Varieties of developmentalism: A critical assessment of the PT governments

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Abstract: We ask if and how far PT governments followed developmentalist policies. First, we identify a variety of developmentalist concepts. We argue that even if these share the same aim of industrialization with redistribution, they diverge in their mechanisms considered as key to achieve it. When classifying economic and social policies of the subsequent PT governments, we find that not only that these combined two varieties of developmentalism in different combinations over the period under analysis, but that also orthodox policies had a prominent role in part of this time span. Last, we encounter a surprisingly high frequency of policy changes.

Key words: development; economic policy; Brazilian economy; developmentalism; State

1. Introduction

Brazil gained high attention for it ability of combining growth with equity for the decade of 2000s. Yet, its deep crisis over the recent years brought up the question of whether the determinants of both this success and its implosion can be seen as result of a deliberate strategy or of the changes in the external context, mainly the boom and bust of commodity prices and capital flows, or if domestic policy failures are to be blamed.

This debate encompasses supporters and opponents of the strategy followed by successive Brazilian governments led by the Labor Party (*Partido dos Trabalhadores* – PT) over more than a decade, which many have labelled, even if with different prefixes, as 'developmentalist' (Ban, 2012; Bielschowsky, 2015) or 'varieties of neoliberalism' (Saad Filho, 2017), in analogy with the concept of 'varieties of capitalism'[i]. Following Fonseca (2014), developmentalism is a rather ambiguous term by definition, nurtured both by theoretical concepts and economic policy experiences. Indeed, a common denominator, shared by academics as well as explicitly expressed by the Brazilian governments in this period (Ministério de Planejamento, 2003) has been the aim to combine sustained economic growth with productive restructuring and income distribution by giving the State an active role.

We ask *if and how far* the PT governments (2003 to mid-2016) followed a developmentalist approach, and *which* kind of developmentalist approach was adopted. To address our research question, we derive three main hypotheses. First, we assume that there exists a variety of conceptual approaches which can be labelled as developmentalist, even with different prefixes. Our second hypothesis is that the policies applied during such period followed different approaches of developmentalism, and even encompass some elements which we classify as orthodox. Third, the significant and repeated changes of the policy mix over time were conditioned by the external context, but also shaped by domestic factors.

The main contribution of this paper is to assess the economic and social policies during the PT governments, analyzing if these policies can be considered developmentalist and, if they can, what 'varieties of developmentalism' were implemented. Hence, we address a lacuna in the current literature on the Brazilian case looking into the policies applied at asking how they can be classified in terms of their paradigmatic background. This evaluation is also useful to bring to light the differences between the PT governments and the starkly orthodox government of the president Michel Temer, who took office due to the impeachment of President Dilma Rousseff in August 2016.

The following section presents the different varieties of developmentalism. The third section presents stylized facts of the external context; and summarizes the macroeconomic outcomes of the Brazilian economy in the period under review. The fourth section sums up the economic and social policies applied from 2003 to mid-2016 while the fifth proposes a periodization and a typology of policies during PT governments along the different developmentalist and non-developmentalist varieties. Finally, the sixth section concludes.

2. Varieties of developmentalism

The concept of developmentalism is a rather ambiguous term per definition. It involves two perspectives which are intertwined, but are not the same neither from an epistemological viewpoint nor in daily practice: i) a phenomenon of the 'material world', i.e. a set of practices of economic policies proposed and/or executed by policy makers; and ii) a phenomenon of the 'world of ideas', i.e. a set of ideas proposed to express theories, concepts or visions of the world. The former expresses itself also as political discourse, while the second seeks to form a school of thought (Fonseca, 2014, p.30).

