The consequences of the international financial crisis and the great recession in Argentina and Brazil¹

As consequências da crise financeira internacional e a grande recessão na Argentina e no Brasil

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RESUMO: A crise financeira internacional de 2007-2008 (IFC) e a "Grande Recessão" (GR) tiveram efeitos em todo o mundo. No caso da Argentina e do Brasil, a redução e melhoria da composição da dívida externa pública, a política anterior de acumulação de reservas internacionais combinada com a afinidade política de esquerda entre governos, proporcionou algum espaço para políticas macroeconômicas anticíclicas. Consequentemente, seus governos puderam enfrentar a IFC e a GR sem seguir políticas macroeconômicas tradicionais rígidas ou pró-cíclicas. Este artigo examina as consequências da IFC e da GR na Argentina e no Brasil e as políticas macroeconômicas anticíclicas que foram implementadas durante o período 2009-2014.

PALAVRAS-CHAVE: Crise financeira internacional; grande recessão; Argentina e Brasil; políticas macroeconômicas anticíclicas.

ABSTRACT: The 2007-2008 international financial crisis (IFC) and the 'Great Recession' (GR) had worldwide effects. In the case of Argentina and Brazil, the reduction and improvement in composition of public external debt, the previous policy of international reserves accumulation combined with left-wing political affinity between governments, provided some space for countercyclical macroeconomic policies. Consequently, its governments were able to face the IFC and GR without following traditional tightened or pro-cyclical macroeco-

 $^{^1}$ The authors would like to thank two anonymous referees. They acknowledge all remaining errors and their responsibility.

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nomic policies. This article examines the consequences of the IFC and the GR in Argentina and Brazil and the countercyclical macroeconomic policies that were implemented during the period 2009-2014.

KEYWORDS: International financial crisis; great recession; Argentina and Brazil; countercyclical macroeconomic policies.

JEL Classification: F63; O23; O54.

INTRODUCTION

The 2007-2008 international financial crisis (IFC) was a crisis of globalized finance, meaning that a crisis in a segment of the financial system – specifically the United States subprime mortgage market – eventually spread worldwide. The effects of such a crisis are not economically and socially neutral, especially because since 2009 the 'Great Recession' (GR) has affected different regions of the world, including emerging economies.

As is well known, historical recent experiences of financial crisis in emerging economies, especially in Argentina and Brazil, have been a succession of painful events, such as, the external debt crisis of the 1980s, and the contagions of Mexican 1994-1995 crisis, or the Asian (1997) and Russia (1998) crisis, among others. However, at this time, the Argentinean and Brazilian governments' policy responses to the contagion of IFC and the GR were rather different. Why on this occasion it was different? Mainly because the reduction in public external debt, the previous policy of international reserves accumulation and the reduction and improvement in the composition of public debt provided some policy space for the introduction of countercyclical policies in Argentina and Brazil to mitigate the effects of the IFC and GR, when on other occasions the Argentinean and Brazilian's Economic Authorities (EAs) had made use of tightened policies.

The purpose of this article is to examine the consequences of the IFC and the GR in the Argentinean and Brazilian economies; that is, it aims to present and analyze the countercyclical macroeconomic policies that were implemented in Argentina and Brazil and their economic results.

Following this introduction, the article is divided into three sections. The second section shows that the IFC and the GR both substantially had an effect on the economic dynamism of Argentina and Brazil, and also shows the reaction of the Argentinean and Brazilian's EAs to the coming of the IFC and the GR. Third section analyses, specifically, the main countercyclical macroeconomics policies implemented by Argentinean and Brazilian's EAs to mitigate the impacts of the IFC and the GR, and their economic results, from 2009 to 2014. Finally, the fourth section summarizes and concludes.

THE CONSEQUENCES OF THE IFC AND GR IN ARGENTINA AND BRAZIL AND THE REACTION OF THE ARGENTINEAN AND BRAZILIAN'S EAS

The IFC crisis had a dramatic effect on economic activity, both in developed countries and in emerging economies, casting doubt on the very notion of the decoupling of these latter ones from the first ones. The developments from the crisis were observed not just in the financial system, but most importantly in the real world of the economy. After a period of prosperity in the world economy running from 2003 to 2008, the United States, the countries of the Euro Area, Japan and some of the leading emerging countries, including Argentina and Brazil, went into recession in 2009. The scenario of economic downturn, shrinking trade flows and asset deflation that unfolded from September 2008 onwards caused the world economy to collapse.²

It should be stressed that the world recession in 2009 might have been much worse had it not been for the actions of the EAs of both G-7 countries and emerging countries taking an active part in mitigating the impacts of the IFC on the productive section of the economy. In this way, they implemented countercyclical fiscal policies and expansionist monetary policies, mainly through the activities of their central banks as lenders of last resort, in order to reverse the steadily deteriorating state of expectations among economic agents. In that sense, injections of liquidity and substantial interest rate reductions by central banks, along with fiscal incentives along 'Keynesian' lines, were important in reducing the impact of the crisis on the 'real economy' and seeking to restore agents' confidence in the workings of the markets.

The fact that the IFC was restricted to the developed countries, and that most emerging countries' fiscal and external situation was comfortable, led a number of analysts and policymakers to give credence to the hypothesis of a 'decoupling' of some emerging countries. However, the IFC spread to the whole world economy by contagion effects, affecting credit and capital markets, as well as international trade, especially by countries dependent on the exports of commodities, whose prices fell abruptly. In that context, some emerging countries experienced not just macroeconomic instabilities (in terms of economic activity or price volatility), but also situations of fiscal and external fragility, regardless of whether or not they had displayed, prior to the crisis, what were regarded as sound macroeconomic fundamentals.

