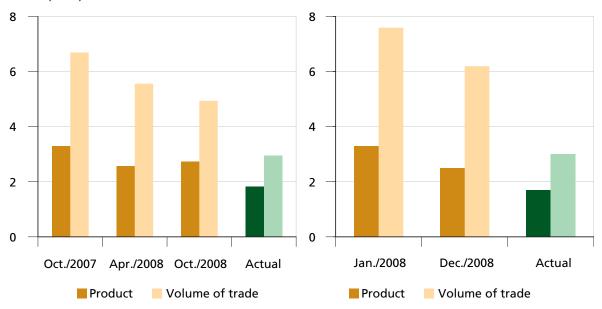
Against this background, the top priority for policymakers is to head off rising inflationary pressure, while keeping sight of risks to growth. In many emerging economies, tighter monetary policy and greater fiscal restraint are required (...). In the major advanced economies, the case for monetary tightening is less compelling, (...), but inflationary pressures need to be monitored carefully (IMF, 2008, p. 1).

This type of prescription, that shortly after would prove as mistaken, was, however, in full agreement with the predictions then constructed for almost all public and private institutions and international organizations whose regular activities include carrying out studies on the global economy and predictions about the behavior of macroeconomic variables. The brutal mistake of these predictions, some of which are briefly discussed below, is striking.

^{16.} See, for example, Roubini and Setser, 2005 and Roubini 2008.

In this sense, graph 5 shows the comparison between, on the one hand, the forecast growth rates of both the world product (at market exchange rates) and the volume of international trade for the year 2008 built by two of the most (if not in fact the most) important multilateral institutions that produce economic forecasts and, on the other, the actual data for both rates. The estimates used are those compiled by the IMF World Economic Outlook Databases – WEO, and the World Bank in Global Economic Prospects – GEP. On the left, the graph shows the IMF forecasts built in October 2007, April 2008, and October 2008, respectively, thus with twelve and six months in advance and contemporaneously to the collapse of the global markets, compared to the numbers recorded on the database published by the IMF in October 2009, i.e., just one year later, the numbers that are considered here as those which express the values actually realized in 2008.¹⁷ The right hand graph shows the World Bank estimates for the same year 2008 contained in the GEP's from, respectively, in 2008 (published in January of that year) and 2009 (published in December 2008), i.e., nine months before and two months after the collapse of the global markets, also compared to the numbers recorded in the report released by the World Bank one year after the outbreak of the crisis, the GEP 2010 published in January of that year.

GRAPH 5 **Growth of global product and volume of trade in 2008 – predicted** *versus* **actual amounts** (In %)



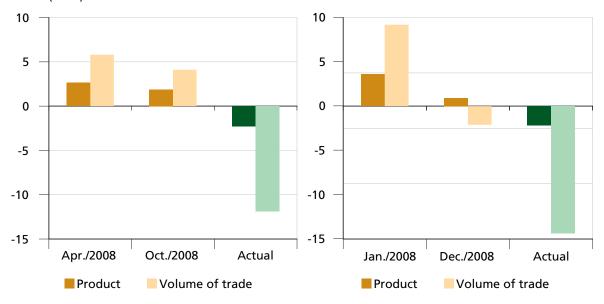
Source: World Economic Outlook Databases — International Monetary Fund. Global Economic Prospects — World Bank.

^{17.} The choice for the use of data published with about one year lag to capture the 'real' values seeks to achieve a compromise between the too preliminary estimates and therefore subject to significant changes, and fully consolidated estimates that incorporate information (changes in weights, methods etc.) that the analysts certainly could not have at the time of the forecast. The intention of this commitment is to employ the most appropriate benchmark to evaluate the accuracy of the forecasts. For a justification of the choice of an equivalent lag see Juhn and Loungani (2002, p. 51).