The origin of developmentalism is related both to studies of development in the 1950s and the Latin American structuralist approach, which sought to understand the specificities of underdevelopment and how to overcome it. Classic developmentalism departed from the idea that the typical division of labor between developed and developing economies created a structural balance of payments constraint and impaired domestic growth. As a phenomenon of the 'material world', developmentalism translated to national-developmentalist strategies supporting that industrial development was the most efficient way to achieve an increase in productivity and in national income; thereby retaining the 'fruits' of technical progress in peripheral economies. Latin American structuralism, also known nowadays as 'classic developmentalism', used the metaphor 'center-periphery' to translate the productive and technological asymmetries of the international order and saw industrialization as the only way for the peripheral economies to gain access to part of the technical progress from the developed economies, allowing them at the same time to progressively raise the living standard of the population (Prebisch, 1950 and Ocampo, 2001).

The current debate is intensively nurtured and intertwined with the economic policy discourse and policy making, especially in Latin American countries where leftist parties dominated governments in many countries until recently. Updated concepts of developmentalism gained space in semi-mature economies of the continent such as Argentina and Brazil[ii], which are featured by a more diversified productive structure and the risk of premature de-industrialization. This also resulted from profound discontentment with orthodox policies, based on the neoliberal recommendations of the so-called 'Washington Consensus'. Indeed, the region that has the highest degree of economic inequality in the world experienced a stagnation or even further worsening of inequality though the period of liberalization. Within the critical assessment of the neoliberal agenda of domestic market liberalization, trade and financial openness and reduction of the role of the State, income distribution emerged at the center of public debate.

Within this renewed and multidisciplinary debate in Brazil, we identify two major new concepts in the economic field: social developmentalism (SD) and new developmentalism (ND)[iii]. These have updated classic developmentalism and added new dimensions. Both clearly reject the neoclassical idea of welfare maximization by specializing on comparative advantages at the global level, similar to classic developmentalism, at seeing structural external constraints caused by integration of peripheral economies in the global market as the cause of lacking economic dynamism at the domestic level. Thus, they support a national strategy of economic development with an active role of the state to achieve structural change towards (re-) industrialization, resulting in social transformation (Fonseca, 2014, p. 41; Bielschowsky, 2015).

To facilitate the analysis of policy coordination, we analytically disaggregate the two varieties of developmentalism into three different layers of policy aims, targets and tools (see Table

1).[iv] We also refer in this table to the orthodox approach to sharpen the understanding of the differences between the body of developmentalist concepts and the orthodox approach that has globally dominated the formulation of development strategies at least since the 1990s. For our purposes, we find the label 'orthodox' more precise to differentiate macroeconomic and social policies than the more general label 'neoliberal'[v]. Yet, as this latter is well established, in the following we only detail the two developmentalist approaches.

When comparing SD and ND, we first find that especially the concept of ND is rather well developed and clearly defined in paradigmatic terms in various papers mainly by Bresser Pereira (2011 and 2015). Differently, the SD approach is being treated more loosely and less coherently by a series of authors, which makes its definition more difficult. Yet, by systematically comparing the two concepts, we can depict rather clear and relevant distinctions: Even if both are rather similar in their policy aims, at seeking to achieve productive change with income redistribution, they clearly differ regarding most of the targets and tools to achieve these aims.

SD is closer to the classic developmentalist approach, as it continues focusing on the shortage of domestic demand to push investment into productive diversification. Yet, while the former sees income redistribution more as an outcome of structural change pushed by State action, SD gives the aim of a more equal income distribution a prominent role for increasing domestic mass consumption, which would push economic growth and productive change. The structural balance of payments' constraint would be mitigated by export growth induced by scale effects and industrialization as well as fostered by domestic demand, given the complementarity between domestic and foreign markets. It also could be supplemented, at least temporarily, by the expansion of the natural resource-intensive sector and its supply chains (Bielschowsky, 2012; Biancarelli, 2015).