The outcome was no different in Argentina and Brazil: after a period of miniboom of growth³ (2003-2008) due mainly to the commodities boom, by the end

² According to the International Monetary Fund (IMF) (2019), the growth rates in 2009 of the United States (USA), the Euro Area and Japan were, respectively, -2.4%, -4% and -5.1%. Moreover, according to the World Trade Organization (WTO) (2019) the volume of world trade shrank 12% in 2009.

³ According to Ocampo (2011) in this period South America, especially Argentina and Brazil, combined

of 2008 these countries had fallen into recession. The contagious crisis effect of the global financial crisis on the performance of Argentina and Brazil was deep, short and synchronized: in 2009 Gross Domestic Product (GDP) growth was negative in Brazil, while in Argentina the economic activity had dropped considerably as compared with 2008 Moreover, according to data released by ECLAC (2018), the trade balance and current account in Brazil had deteriorated between 2008 and 2009 due to the fact that their most important trade partners, such as the United States and the countries of the Euro Area, had fallen into recession. It is important to mention that another reason for the deterioration of the current accounts was the sharp drop in commodity prices by the end of 2008 – compared to the prices of the 2004-2008 period – due to the GR that followed the IFC. In Argentina, these effects were felt in exports and imports account, as the first fell drastically while the latter suffered heavy government restrictions to avoid a greater deterioration of the country's external position.

Another immediate channel of the contagion of global crisis was through the capital outflows in portfolio capitals, loans, Foreign Direct Investment (FDI) and profit repatriation by transnational corporations. ECLAC (2018) data shows that the balance of financial account reduced sharply in the aftermath of the Lehman Brothers bankruptcy, but it recovered quickly and strongly in Brazil, mainly because it is one of the most financially integrated countries. With regard to Argentina, it should be considered that the renegotiation of the external debt in 2004-2005, when its external indebtedness was reduced dramatically, was not able to stabilize the normal flows of FDI and the inflows of portfolio capital to Argentina.

In principle, the IFC and the GR could cause inflationary pressures in Argentina and Brazil, due to the sharp currency devaluation (against the dollar) during the contagion of the IFC after the Lehman Brothers bankruptcy that would result in exchange pass-through effects. However, the recession that followed the financial crisis and the drop in the food goods and oil prices neutralized the inflationary effects of the devaluation and allowed the monetary authorities to implement an expansionary monetary policy (involving the expansion of monetary aggregates and/or a reduction in interest rates). The behavior of the inflation rate (consumer price index) before and after the crisis has been uneven across the economies: Argentina has much higher level of inflation compared to Brazil. After the IFC, inflation increased in Brazil, and fell in Argentina. It is important to mention that Brazil adopted an inflation target regime (ITR) under the conditions of a floating exchange regime in 1999, while Argentina operated a managed exchange rate with monetary targets.

Summing up, the IFC generated mechanisms by which it was transmitted to Argentina and Brazil including: (i) the withdrawal of portfolio capital (with, inci-

the highest economic growth since the post-war boom (until the 1970s) with positive social results in terms of reduction of poverty and inequality, favored unusually by: quick growth of trade, increase in the commodities prices and ample access to international financing at historically low costs.

dentally, capital flight eventually affecting stock markets) and FDI; (ii) the interruption of credit, particularly for foreign trade; (iii) falling commodities prices; (iv) declining exports to developed countries; (v) volatile exchange rates; and (vi) rising levels of profit repatriation by transnational corporations.

Prates and Cintra (2009) argue that in previous crises, more precisely the external crises of the 1990s (Mexico, 1994-1995, East Asia, 1997, Russia, 1998, and Brazil, 1998-1999), most emerging countries implemented pro-cyclical (restrictive) measures. This was in line with the principles of the IMF, and was intended to regain the confidence of the financial markets as a necessary condition for foreign capital to flow back to those emerging economies. However, in view of the systemic nature of the present crisis emerging countries' EAs decided that on this occasion such policies would be completely ineffective. In fact, those policies would contribute to exacerbate the developments from the crisis by setting off a vicious circle of exchange depreciation, credit squeeze, asset deflation, and crises of effective demand and unemployment. In that light, these countries met the contagion effect by putting in place countercyclical measures to render their currencies less volatile, prevent balance of payments deterioration, assure liquidity for their domestic financial systems, stabilize prices and bring growth back on track.

Indeed, Argentina and Brazil recovered sharply in 2010. Such a recovery was the consequence of a combination of external factors with domestic ones.

The external factors are related to (i) the recovery of the international trade by the middle of 2009 favored by the recovery of the Chinese economy through the use of expansionary policies that once again increased the demand for basic goods, and (ii) the return of the capital inflows, mainly in the modality of portfolio, to emerging economies, especially Brazil, boosted by the expansionary monetary policy adopted by developed economies.

The domestic factors are related to the successful implementation of counter-cyclical policies in Argentina and Brazil. According to Paula, Ferrari-Filho and Gomes (2013: 235) economic policy responses in these countries included a large range of tools:

- (i) Both the Central Bank of Argentina (CBA) and the Brazilian Central Bank (BCB) provided foreign currency liquidity to the private sector, to ensure both the operation of foreign exchange markets and the continuous availability of external financing. They also increased the range of assets accepted as collateral to improve access to short-term funding, and relied heavily on lower banks' reserve ratio requirements;
- (ii) The Argentinean and Brazilian governments made use of countercyclical fiscal policy, by reducing taxes to stimulate consumption and/or by increasing public expenditures;
- (iii) Two further countercyclical tools were increases in the minimum wage and in social programs (mainly in Brazil) that contributed to avoid a fall

in the real wage and to moderate the reduction of consumption due to the recession that developed in the aftermath of the contagion of the crisis.