One can see from the graph the gross error of the forecasts made by both institutions less than a year before the worsening of the economic crisis. Such projections projected, for 2008, an expansion of the product, respectively, 80% and 94% higher than the one that prevailed, and an expansion of the volume of international trade 127% and 153% higher than the observed. Even the forecasts constructed with the year already in progress and published by both institutions in October and December 2008 – therefore already in the midst of financial collapse – still projected growth for the product almost 50% higher than that which was confirmed just a few months after and a growth in trade 67% (IMF) and 107% (World Bank) higher than the real one.

When analyzing the forecasts issued in the same reports which pointed to the following year, 2009 – therefore with a greater lag, of one to two years in advance – and comparing them with the values subsequently seen, the size of the discrepancies jumps scarily as seen in graph 6.

GRAPH 6 **Growth of global product and volume of trade in 2009 – predicted** *versus* actual amounts (In %)

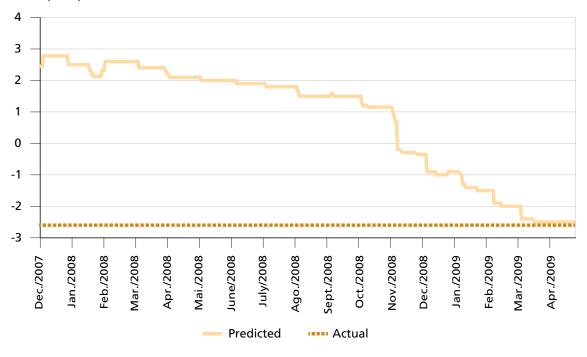


Source: World Economic Outlook Databases — International Monetary Fund. Global Economic Prospects — World Bank.

The serious projection errors in the period preceding the deepening of the crisis, that help to understand the perplexity demonstrated later by some in face of the intensity of its effects, far from restricting themselves to the mentioned multilateral organizations, constitute the rule when the forecasts built by professional analysts around the world are examined. Thus, comparable errors were also committed by other major multilateral institutions – such as the OECD and the European Commission – as well as by companies and

organizations linked to the private sector. As an example of the mistakes made in this case by private agents, we can see in graph 7 forecasts for the growth rate of the United States GDP in 2009 produced between December 2007 and April 2009 and collected daily between economists by Bloomberg, a private company that operates as a leading global provider of information used by professionals operating in financial markets whose data and analysis influence, therefore, the decisions taken in those markets around the world. The predicted values at each time are compared to the value that was finally seen later, shown in the graph as a dashed line.

GRAPH 7 **Product growth in the United States in 2009 – predicted** *versus* **actual amounts** (In %)



Source: Bloomberg.

While in 2009 the United States GDP *fell* by 2.6%, the largest annual decline since the 1930s, until April of the previous year forecasts compiled by Bloomberg pointed to a growth of about 2.5%. This value was gradually reduced over the months, but even in early November 2008, therefore, almost two months *after* the collapse of Lehman Brothers in mid-September, it was still anticipated that the following year's product would grow little more than 1%. It was only then, when the effects of the crisis worsened rapidly, that growth forecasts plummeted, dropping in a few days to -0.3% and reaching -2.5% at the end of March 2009, value that would undergo few modifications throughout that year and that proves very close to the amount actually seen and released at the beginning of the following year, of -2.6%.

Consistent with the perception that led to such misconceptions, in the month before his appointment as chief economist of the IMF on September 1, 2008, Olivier Blanchard took pleasure in praising the state reached by macroeconomics that, after decades of intense disputes, had finally stabilized around a set of ideas shared by most macroeconomists:¹⁸

For a long [time] (...), the field looked like a battlefield. Over time, however, largely because facts do not go away, a largely shared vision both of fluctuations and of methodology has emerged. Not everything is fine. (...) [But] none of this is deadly. The state of macro is good (Blanchard, 2008a, p. 2).¹⁹

Far from demonstrating just an individual conviction of limited scope, this kind of statement shows quite clearly the dominant perception about the state of macroeconomics in the 2000s. Another example of this perception is given by the Nobel laureate Robert Lucas in his speech at the 2003 annual meeting of the American Economic Association:

Macroeconomics was born as a distinct field in the 1940s, as a part of the intellectual response to the Great Depression. The term then referred to the body of knowledge and expertise that we hoped would prevent the recurrence of that economic disaster. My thesis in this lecture is that macroeconomics in its original sense has succeeded: Its central problem of depression prevention has been solved, for all practical purposes, and has in fact been solved for many decades (Lucas, 2003, p. 1).