Differently, ND has a predominantly macroeconomic perspective and is inspired by the development path of Asian emerging markets with their marked strategy of export surplus. It sees two hindering factors for development: first, the tendency towards currency overvaluation as a result, mainly, of the specialization in commodity exports (also discussed as the phenomenon of Dutch disease); second the net flows of foreign capital, stimulated by the policy of growth-cum-foreign savings. Also, the tendency of wages to increase below productivity due to the availability of an unlimited supply of labor. Here, the aim of (re-) industrialization is directly linked to the target of an export surplus of manufactured goods, pushing for further investment in this sector. With this, the country should be enabled to avoid incurring into external debt. In this view, the exchange rate plays the key role to influence both imports and exports. An improvement in the income redistribution basically would result from (formal) job creation in the manufacturing sector and from wages increasing along productivity gains (Bresser-Pereira, 2011).

Regarding the policy tools attached to each of these approaches, Carneiro (2012) notes that the reflections regarding SD are rather fragmented. This holds especially for the first generation of papers (Bastos, 2012; Bielschowsky, 2012; Carneiro, 2012), where the focus is exclusively on policies oriented towards redistribution and shifting production patterns, as follows:

- Wage policies, being the minimum wage a powerful policy instrument to foster wage increases in real terms especially in the lower income range;
- Social transfers targeted towards the poorer part of the population;
- Financial policies focus on consumer credit and subsidized financing by public banks;
- Public investment especially in infrastructure, seen as crucial for reating demand, but especially for giving incentives for private investment;

- Industrial policies to further stimulate private investment.

Macroeconomic considerations are mainly included in a second wave on publications on SD. Rossi (2014) makes an explicit attempt to include monetary, fiscal and exchange rate policy tools, supporting that a macroeconomic policy coherent with SD should sustain economic growth through countercyclical fiscal policies. Macroeconomic stabilization to foster productive investment, would require a low interest rates and a non-appreciated and non-volatile exchange rate, via an active exchange rate policy and capital controls. Following Rossi, these targets and tools could be pursued along with a more flexible execution of the current orthodox framework, the so called macroeconomic tripod of inflation targeting, floating exchange rate and primary surplus target. Yet, this author doesn't explain how to make these macroeconomic tools compatible with the main pillar of SD policies, which are wage increases in real terms, without jeopardizing price stability or a competitive exchange rate.

Within ND, Bresser-Pereira (2011) offers a well-developed theoretical approach and clearly deduces the policy tools necessary for the strategy of export-led growth:

- Priority is given to currency devaluation and subsequent maintenance of the exchange rate at a level where domestic industry becomes internationally competitive. If necessary, this undervalued currency should be supported by capital controls.
- Other macroeconomic instruments are thought to support this exchange rate level at maintaining price stability, supported by a combination of a low interest rate and a balanced public budget with room for countercyclical fiscal policies over the cycle, what means an austerity bias during the boom.
- Industrial policy is a secondary policy tool and should be targeted exclusively towards exports, until catching up with advanced economies.

- Wages, at the short term, might lose in terms of purchasing power as a consequence of the currency devaluation. In the medium term they should grow along productivity gains to prevent spurring inflation and to maintain the functional distribution. Income redistribution is expected to stem from additional job creation in the manufacturing sector.
- Redistributive policies are included as an addendum in later publications (Bresser-Pereira et al. 2015), reacting to the heated debate around re-distributional issues, being not vital to the ND strategy.

Hence, even if the new varieties of developmentalism share the same aim, they substantially diverge in terms of priority given to the targets and tools. This results in starkly different manners of policy coordination. In order to bring to light these differences, Table 1 presents the key policies of each variety in order of relevance.

Table 1 here

3. Empirical outcomes

This section summarizes, firstly, the changes in the external context overtime that conditioned the performance of peripheral economies, such as Brazil, according to developmentalist approaches. Secondly, the economic outcomes of the Brazilian economy during this period is presented through stylized facts regarding the most relevant goals targeted by these approaches, i.e. growth, income distribution and productive re-structuration.