The combination of the reduction of public external debt (external liabilities) with the increase in the foreign reserves (external assets) meant that both economies were prepared to face the contagion of the global crisis. This reduced external vulnerability was the principal reason for the reasonable performance of Argentina and Brazil during the IFC.

According to CEPAL (2012: 17), fiscal policy in most South American economies had the following guidelines: (i) the 2003-2008 period of economic growth was marked by generating fiscal primary surplus and the reduction of public debt, that is before the external adversities of 2008-2009; (ii) in 2009, the stabilization of domestic demand through the increase of public expenditures (social programs, housing programs, financing of small and middle firms, infrastructure, etc.) and the reduction of the taxes to stimulate consumption; and (iii) since 2010, implementation of a tax reform (either revenues and expenditures sides) in some countries played an important role in consolidating public finance.

Regarding monetary policy, while in Brazil the basic interest rate was reduced only at the beginning of 2009, the CBA increased the interest rate in 2009. Other tools of monetary policy included a reduction of reserve requirements on banking deposits and some special credit lines implementation by BCB and CBA (for instance, to finance exports). In Brazil, the public banks, that have a high portion of the market share, operated a countercyclical credit policy that helped to mitigate the credit markets lowdown.

In 2011-2012, due to the sluggishness of the world economy and the greater uncertainty about the performance of the international commodity and asset prices, Argentina and Brazil opted for a more cautious and flexible monetary policy, with less variations and some reduction in the basic interest rate, combined with the implementation of macro-prudential policies.

Although both countries adopted different strategies, neither one chose to implement a pure floating exchange rate management, but some kind of combination of a flexible exchange rate with active intervention in the foreign exchange market, which included foreign reserve accumulation. Brazil had experienced depreciation of its real effective exchange rate (REER⁴) after the IFC. Due to the continuous pressure on the exchange rate, Brazil implemented in 2010-2011 some controls on capital inflows (with the use of a financial transactions tax) in order to reduce such pressure and to allow some currency devaluation.

Ocampo (2011) points out that what made South America better equipped to face the contagion of the IFC was a better balance of payments performance thanks to the exceptional external conditions that had allowed to reduce part of the ex-

⁴ REER is the weighted average of a country's currency relative to an index or basket of other major currencies adjusted for the effects of inflation.

ternal public debt of their countries and to increase their foreign reserves, in a more benign international environment. However, in 2012, due to the slowdown in the rate of growth of the Chinese economy plus a deterioration in the situation of some South American economies (high inflation, increase of current account deficit, and deceleration of credit supply, among others), the space to implement countercyclical policies was reduced, especially in Argentina and Brazil.

According to CEPAL (2014: 102-103), a greatly different economic environment in 2012 and 2013 was present in comparison to 2008-2009 that changed the effects of implementing financial policies: (i) the emergence of inflationary pressures in Argentina and Brazil had put some pressure on monetary policy; (ii) the gradual, but imminent, change in the FED monetary policy ('tapering') and consequent increase in the interest rates of emerging economies could result in a currency depreciation trend in South America currencies, which could eventually increase domestic prices; and (iii) in some cases, a rapid growth in credit supply could eventually put pressure on inflation and external balance.

Indeed, from 2011 to 2014, despite the countercyclical policies adopted by Argentina and Brazil – mainly monetary policy in Brazil and fiscal policy in Argentina – economic growth showed great volatility and was very poor in both countries: the annual average GDP growth, in the period 2011-2014, was 1.7% in Argentina and Brazil. It is important to mention that, since the IFC, domestic demand has been the main drive of growth in Argentina and Brazil, while net exports made a negative contribution.

ECONOMIC PERFORMANCE AND THE COUNTERCYCLICAL POLICIES OF ARGENTINA AND BRAZIL AFTER THE IFC

Argentina

Since the collapse of the 2001-2002 Convertibility Plan,⁵ Argentina has applied heterodox economic policies, which, in a context of international economic prosperity, high commodity prices, and domestic idle capacity, contributed to a vigorous recovery in its GDP in 2003-2007 (8.8% on average). According to Damill and Frenkel (2009) the macroeconomic regime based on the preservation of a stable and competitive real exchange rate (SCRER) was the main reason explaining the rapid growth experienced in Argentina, besides the commodities boom.

With the onset of the IFC, the Argentinean economy suffered especially from the deterioration of the terms of trade and a fall in the external demand. In response, the Argentinean' EAs implemented fiscal and monetary stimulus packages

⁵ In April 1991 Argentina implemented a stabilization plan called the Convertibility Plan, which consisted mainly in adopting a currency board-type exchange rate regime, which essentially anchored the Argentinean peso to the USA dollar.

designed to maintain the aggregate demand level and to temporarily assist the more vulnerable social sectors.