In the same line, Michael Woodford proudly stated in his speech on Convergence in Macroeconomics at the American Economic Association – AEA held in January 2008:

the current moment is one in which prospects are unusually bright for the sort of progress that has lasting consequences, due to the increased possibility of productive dialogue between theoretically and empirical work, on the one hand, and between theory and practice on the other (Woodford, 2009, p. 277).

With this view of macroeconomics, it is not so surprising that only thirteen days before the collapse of Lehman Brothers, when commenting in an interview with a magazine by the IMF itself about the possible macroeconomic scenarios, the same Blanchard said:

one can think of many bad scenarios where low activity makes the financial crisis worse, and macroeconomic policy has little room for maneuver. At the same time,

^{18.} See, about the new consensus in macroeconomics that embodies this vision, for example, Arestis (2009).

^{19.} The deepening of the international financial crisis occurred a few days after this statement revealed his mistake, and later contributed for Blanchard to come to question himself about the actual ability of science to know how to conduct the macroeconomic policy. See about this Blanchard *et al.* (2010).

we can easily think of most optimistic scenarios, and I actually see them as more likely (Blanchard, 2008b).²⁰

Clearly, as demonstrated by the above passages, in early 2008 the prevailing sentiment among most economists was that the financial crisis, the effects of which already manifested themselves unequivocally especially – but not only – in the real estate market since the middle of the previous year, was relatively unimportant. This, conclusion in any case, was confirmed by the results obtained from an examination of the dominant macroeconomic models.

There is nothing in these models to suggest the possibility that the type of collapse seen in 2008 could occur. The bursting of the housing bubble was not conceivable in an environment in economics in which prevailed the idea that such bubbles simply could not exist. In addition, according to Krugman (2009), this *a priori* belief, and not the empirical evidence was at the basis of the defenses made by Greenspan's about the lack of a bubble in the United States housing market.

In such an environment, the emphasis given in economics to the study of the causes of financial crises was reduced. As stated by Colander *et al.*:

little exploration of early indicators of system crisis and potential ways to prevent this malady from developing. In fact, if one browses through the academic macroeconomics and finance literature, "systemic crisis" appears like an otherworldly event that is absent from economic models. Most models, by design, offer no immediate handle on how to think about or deal with this recurring phenomenon (Colander *et al.*, 2008, p. 2).

Recent evidence of this conclusion, pointing to the inability of the dominant models in explaining the occurrence of systemic crises²¹ can be found in the study by Rose and Spiegel (2009). Aiming specifically at understanding the causes of the 2008 financial crisis to, then, develop a model able to predict in advance the occurrence of similar events, his work seeks to relate statistically the severity of the impacts of the crisis in each country with the state assumed by the variables normally associated with the "fundamentals" of the economy, identifying those that are relevant to explain the crisis. In spite of carrying out a comprehensive test with over sixty of these variables, the study is not able to establish a clear

^{20.} Inevitable is the analogy with two known statements made by Irving Fisher, then one of, if not the most, renowned economist on the planet, a few days before the New York Stock Exchange bubble burst on October 24, 1929, which marks the beginning of the Great Depression: "There may be a recession in stock prices, but not anything in the nature of a crash" (New York Times, 09/05/1929). "Stock prices reached what looks like a permanently high plateau. I do not feel there will be soon if ever a 50 or 60 point break from present levels (...). I expect to see the stock market a good deal higher within a few months" (10/17/1929).