Over the period under consideration, the external context underwent important changes. We can identify three different phases during the period of PT-led governments: the first one from 2003 to the global financial crisis (GFC), benign to emerging economies in terms of trade (high commodities price and external demand) and capital flows; the second one, from September 2008 to 2010, featured by such crisis, the double speed-recovery and the new ‘twin boom’ of commodity prices and capital flows; the third one, from 2011, characterized by a deterioration of external conditions (For more details, see Biancarelli et al. (2017); Figure 1 and Table 1A in Annex).

Figure 1 here

During the first phase (more specifically, from 2004 to mid-2008), the Brazilian economy experienced unprecedented growth compared to the 1980s and 1990s, with an average growth rate of 4.8% per year. During the pre-crisis boom, the main engine of growth was household consumption (which responds to the biggest share of the Brazilian GDP, around 60%). Another novelty of this period was the continuous credit growth to households and firms.

In line with other emerging economies, the recession caused by the contagion effect of the GFC was brief, mainly because household consumption mitigated the adverse effects of the crisis. The economy recovered quickly and in 2010 GDP recorded a growth rate of 7.5%; both consumption and investment contributed to that healthy economic recovery.

Growth, however, began to slow down in late 2010, further decelerating in 2012, until turning into the worst economic recession since at least the Great Recession of the 1930s (Table 1A in Appendix). A set of shocks contributed to this crisis, among these a terms of trade deterioration, accelerated inflation due to a de-freezing of monitored service prices and strong currency devaluation, plus a hydric crisis. The recession, which was further fuelled by a tightening of monetary and fiscal policies from 2015, produced declining wages and profits. This also caused a huge slowdown in credit supply (Figure 2) and a deterioration in the financial situation of non-financial corporations, further delaying the recovery of the economy (Paula and Pires, 2017).

Economic growth in 2003-2013 was accompanied by a sharp reduction in the unemployment rate, from 12.4% in 2003 to 5.1% in 2013 (this rate increased to 8% in 2015 due to the recession). The combination of low unemployment and real wage increases contributed to the improvement in social indicators, especially economic inequality, a trend also observed in other Latin America countries (Fritz and Lavinas, 2015). In the case of Brazil, the poverty rate fell down sharply from 35.8% of the population in 2003 to 13.3% in 2014 (Table 1A in Appendix). The process of income redistribution encompassed both the personal dimension, with a reduction of the Gini index, and the functional one, with an increase of the wage share in total income.

Figure 2 here

However, studies using personal income tax records (i.e, Gobetti and Orair, 2015; Morgan, 2017) show a different picture of Brazilian personal inequality, revealing that the Gini index, which is based on household survey data, overestimates the improvements in the personal income distribution during the PT governments mainly due to the underestimation of the level of incomes at the top of distribution. The estimations of these studies confirm that poverty and labour income inequality registered a decline, yet the exceptionally large concentration of income at the top has not changed. As a result, the bottom made gains at the expense of what he calls the 'squeezed middle' of income earners[vi].

Besides growth and income redistribution, the third aim of developmentalism is to achieve a reallocation of productive resources from the traditional sector (especially agriculture) to the manufacturing sector (mainly those segments of higher technological sophistication). Yet, over the period of 2008-2015, the fall of this sector's share in the GDP gained momentum (Figure 3).

Figure 3 here

Moreover, since 2008, this descending trajectory was accompanied by increasing deficits in manufacturing goods' trade balance, certainly fostered by the appreciation of the domestic currency in real terms until 2012 (see section 4), along with a surplus in non-manufacturing goods favoured by increasing terms of trade (Figure 4). Even with a subsequent reverse in the appreciation trend, profitability of exports increased only slightly. In this setting, industrial output firstly stagnated and, from 2013, begun to fall. Meanwhile, retail sales and the import coefficient of industry inputs kept growing, indicating a substitution of domestic production by imports both in final and intermediary manufacturing goods (Paula et al., 2015).

The negative results regarding structural change came out with a deterioration of external solvency in the medium and long term, as the growth rate of total net external liability was greater than the one of exports. The situation rather worsens when considering only the exports of manufactured products, characterized by lower price volatility and higher income-elasticity than commodities. From this perspective, the country's capacity of generating autonomously foreign currency to serve its external liability decreased during the period under analysis (Table 1A in Appendix).