In 2008 and 2009, economic growth fell sharply, but it also recovered sharply in 2010 and 2011. However, GDP average growth fell substantially in 2012 and, after a rise in 2013, again fell in 2014, a recessive year. Inflation, for its part, after a sharp drop jumped strongly to around 40% in 2002-2003 due a huge devaluation of the peso, and only falling again in 2004 to 4.4% annually. Despite this fall, inflation rate maintained an upward trend since 2010, reaching an annual average of 13.6% for 2010-2014. But these official data were questioned by many analysts as being lower than real ones because public services rates were artificially frozen⁶ and, after 2007, official data begun to be manipulated by the government. As a consequence, the calculation of the inflation rate in Argentina due to changes in the methodology have also underestimated the real increase of Consumer Price Index (CPI).

In terms of fiscal policy, the following measures were taken: (i) government spending was increased, particularly in subsidies to the private sector, mainly those given to the energy, transport and food industries; (ii) the income tax was reduced for middle-income families;⁷ (iii) infrastructure expenditures and funding for combat poverty programme increased; (iv) the private retirement was nationalized and together benefit payments, passed on to be adjusted to the ongoing inflation rate; and (v) reduction of taxes on agricultural exports, to aim at increasing public sector revenues and preventing that the agricultural prices could be transferred to the domestic market.⁸

In 2009 public expenditure expanded significantly, expanding in relation to GDP, due to increases in wages, social security benefits and capital expenditures. In particular, transfers to the private sector (including energy, transport and food subsidies) reached approximately 4% of GDP. As a consequence of these measures, primary fiscal surplus first sharply fell – from 2.2% of GDP in 2008 to 1.2% on average in 2009-2010 – and later turned into deficit in 2011-2013. In 2009 the public debt increased slightly over the previous year's level to almost 50% of GDP.

Regarding monetary policy, different management approaches were followed. In 2008, rapid economic growth and high international prices, especially in food goods, led the CBA to choose to control money supply by interest rate raising. At the end of 2008 and in 2009, within a tax conflict with the agricultural sector environment followed by a fall in exports hit the current account surplus, forcing

⁶ Due to the dramatic crisis related to the end of the convertibility model, by the passing of the 25,561 Law, "Economic Emergency" was declared in 2002 which, among other stipulations, gave space for public services tariffs to be "de facto" frozen. As this state was kept the following years, a "de facto" policy of underrated level of these prices was maintained.

⁷ These reductions were transitory, not adopted by law.

⁸ In 2008 taxes over wheat, corn and soybeans were, in fact, reduced after having been increased.

⁹ This figure has been maintained in 2011-2013, according to ECLAC (2013a).

the CBA's intervention in the foreign market. As a result, interest rates oscillated, with large fluctuations around periods of turbulence. In 2009, monetary aggregates expanded more slowly, and the CBA gradually increased the interest rate, while in 2010 the monetary policy was relaxed in response to the uncertainty of the GR, introducing measures to expand liquidity together with a lower interest rate. Thus, credit supply from the financial system increased.

CBA intervened in the foreign exchange market, buying and selling foreign exchange as circumstances dictated, in order to maintain the level of international reserves, which stood at US\$ 48 billion in the end of 2009. Despite the considerable devaluation in 2008-2009, exchange rate policy continued its trajectory of preserving a stable and competitive real exchange rate. Both the continuing trade surpluses and the policy of accumulating foreign reserves helped to stabilize the exchange rate market and assure a relatively comfortable external situation (current account deficits of -0,6% of GDP on average in 2011-2014). Nevertheless, according to ECLAC (2013a: 2) "the external sector has been under strain since mid-2011, owning to a reversal in the energy balance [...] an appreciating real exchange rate, and a strong demand for foreign assets, as tends to occur in countries with a dual currency system in these circumstances". As a consequence of the general worsening in its external position, since the beginning of 2010, EAs in Argentina decided to use international reserves to service its external public debt.

In 2010-2011, there was a strong recovery of the Argentinean economy basically due to the new commodities mini-boom and the expansionary monetary and fiscal policies implemented in 2009 that were maintained in the following years. In particular, the demand for exportable goods recovered as a result of developments in agricultural product markets (strong recovery in grain harvests) and the better performance of major trading partners such as Brazil.

In terms of the exchange rate, EAs intervened in the foreign exchange market to manage the nominal exchange rate aiming to, on the one hand, improve the trade balance, and, on the other hand, keep inflation under control. Tackling inflation began to be particularly troublesome as it kept being high since 2010, driven by a number of factors: the increase in international food prices, the nominal devaluation of the *peso*, and a conflict in wage bargaining process that eventually turned into a wage-prices spiral as the perceptions spread among workers that inflation was substantially higher¹⁰ than the official rate.¹¹

Throughout 2012, the government acted on two fronts: (i) it adopted domestic price regulation measures in the form of agreements with producers of certain goods and services and restrictions on food exports to keep inflation under control;

¹⁰ By that time, official inflation rate had lost credibility. This can be observed by the fact that wage negotiations, according to ECLAC (2019), delivered an 25% average raise, considerably above the 10.02% rate announced by the official bureau Instituto Nacional de Estadística y Censos de la República Argentina (INDEC).

¹¹ ECLAC (2012: 2) reports that average wages climbed by nearly 25% in 2012.

and (ii) due to the deterioration in the trade balance, it implemented measures to contain the erosion of international reserves. The main measures were: "(a) the introduction of foreign-exchange regulations, including restrictions to acquire foreign currency for hoarding purposes and on repatriation of profits by foreign firms; (b) the management of goods imports; and (c) the renationalization in the oil company Repsol YPF" to reach of a majority holding and, in this way, acquiring its control (ECLAC, Economic Survey for Argentina, 2013b: 2). Looking back, as total external debt did not increase, the lower level of external debt (28% of GDP in 2013) seem to indicate that economic tensions in the Argentinean economy in those years, related to the balance of payments had more to do with liquidity incapacity than with a structural external solvency.