This type of wrong prediction followed by the stock market crash and the Great Depression costed Fisher much of his personal wealth and prestige in academia. They clearly show the distance of the economics of the time in relation to the reality that unfolded before it, manifested in its inability to understand and make valid statements about it.

^{21.} For a critique of the limitations of economic models, see Lawson (2003).

relationship between, on the one hand, the factors most frequently cited by the dominant approach in economics to explain the occurrence of the crisis and, on the other, its impact on different countries. This indicates that prevention systems created from models (at least those built from the dominant approach) would hardly be able to predict the occurrence of systemic crises.

In this context, it should not be so surprising that the irruption of an economic crisis with proportions that, according to Soros (2008), had not been seen since 1929, was received with a degree of perplexity usually unimaginable by most economists. Perhaps the greatest evidence of this feeling is the reaction of a character like Alan Greenspan, chairman of the United States Federal Reserve for almost twenty years until his retirement in late 2006, celebrated by the global financial markets and acclaimed as a sage of economics by the mainstream media, by the economic establishment in most of the world, and even, as demonstrated over the years in his hearings before the United States Congress,²² by the vast majority of lawmakers in his country, belonging to both major parties. In a long testimony before the Congressional Committee on Oversight and Government Reform on October 23, 2008,23 Greenspan acknowledged that the crisis "has turned out to be much broader than anything could have imagined," and that he felt distressed because he found a defect, he did not know how significant or permanent it could be, in the worldview that had guided him for forty years or more and that guided the profound changes, occurred under his mandate, in the participating institutions and the functioning of financial markets in the United States and around the world, which became increasingly deregulated. Suggesting that he had made a mistake, he said: "Those of us who have looked to the self-interest of lending institutions to protect shareholders' equity, myself especially, are in a state of shocked disbelief" (Greenspan, 2008, p. 2).

Indeed, the housing bubble had revealed the problems with the risk management theories and asset pricing on which rested much of the financial innovations that had occurred in recent decades. When real data from a period of uncertainty replaced those related to the period of euphoria corresponding to the two and half previous decades with which the models typically used for building policy recommendations were generated, the modern risk management paradigm that was dominant until then collapsed, and with it the whole intellectual edifice that supported it.

^{22.} For example, in his last congressional hearing still as Fed Chairman, on November 3, 2005, Greenspan heard comments like this, made by Congressman Jim Saxton: "You have guided monetary policy through stock market crashes, wars, terrorist attacks and natural disasters (...). You have made a great contribution to the prosperity of the United States and the Nation is in your debt" (JEC, 2005).

^{23.} See comments on the declaration in, for example, Andrews (2008) and Wall Street Journal (2008).

To the manifest inability to predict the advancement and prevent the deepening of the crisis, was added the perception of cacophony in the statements given by economists once the crisis was installed, both in relation to the interpretations of the causes of the sudden financial collapse and the measures necessary to alleviate its most perverse effects. The theoretic and practical convergence imagined by the macroeconomists in the "great moderation" period seemed to have brutally evaporated, breaking the (then perceived) fragile consensus between new classical purists and new Keynesians.

The perplexity demonstrated before the advent and progression of the crisis as well as the conflicting reactions that followed it fostered an increase questioning of economics – particularly in macroeconomics and finance – and economists in wider sectors of society and within the profession itself. Reflecting a widespread impression, one could say that the profession of economist would have

failed in its duty to society to provide as many insight as possible in to the workings of the economy and in providing warnings about the [limitations of the] tools it created. It has also been reluctant to emphasize the limitations of its analysis (Colander *et al.*, 2008, p. 14).