Figure 4 here

On the contrary, the state of external liquidity, i.e. external vulnerability in the short term, improved thanks not only to the policy of foreign exchange (FX) reserves accumulation (see section 4), but also to the reduction in the currency mismatch associated with a change in the composition of the short-term gross external liability. This change stemmed from two simultaneous trends: a decrease in external debt and a rise in foreign portfolio investment in the domestic market (Biancareli et al., 2017). Further, the increasing current account deficit between 2009 and 2014 was financed almost fully by foreign direct investment (FDI). In 2015 and 2016, the FDI was higher than the external deficit. Thus, in the short term, Brazil did not face an external constraint, what explains, along with the dirty floating regime, why a balance of payment crisis did not break out despite the huge outflow of foreign portfolio investments amid a deep economic and political crisis (Table 1A in Appendix).

4. Economic and social policies over the PT governments

In this section, we analyze public policies implemented during Luís Inácio Lula da Silva's and Dilma Rousseff's terms. Based on this assessment, we will elaborate in section 5 a typology of these policies along the different developmentalist and non-developmentalist concepts.

4.1. Macroeconomic policies

The first term of Lula da Silva's government (2003-2006), following a confidence crisis in 2002 with a massive speculative attack against the Brazilian currency, was characterized by the continuity of the tripod of macroeconomic policies adopted after the 1999 currency crisis, namely, inflation targeting, primary surplus targets and a (dirty) floating exchange rate regime. Under this framework, both fiscal and monetary policies were kept mostly orthodox, featured by a wide primary surplus and the maintenance of a high real interest rate (albeit with a decreasing path), while the currency appreciated gradually (Figures 5 and 6).

Figure 5 here

Figure 6 here

Amid a positive external environment in terms of trade and capital flows (Figure 4 and Table 1A in Appendix), the high interest rate stimulated speculative operations through portfolio investment and FX derivatives. These operations along with the current account surplus resulted in a significant currency appreciation. The interventions of the monetary authority in the FX market in 2005 did not curb this appreciation, but came out with the buildup of FX reserves. The so called precautionary demand for reserves contributed to the decrease of net public external debt (Table 1A in Appendix) and the improvement in the country's eternal liquidity. Moreover, in this period bank credit to the private sector recorded a significant growth, stimulated, among other factors, by the implementation of payroll-deductible credit operations, which reduced bank risk and, consequently, the cost of loans to households.

From 2006, credit of public banks to corporations, also gained momentum, especially when in 2007, the first year of President Lula second term, a huge program of public investment in infrastructure was launched, called Growth Acceleration Plan (PAC). Hence, even before the contagion effect of the GFC, this term was featured by a greater state activism (Singer, 2015).

The Brazilian authorities responded to the GFC by adopting a number of countercyclical measures (Barbosa, 2010; Paula et al., 2015): (i) to avoid the spread of the credit crunch, the Central Bank of Brazil (CBB) adopted a series of liquidity-enhancing measures; (ii) the CBB intervened in the FX markets; (iii) the state-owned banks were encouraged to expand their credit operations to compensate for the deceleration in the credit supply by private banks (Figure 2); and (iv) the Ministry of Finance undertook fiscal measures to stimulate aggregate demand. Such countercyclical reaction was possible, to a large extent, due to the policy space created by the shift towards a net creditor position in foreign currency of the Brazilian government. Consequently, the currency devaluation favored public finance.

In the context of quick recovery of the economy and a new “twin boom”, Brazil faced again huge short-term inflows boosted by a still high differential between the internal and external interest rates. As the CBB resumed the exchange rate policy adopted before the crisis, Brazil’s currency recorded a huge appreciation in 2009 (Figure ting, the Ministry of Finance started imposing regulations on capital flows, starting with a tiny financial transaction tax on foreign portfolio investments in October 2009. Soon, these regulations were strengthened with the first measure targeting FX derivatives operations and administrative controls. Moreover, the Central Bank of Brazil adopted macro prudential regulations to curb the domestic credit boom (Paula et al., 2015; Prates and Fritz, 2016).