For its part, the real economy was hit by a contracting global economy (including Brazil) and a fall in agricultural output due to a serious drought. Nevertheless, fiscal and monetary policies presented contrasting features: while the CBA continued to increase the interest rate, the government decided to maintain the expansion of public spending in an effort to gain some economic expansion, with the largest increases being those in social security benefits and current transfers to the private sector. This mix resulted in a higher inflation rate in 2012 (10.8%, although private estimates calculated around 25%) combined with a GDP growth dropped strongly.

During 2013, the government continued its strategy to contain the erosion of international reserves by adopting the following measures: "regulation of import flows, tougher restrictions on foreign exchange for the purposes of hoarding and overseas tourism (which created a parallel exchange market) and the introduction of some limits on the repatriation of profits by foreign firms" (ECLAC, Economic Survey for Argentina, 2014a: 2). Unlike the CBA which implemented a restrictive monetary policy, the government, once again, opted for fiscal expansion (recording a primary fiscal deficit of -1.4% in 2013), and "opted to fund this deficit by drawing on resources from the public sector itself, basically from the CBA, the National Social Security Administration (ANSES) and the Bank of the Argentine Nation (BNA)" (ECLAC, Economic Survey for Argentina, 2014a: 3).

In terms of the exchange rate, in 2013 the *peso* had a substantial depreciation against the dollar, which, however, did not avoid an important deterioration in the trade surplus in 2012-2013 – as exports fell slightly (a deterioration in the terms of trade and the stagnation of exports to Brazil). Furthermore, this depreciation had a negative impact on the inflation rate, due to the pass-through mechanisms. In response to the increase of inflation rate, at the end of 2013, "the government launched the *Precios cuidados* price-watch program, in which the national government, supermarkets, distributors and the main suppliers undertook to control the prices on a basket of 194 products, subsequently extended to 302 products" (ECLAC, Economic Survey for Argentina, 2014b: 5). Despite inflation problems, the country was able to manage a recovery in 2013 pushed up by private consumption.

Regarding 2014, once again the economy plunged into recession. Officially, at first it was informed that GDP fell 0,5%, but a later revision showed the much greater figure of -2.5%. Inflation more than doubled reaching 23.9%, while the

current account deficit increased to 7.4 (later the deficit was updated to 8.7) billion. despite some increase in external trade surplus. According to ECLA the main reasons for this negative performance were the effects of the currency devaluation at the start of the year - tackled with an interest rate rise - and the persistence all through the year of exchange tensions that resulted from the conflict with the 'vulture funds' after a suffering a reversal judicial decision in the USA. The slowdown in the Brazilian economy also hit hard domestic industrial exports which also helped in a rise in the unemployment level. The EAs tried to face this negative scenario with fiscal expansion with focus on the more vulnerable social segments. Unavailable to reach new funds externally and lacking internal confidence, the EAs improvised different ad-hoc strategies(some rather obscure in substance and/or method) to face an increasing fiscal deficit, such as an agreement China's Central Bank and having CBA and the Public Pension System acquire domestic treasury notes. It must be noted that as international reserves were also used to pump up the economy and external debt payments, their level ended in the low plateau of US\$ 28 billion.

To sum up, after the severe Convertibility Plan Crisis in 2002 unexpectedly the Argentine economy returned to very high economic growth levels between 2003 and 2008. The international economy helped fundamentally in this outcome with very high commodities prices and levels of export demand. The coming of the GR saw the country ending this unusual beneficial environment and the EAs tried to maintain the heterodox line of policies that had already been put forth. As the international situation for Argentina did not recover accordingly, the second decade of the present century saw a worsening of the economic situation. By the end of 2014 the scene was a strongly deteriorated one aggravated by the presidential elections in 2015, which in fact brought a change in political power and in the general mood regarding heterodox economic policies.

Brazil

After the economic downturn in 2001 to 2003, the Brazilian economy recovered in 2004, pushed by the strong boom in commodities' exports that resulted from the greater real of economic growth in the global economy, and the increase of the household consumption, due to both government stimulus to credit and the increase in the purchase power of the households, and the public investment, especially investment under the Growth Acceleration Program (*Programa de Aceleração do Crescimento*, PAC). ¹²All these factors together eventually resulted in a miniboom between 2004 and 2008, when the GDP grew 4.8% on average.

In this scenario, Brazilian's EAs underestimated the IFC. When fourth-quarter

¹² The Brazilian government launched the PAC in January 2007 with three main objectives: to stimulate private investment; increase government investment in infrastructure; and remove the main obstacles to economic growth (bureaucracy, inadequate norms and regulation). For full details, see Brazil (2019).

2008 GDP was announced (-3.6%), the figure cast doubt on the notion that Brazil was impervious to the effects of crisis. With the fall in all private components of demand, GDP growth fell to -0.3% in 2009, before recovering strongly in 2010 (7.5%) as a result of the countercyclical policies. In 2011, economic growth slowed (2.7%), due to the depletion of idle industrial capacity and the impact of policies aimed at containing the surge in domestic demand and the resulting inflationary pressures. In 2012-2013, in spite of the implementation of more expansionary policies, the economy slowed even more (1.8% on average), pushed down by both investment and net exports, while consumption continued to expand, and employment levels continued to rise, albeit more slowly. The inflation rate, after falling to 4.3% in 2009, rose to around 6.0% on average in 2010-2013.