More than that, for many, the economists had become accomplices of the crisis, after all,

economists [were those] who legitimized and popularized the view that unfettered finance was a boon to society. They spoke with near unanimity when it came to the "dangers of government over-regulation." Their technical expertise — or what seemed like it at the time — gave them a privileged position as opinion makers, as well as access to the corridors of power (Rodrick, 2009).

Certainly, the effective importance of the economists as a profession in the definition of the choices made by governments and private agents in general, and specifically their participation in the decisions that paved the path to global economic crisis, are important issues that deserve further investigation that will not, however, be undertaken in this work. Anyway, considering that, on the one hand, the major institutional changes observed in recent decades, which were strongly defended – and even eventually implemented – sometimes by members of the mainstream in economics, were crucial in the developments that led to the expansion of the systemic risks that resulted in the crisis, and on the other, that most economists were unable to identify the tensions and assess the potential for damage before they manifested themselves, it is not difficult to agree with the statement by Colander *et al.* that the global financial crisis had made clear "a systemic failure of the economics profession" (2008, p. 2).

In this context in which mutual criticism multiplied publicly among economists of different currents inside mainstream economics (in addition, of course, to the attacks from outside) that shortly before were thought as finally convergent, the popular British magazine The Economist asked "What went wrong with economics?" It even allowed itself to state that "of all the economic bubbles that have been pricked, few burst more spectacularly than the reputation of economics itself" (The Economist, 2009).

4 CRISIS AND THE BREAK IN THE PATTERN OF GLOBAL GROWTH

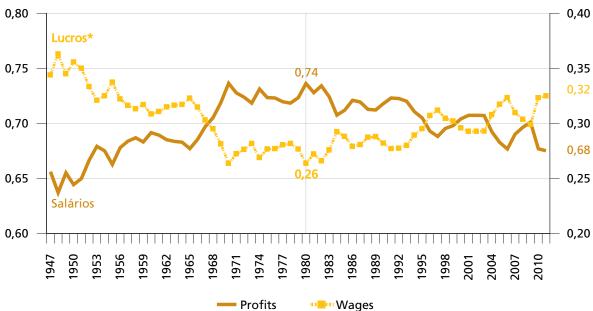
If the widespread myopia of the economic establishment in the face of the evidences that heralded the advent of the crisis prevented the governments from taking measures to avoid its occurrence or at least attenuate its impact, the non-recognition of its lasting effects on the economy has hindered the understanding of the situation of low global growth recorded since 2011 and hampered its overcoming.

This situation finds its central explanation in the slow expansion of investment and consumption in much of the planet caused by the global environment of high uncertainty prevailing in recent years, which five years after the beginning of the crisis does not seem yet close to dissipate. Certainly, the political deadlocks and mistakes made in the conduction of macroeconomic policies mentioned in the introduction of this work certainly contributed to the maintenance of the uncertainty. However, it is argued that the main element that explains this environment is found in the rupture, precipitated by the outbreak of the international financial crisis, of the confidence in the reproduction of the global growth pattern that prevailed in the last quarter century. Without that confidence, the uncertainty becomes generalized and growth cannot be resumed on a sustainable basis.

From the late 1970s until the deepening of the crisis in the last quarter of 2008, the "normal" operation of the international economy was characterized by the presence of a specific pattern of growth within which two fundamental destabilizing tendencies developed whose explosive potential worsened over time and peaked in the second half of the 2000s. Despite – indeed, *precisely because of* – the presence of these trends, while the overall confidence of the agents in support of this pattern remained robust, the world economy could maintain a high pace of growth, despite the upheavals caused mainly by the regular outbreak of more or less localized financial crises.