In mid-2011, during Roussef’s first term, a gradual change was introduced for what the government itself called the ’New Macroeconomic Matrix’. This encompasses a set of countercyclical measures to boost growth in the context of the worsening of the euro crisis as well as to increase the competitiveness of the Brazilian industry damaged by years of currency appreciation and the greater competition in the external markets after the GFC.

The regulatory toolkit on spot and derivatives’ FX markets was further broadened as the previous measures had only mitigated the currency appreciation trend underlying the deterioration in competitiveness of Brazil’s manufacturing sector in both external and domestic markets (Prates and Fritz, 2016). It was completed by a progressive reduction of the policy rate. Yet, as precondition for these changes in the exchange rate and monetary policy without jeopardizing price stability, fiscal policy was tightened in the first half of 2011 (Cagnin et al. 2013). The interplay of the new FX regulations, the monetary policy loosening and the increase in the risk aversion of global investors came out with the intended depreciation of the Brazilian currency (Figure 6).

Besides the change in the interest and the exchange rate, the government launched a wide range of instruments that favored the domestic manufacturing sector and seek to dampen inflationary pressures in face of the currency depreciation: a nominal freeze of relevant public tariffs, such as energy and gasoline), the use of state-owned banks to reduce bank spreads and tax exemptions (see subsection 4.2). It is worth mentioning that in the first year these measures did not change the overall fiscal policy stance (Paula and Pires, 2017; Mello and Rossi, 2017).

Yet, in April 2013, due to an increasing inflation rate, the CBB restarted to rise gradual and continuously the policy rate (Figure 5), and removed regulations on FX operations due to signaling by the Federal Reserve that its quantitative easing policy would to be withdraw soon ('tapering'). At the same time, the Brazilian government further enlarged tax exemptions, and tried to intensify investment in infra-structure. Moreover, affected by the decline of oil prices and the first effects of 'Lava-jato'[vii] operation, Petrobras reduced its investments, with a strong impact on overall investment (Mello and Rossi, 2017).

Compared with the policies launched to counter the GFC contagion effect, the countercyclical fiscal policies implemented in 2012-2014, with the use of tax exemptions instead of public expenditures, were very limited, with small aggregate impact on production and employment. The same holds for public investment, which was significantly higher over 2006-2010.

In 2015, after the re-election of Dilma Rousseff, the government shifted its economic policy somehow radically towards a more orthodox policy stance. The main aim of the economic policy was to implement fiscal adjustment mainly by the side of public expenditures, understood as fundamental for retaking the agents' confidence as a pre-condition for economic recovery. For this purpose, the Brazilian government committed itself to a primary fiscal surplus of 1.2% of GDP, implementing a set of measures to reduce public expenditures (mainly by the budget contingency), re-adjusted monitored prices (energy and oil), while the CBB further increased its policy rate from 10.92% p.a. in October 2014 to 14.14% p.a. in August 2015. Due to strong devaluation in 2015, the CBB had to intervene in the FX market to reduce exchange rate volatility and to offer exchange rate hedging to private agents, with the use of swap operations (Paula and Pires, 2017; Carneiro, 2017).

The efforts of fiscal adjustment failed as fiscal revenues dropped dramatically in 2015, so that the Ministry of Finance had to revise its fiscal targets. Due to the recession and increasing interest payments, the public nominal deficit increased even more in 2015. Net public debt over GDP, which had recorded its lowest level during the period under analysis in 2013 with 30.5%, again grew steeply (to 46% of GDP in 2016). Gross debt increased even more, from 51.5% to 69.6% over GDP in the same period. This means that government's assets (mainly, foreign reserves and loans to public banks) shrunk in relative terms, contrary to the period 2010-2014, when they rose significantly (Table 1A in Appendix).