The immediate impact of the 2008 crash on the Brazilian economy was the capital flight related to the portfolio investments and foreign loans; on the other hand, the reduction in foreign credit lines to resident banks and firms increased the liquidity constraints of some firms, including some main Brazilian exports firms that had been benefiting from interest-rate arbitrage involving foreign exchange derivatives. The reversal in the capital flows exerted strong pressure on the exchange rate, which depreciated 42.6% from September 1 to December 31. Another important transmission channel of the IFC in Brazil was the domestic credit market, due to the impact of the reduction of the international credit operations (financing of exports) and, due to the overall deterioration of expectations about the future, the liquidity preference of the banks increased sharply, contributing to the slowdown of domestic credit.

Brazilian EAs responded to the financial crisis by adopting a number of countercyclical measures (Barbosa Filho, 2010; Paula, Modenesi and Pires, 2015): (i) in order to avoid the spread of the credit crunch, the BCB adopted a lot of liquidity-enhancing measures; (ii) the BCB undertook interventions in the foreign exchange markets – selling US\$ 23 billion of its foreign reserves in the last quarter of 2008 in the spot market and offering foreign exchange swaps in order to provide hedge against currency depreciation; (iii) state-owned banks were encouraged to expand their credit operations, compensating the deceleration in the credit supply by private banks; according to Montero (2014: 127), "[m]ore than 83 percent of the growth available credit to the private sector in Brazil in 2008 and 2009 came from the public banks"; and (iv) the Ministry of Finance implemented a lot of fiscal measures in order to stimulate aggregate demand: reduction in the industrialized products tax (IPI) burden on motor vehicles, consumer durables and construction items, and an increase in the duration of unemployment insurance. In addition, the

¹³ Liquidity-enhancing measures included (i) a reduction in reserve requirements that resulted in an expansion of liquidity of around 3.3% of GDP in the money market; (ii) the creation of incentives for larger financial institutions to purchase the loan portfolios of small and medium banks; and (iii) an additional insurance deposit for small and medium banks.

BCB with some delay eased monetary policy by lowering the basic interest rate from 13.8 % in January 2009 to 8.8 % in September 2009.

ECLAC (2009) points out that Brazil was one of the South American countries to make use of a greater variety of tools to face the contagion effects of the crisis. According to Barbosa Filho (2010), the delay in monetary policy to stimulate economic growth immediately after the 2008 crash had to be compensated by fiscal policy (primary fiscal surplus reduced from 2.8% of GDP in 2008 to 1.2% in 2009).

In 2009 the Brazilian economy suffered a recession due to the effects of the Lehman Brothers contagion – a decline of 0.2% in GDP, pushed down by the sharp reduction in industrial output (-5.6%). After the recession in the first semester of 2009, the economy recovered quickly in the second semester, and in 2010 the level of GDP growth was 7.6%. Responding to the quick economic recovery and the consequent increase in the industrial capacity utilization, the investment rate increased from 17.0% of GDP in the first quarter of 2009 to 20.5% in the third quarter of 2010. A new surge of capital inflows to emerging economies began in the middle of 2009, and a further reason for such surge was the high differential between the internal and external interest rates – Brazil was one of the emerging countries that had a stronger trend of currency appreciation until 2011.¹⁴

By the end of 2010, with the fear of the increasing system risk of the financial system, due to the surge of capital inflows and the rapid increase in the supply of credit, the Brazilian government implemented some macro-prudential measures: (i) an increase from 8% to 12% in reserves requirements on sight and fixed term deposits; (ii) an increase of minimum capital required for personal credit with maturity up to 24 months; and (iii) a rise in the tax on financial transactions (IOF) from 1.5% to 3.0% in all credit operations and an increase to 6% in the IOF on new foreign loans with maturities of up a year.

Due to the gradual worsening in the international scenario (Euro crisis and the decline in growth in emerging economies, including China), Dilma Rousseff's first government (2011-2014) implemented some important changes in the 'modus operandi' of macroeconomic policy. Those changes included the adoption of a more gradualist strategy of the BCB to deal with inflation, ¹⁵ and the introduction of a countercyclical fiscal policy. Thus, from 2011 to 2014 the primary fiscal result dropped from 3.1% of GDP to - 0.6% of GDP and the inflation rate increased to the upper range limit of the ITR.

However, in the beginning of Dilma Rousseff's administration, in the first semester of 2011 the EA adopted a more tightened economic policy in order to reduce aggregate demand to curb inflation acceleration, and some fiscal austerity measures were implemented.

The deterioration of the Euro crisis since September 2011 and the deceleration

¹⁴ From April 2009 to April 2011 Brazilian currency appreciated by 28%.

¹⁵ It is important to mention that the deceleration of the inflation, due to the reduction in the commodities prices and in domestic demand, made possible a steady policy of reduction of the Selic.

of the inflation due to the reduction in the commodities prices and in domestic demand, made possible a steady policy of reduction of the Selic (basic interest rate)that fell from 12.5% per year in July 2011 to 7.5% in August 2012. Furthermore, in order to curb the deterioration in the competitiveness of the manufacturing sector, in both external and domestic markets, BCB induced a currency devaluation of 30.0% from July 2011 until May 2012 (BCB, 2019), In 2012 EA adopted a countercyclical fiscal policy. The main fiscal tool was a tax exemption, which included the reduction of IPI on capital goods, exemption of the payroll in labor-intensive sectors, such as construction and textile industry that was gradually extended to other sectors, and the reduction of IPI on some consumer durable goods in April 2012. Those fiscal measures aimed at reactivating the economy and increasing the competitiveness of the domestic industrial sector. Thus, from 2012 to 2014 Dilma Rousseff's term was an attempt to replace the macroeconomic policy tripod (inflation targeting regime, primary surplus target and flexible exchange rate regime) that was implemented in the Fernando Henrique Cardoso's second term (1999-2002) and was adopted during the first and second terms of Lula da Silva (2003-2010).