Indeed, far from being minor elements, the two destabilizing trends mentioned comprise the two *core* elements of that growth pattern. The first is a result of the fact that wages, especially in the developed countries and in the United States in particular, and in contrast to what occurred in the pattern of growth that had worked in the thirty golden years of the post-war period, progressed at a pace consistently slower than that of productivity. With this, the share of national income appropriated by them reduced progressively,²⁴ while the share of profits grew. This movement, in the United States, can be seen in graph 8:





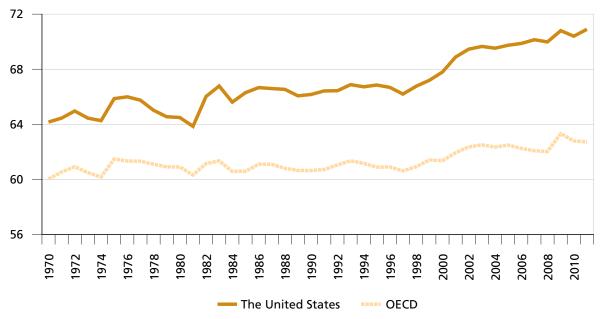
 $\label{thm:convex} \mbox{Source: Bureau of Economic Analysis, U.S. Available in $$<$http://www.bea.gov/>. $$}$

Note: * The share of profit includes income from business owners, corporate profits, rents and interest received.

This development took place in a period in which the share of consumption in the product of developed countries, rather than decreasing, expanded considerably, also especially in the United States, as can be seen in graph 9:

^{24.} In the United States, this evolution seems not to have been found for the group of workers who receive higher wages, as shown by Dumenil and Levy (2012). However, the behavior of higher labor income with respect to its use for consumption is significantly different than what is found for the other groups.





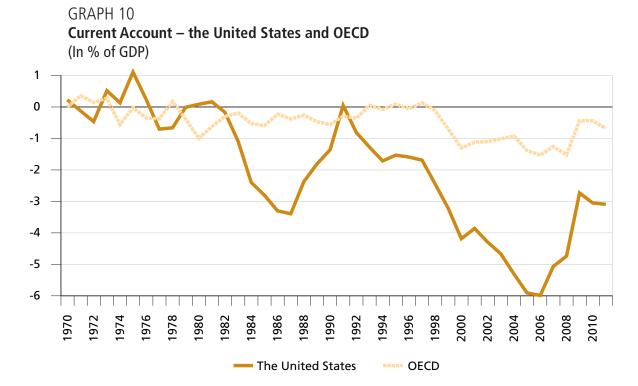
Source: OCDE Stats. Available in http://stats.oecd.org/>.

This growth in consumption observed despite the relative stagnation of wages required that part of the funds accumulated in the form of profits would somehow be channeled into it, which was only possible thanks to the massive credit expansion that occurred in the last decade as a result of the intense process of financial disintermediation and deregulation promoted since the early 1980s but that accelerated in the 1990s and which led, in the period preceding the outbreak of the crisis, to the explosion of household debt, again, more clearly in the United States. The explosive growth of that debt, ²⁵ unrelated to the evolution of their respective income streams, is the first of the destabilizing trends outlined above. Thanks to their presence, however, while the volume of loans remained in expansion, often thanks to incentives from the government itself, allowing the realization of current profits and feeding back the rising expectations of future profits, the world economy was effectively able to maintain a high growth rate – although in the case of developed countries, a mediocre one when compared to those seen in previous decades.

The expansion of consumption fueled by credit growth did not, however, come accompanied in the United States and, subsequently, either in other developed countries, by a corresponding increase in production. Indeed, the

^{25.} Such indebtedness, whose counterpart was largely held by commercial banks, has been largely replaced, in the years that followed the bursting of the housing market bubble and as a result of the actions taken to prevent the collapse of the financial system, by the government indebtedness.

consumption growth occurred with an increasing relative share of imported goods and services, which required on the part of these countries the accumulation of growing current account deficits. This could only be possible in a world where globalization had already made strides and in which the United States had the international value reserve currency par excellence. This accumulation can be seen in the following graph 10.



The growing external deficits, especially in the United States, with their counterpart in the explosive growth of the public debt accumulated largely by foreigners, are the second destabilizing trend which allowed, while surplus countries continued financing such deficits, expanding consumption, and thus, the maintenance of continued growth.