Despite the changes in macroeconomic policy tripod, during the period 2011 to 2014 economic growth was disappointed: average growth was only 1.7%, while industrial output declined even more. All the components of demand decreased, but fixed capital contributed more of the decline. The poor economic performance was the consequence of both external and domestic factors. Although the economic situation of the Euro Area now seems to be not disruptive, the Euro crisis affected the Brazilian economy mainly by the commercial side and by the deterioration of the entrepreneurs' expectations about the future of the world economy. More recently, the announcement of the end of 'quantitative easing' policy by the FED and its possible future change in monetary policy, capital flows to Brazil and South America have become more volatile.

On the other hand, investment rate increased in 2010-2011, due to the fact firms supposed that economic growth would continue to be high. Unfortunately, it did not happen, and, as a result, the capacity utilization rate of the industrial sector decreased, generating idle capacity that contributed to the slowdown of investments in the period 2012-2014.

Exporters lost external markets due to the lack of competitiveness and low levels of external demand, while imports increased shifting part of the domestic industrial production – years of currency appreciation seem to be eroded by the competitive capacity of the domestic firms. Consequently, net exports did not contribute to higher growth. Household consumption was still high, but reduced gradually in consequence of the slowdown in the demand and supply of credit, due to the high level of the household indebtedness and non-performing loans.

Finally, public expenditures were not enough to compensate for the overall reduction in the aggregate demand. The Brazilian government hoped that the change in the mix of the economic policy (lower interest rate and more devaluated currency) together with some tax exemption to stimulate the demand and supply of goods, which would be enough to reach a robust economic growth. When it

became clear that this was not the case, government sought to implement *ad hoc* measures to boost growth. Such action, however, was not well coordinated and lacked consistency (Paula, Modenesi and Pires, 2015).

To sum up, after the second half of 2012 there were some changes in macroeconomic policy due to macroeconomic deterioration. First, the inflation rate began to increase in the end of 2012, with most pressure coming from services and food. Second, exchange rate became very volatile, reflecting both the uncertainties over the United States monetary policy and the deterioration of the external accounts (current account of 4.2% of GDP in 2014, the worst deficit of the Brazilian economy). Third, the fiscal result deteriorated dramatically, due to wrong fiscal measures and the slowdown of the economic activity. Fourth, the BCB basic interest rate increased from 7.25% to 11.75% between September 2012 and December 2014. Given these monetary, fiscal and exchange rate changes, and in a context of slowdown of the world economy, the GDP growth rate dropped from 3% in 2013 to 0.1% in 2014. In 2015, after the Dilma Rousseff's reelection, the government decided to adopt orthodox fiscal and monetary policies, and, as a result, the countercyclical macroeconomic policies implemented largely after the IFC were abandoned.

CONCLUSION

First of all, as this article has showed, Argentina and Brazil were substantially affected by the IFC and GR. Both countries recovered strongly in 2010, by implementing countercyclical macroeconomic policies, which were also favored by the recovery of the commodity prices by mid-2009. However, economic growth has oscillated after 2010 both because of the uncertainties and slowdown of the world economy and also due to some domestic issues related to the Argentinean and Brazilian economies, such as inflation rate, fiscal deficits and balance of payments deficits, among others.

Second, the stronger capacity of Argentina and Brazil to face the contagion of the IFC was only possible due to the better performance of the balance of payments (current account surplus, foreign reserves accumulation, etc.) thanks to the exceptional external conditions before the IFC of 2007-2008.

Third, as it was exposed, the effects of countercyclical macroeconomic policies, when implemented in both countries immediately after the IFC, were initially efficient and depended on the good governance of the macroeconomic policy. Nevertheless, during the period 2012-2014 the economic growth in neither one responded to the countercyclical macroeconomic policies, as EAs expected.

REFERENCES

Barbosa Filho, N. (2010). "Latin America: counter-cyclical policy in Brazil: 2008-09". Journal of Globalization and Development, 1(1): 1-12.

- Brasil (2019). Programa de Aceleração do Crescimento. http://www.brasil.gov.br/pac (accessed in April).
- Brazilian Central Bank (BCB) (2019). Séries Temporais. http://www.bcb.gov.br (accessed in April).
- Central Bank of Argentina (CBA) (2019). Estadísticas. http://www.bcra.gov.ar (accessed in April).
- Comission Económica para América Latina y El Caribe (CEPAL) (2012). Estudio Económico de América Latina y el Caribe 2012. Santiago: CEPAL.
 - ____. (2014). Estudio Económico de América Latina y el Caribe 2014. Santiago: CEPAL.
- Damil, M.; Frenkel, R. (2009). "Las políticas macroeconómicas en la evolución reciente de la economia argentina". *Nuevos Documentos CEDES nº65*. Buenos Aires: CEDES.
- Economic Comission for Latin America and Caribbean (ECLAC) (2009). *Economic Survey of Latin America and the Caribbean* 2008-2009. http://www.eclac.org (accessed on April 2019).
- Economic Comission for Latin America and Caribbean (ECLAC) (2012). Economic Survey of Latin America and the Caribbean 2012. http://www.eclac.org (accessed on April 2019).
- Economic Comission for Latin America and Caribbean (ECLAC). (2013a). *Preliminary Overview of the Economies of Latin America and the Caribbean Countries Reports*. http://www.eclac.org (accessed on April 2019).
- Economic Comission for Latin America and Caribbean (ECLAC) (2013b). *Preliminary Overview of the Economies of Latin America and the Caribbean Countries Reports*. http://www.eclac.org (accessed on April 2019).
- Economic Comission for Latin America and Caribbean (ECLAC) (2014a). *Economic Survey of Latin America and the Caribbean* 2014. http://www.eclac.org (accessed on April 2019).
- Economic Comission for Latin America and Caribbean (ECLAC). (2014b). *Preliminary Overview of the Economies of Latin America and the Caribbean Countries Reports*. http://www.eclac.org (accessed on April 2019).
- Economic Comission for Latin America and Caribbean (ECLAC) (2019). Statistical Information. http://www.eclac.org (accessed in April).
- International Monetary Fund (IMF) (2019). *Data and Statistics*. http://www.imf.org (accessed in April). Montero, A.P. (2014). *Brazil: Reversal of Fortune*. New York: Polity.
- Ocampo, J.A. (2011). "Como fue el desempeño de América Latina durante la crisis financiera global?". Ensayos Económicos BCRA 61/62, June.
- Paula, L.F.; Ferrari-Filho, F.; Gomes, A. (2013). Capital flows, international imbalances and economic policies in Latin America. In: ARESTIS, P.; SAWYER, M. (ed.). Economic Policies, Governance and the New Economy. Basingstoke: Palgrave Macmillan, 209-248.
- Paula, L.F.;Modenesi, A.; Pires, M.C. (2015). "The tale of the contagion of two crises and policy responses in Brazil: A case of (Keynesian) policy coordination?" *Journal of Post Keynesian Economics*, 37(3): 408-435.
- Prates, D.M.; Cintra, M.A.M. (2009). "Os países emergentes diante da crise financeira global". *Proceedings of II Encontro Internacional da Associação Keynesiana Brasileira*. Porto Alegre: AKB, CD-ROM.
- World Trade Organization (WTO) (2010). Statistics. http://www.wto.org (accessed in April)

ANNEX

Table 1: Selected Macroeconomic Indicators of the Brazilian and Argentinean Economies

Year	GDP Growth (%)		Inflation (%)		Trade Balance (US\$ billion)		Current Account (US\$ billion)	
	Brazil	Argentina	Brazil	Argentina	Brazil	Argentina	Brazil	Argentina
2000	4.3	-0.8	5.97	-0.94	-0.7	1.6	-24.2	-8.9
2001	1.3	-4.4	7.67	-1.07	2.6	6.8	-23.2	-3.8
2002	3.1	-10.9	12.53	25.87	13.1	17.6	- 7.6	8.7
2003	1.2	8.8	9.30	13.44	24.8	16.6	4.2	8.1
2004	5.7	9.0	7.60	4.42	33.6	13.4	11.7	3.1
2005	3.1	9.2	5.69	9.64	44.7	12.5	14.0	5.1
2006	4.0	8.4	3.14	10.9	46.5	13.1	13.6	7.6
2007	6.0	8.0	4.46	8.83	40.0	13.5	1.5	7.2
2008	5.0	3.1	5.9	8.59	24.8	16.2	- 28.2	6.6
2009	- 0.2	0.0	4.31	6.27	25.3	17.7	-24.3	10.9
2010	7.6	9.5	5.91	10.46	20.2	13.8	- 47.4	-1.5
2011	3.9	8.4	6.50	9.78	29.8	11.5	- 52.6	-3.7
2012	1.9	0.8	5.84	10.04	19.4	12.6	- 54.2	-1.3
2013	3.0	2.9	5.91	10.62	2.6	3.2	- 81.4	-4.6
2014	0.1	0.5	6.41	23.9	- 3.9	5.0	- 90.9	-7.4

(continuation)

Year		Exchange Reserves US\$ billion)		Effective inge Rate	Interest Rate (%)	
	Brazil	Argentina	Brazil	Argentina	Brazil	Argentina
2000	33.0	25.2	70.34	262.79	15.75	11.05
2001	35.9	14.6	59.54	275.59	19.00	80.84
2002	37.8	10.5	55.38	125.11	25.00	7.02
2003	49.3	14.2	53.88	125.9567	19.00	1.95

2004	52.9	19.7	56.28	121.15	17.75	3.55
2005	53.8	28.1	69.3	119.56	18.00	7.30
2006	85.8	32.0	77.45	116.74	13.25	8.00
2007	180.3	46.1	83.7	113.71	11.25	10.75
2008	193.8	46.4	87.73	110.39	13.75	12.50
2009	238.5	48.0	87.55	103.09	8.75	14.00
2010	288.6	52.2	100	100	10.75	11.00
2011	352.0	46.4	104.56	95.15	11.00	13.97
2012	373.1	43.3	94.4	98.1	7.25	12.44
2013	358.8	30.6	89.9	90.02	10.00	15.05
2014	363.6	31.4	88.85	73.88	11.75	26.86

Source: IMF (2019) for GDP Growth and Inflation, Trade balance and Current Account, ECLAC (2019) for Real Effective Exchange Rate, and BCB (2019) and CBA (2019) for Reserves and Interest rates.