Source: OCDE Stats. Available in http://stats.oecd.org/>.

From the above discussion arise, therefore, the two central destabilizing trends which paradoxically allowed the reproduction of the growth pattern characterized by them for more than two decades, and which did not arise in the previous period: firstly, the continued expansion of the level of household debt to allow consumption growth despite the restriction on wage growth and, secondly, the continued expansion of foreign indebtedness, especially in the United States, which allowed that consumption growth without an equivalent expansion of production in these and other countries in deficit. The feed backing of such trends, which is what allowed the sustaining of the current growth pattern, could only occur continuously while the confidence of the agents with respect to the

continued expansion of domestic and foreign credit was maintained. On its turn, the credit expansion depends on the maintenance of the trust that, in general, it will be refunded. And this can only occur, within that pattern of growth, if those trends continue to work. The confidence of the agents thus assumes, on this clearly circular logic, a fundamental role. When the panic caused by the spiral of losses in the months that followed the collapse of Lehman threw open the incompatibility between, on the one hand, the face value of a considerable portion of the debt held by households and financial institutions around the world and, on the other, the streams of income with which these debts would have to be honored, the continuation of those trends was doubted and confidence waned. Doubts regarding the support of this very growth pattern became widespread and greatly increased the volatility of the expectations about the future. Under these conditions, the situations in which the positions of the agents became suddenly and strongly conservative have become much more frequent, producing real effects on the economy that fed back the uncertainty. The contraction of credit and the level of activity then assumed a self-fulfilling character, and the economy entered a rapidly declining path.

This is precisely the situation in which the world economy has been living since the drop in confidence precipitated by the bursting of the United States real estate bubble in mid-2007 and that has accelerated considerably since September 2008 with the Lehman Brothers bankruptcy. This breakdown in trust refers not only to the United States or worldwide housing market, nor only to the goods traded in interconnected global markets - much of which has even recovered the pre-crisis levels -, or even to the solvency of a relevant part of the international financial system. Nor it refers to falling growth expectations caused by a cyclical reversion of investments and therefore of the activity level in much of the world. The most important loss of confidence occurred exactly in relation to the possibility of recovery of the two destabilizing tendencies that characterized the growth pattern prevailing until just before the crisis, and thus the viability of the pattern itself. Thus, the maintenance of the progression of the level of household debt – especially but not only in the United States - as well as the huge external deficits, especially the United States' (as well as, for some, the very role of the dollar as the central currency in the international financial system), is now subject to considerable questioning. If the increase in demand made possible in recent decades shows to be undeliverable, the confidence in the reproduction of the growth pattern breaks down. With no trust, the reproduction of that pattern becomes, in fact, impossible. The uncertainty increases, investment contract and consumption, when possible, decreases. In this context, the economy necessarily slowly creeps.

This does not mean, of course, that will not occur, as was especially the case in 2010, improvements in situational awareness of the agents and even bouts of euphoria, foreshadowing an eventual recovery. However, far from pointing to the beginning of a sustained process of growth in the previous molds, such outbreaks are compatible with the situation of instability and stagnation that must characterize the economy in most of the world in the coming years, until a new pattern of global growth will eventually emerge. It is not certain, however, that this new standard can bring back, particularly in developed countries, the growth rate that prevailed in the years preceding the crisis deepening.

By looking for policy measures that governments can eventually take, and that could lead to a return to the global growth pattern that prevailed in the past 25 years, mainstream in economics will be able to contribute little in the search for solutions to the situation. This is so because the establishment and effectiveness of this pattern were only possible in a historically peculiar political and economic set of conditions – which will not be discussed here –, both in terms of the developed economies and emerging markets internal structures, especially in the United States and China, and the relationship between them. Certainly, this situation is no longer present, and is unlikely to repeat itself again. If it returns, accelerated growth will occur in different bases.

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