At the beginning of 2016, Nelson Barbosa, the new Finance Minister, announced his strategy of fiscal consolidation, which, among other things, would be able to reverse the upward trend of public spending that contradictorily compromised the capacity of the Brazilian State to implement public policies in the long term (Paula and Pires, 2017). As for 2016, the spread of political crisis virtually paralyzed the government's actions, making impossible the adoption of any economic policy agenda until the impeachment of President Roussef in 2016.

4.2. Industrial policies[viii]

After a long time span of almost complete absence of industrial policies, three programs of industrial policy were launched during the period analyzed here, each of them containing a different focus. Industrial policy in this period oscillated between two types of strategies: to prioritize high-tech sectors and to select national champions in industries with comparative international advantages, such as agribusiness, steel and mining, as well as to favor sectors damaged by strong foreign competition.

The first program called PICTE (‘*Politica Industrial, Tecnológica e de Comércio Exterior*’ – ‘Industrial, Technology and Foreign Trade Policy’) was launched in 2004 aimed to address Brazil’s external vulnerability, emphasizing an active policy of adding value to exports based on innovation. To this end, three areas were defined: (i) incentives for strategic sectors (capital goods, software, semiconductors, pharmaceuticals and medicines; (ii) horizontal actions to stimulate innovation and technological development, international integration via exports and modernization of institutional environment; and (iii) priority to three areas considered relevant for national technological development: biotechnology, nanotechnology and renewable energy.

With the rapid and intensive improvement of Brazilian terms of trade from 2004, which resulted in substantial surpluses in the trade balance, priorities for industrial policy changed. The ‘Productive Development Policy’ (PDP) was launched in May 2008, in a context where, according to the underlying diagnosis, Brazil had received the investment grade due to its sound economic fundamentals (low inflation, fiscal surplus, etc.). The main policy objective was then set to foster growth and productive investment in the domestic market. For this purpose, the PDP set ambitious investment goals (from 17.6% of GDP in 2007 to 21.0% in 2010) and an increased participation of Brazilian exports in world trade.

The changing global scenario led to the launch of a third program, called 'Plano Brasil Maior' (PBM – Plan Bigger Brazil), in August 2011, with continuous modifications in the following years in view of worsening global economic conditions. The initial objectives of the PBM were creating capabilities aiming at the productive and technological consolidation of value chains, but the intensification of external competition in domestic and foreign markets forced the plan to be directed to the defense of the domestic market and the recovery of systemic competitiveness conditions. In line with the "New Macroeconomic Matrix', the government adopted compensatory measures to minimize the impact of the increasing penetration of imported goods in Brazil on domestic manufacturing output (see subsection 4.1). The measures included the expansion of subsidized credit by BNDES and further tax and social security payment exemptions, causing significant fiscal costs with limited effects on industrial production.

In his balance of industrial policies in the analyzed period, Kupfer (2013) concludes that these remained an auxiliary element of macroeconomic policies, but often in conflict with these as their effectiveness was reduced by the strong currency appreciation until 2011 and very high interest rates.

4.3. Social policies

Highly active social policies were one of the major traits of policy orientation during the period examined. These policies were crucial for attaining the aim of income redistribution, which would foster domestic consumption. The two main factors that contributed to improve income distribution was the huge increase in the minimum wage (66.9% in real terms from December 2003 to December 2014) and the policy of income transference due to both increase of the pension benefits and '*Bolsa Familia*' program (Figure 7 and Table 1A in Appendix).

The most important instrument certainly was the increase of the minimum wage. The rule for adjusting such wage adopted over this period was to add the inflation of the previous year and the GDP growth rate of the second year before the relevant one. In this way, high economic growth resulted in high real wage increases as in Brazil wages of low qualified workers in the public and in the private formal and informal sector, as much as public pension payments, are all linked to the minimum wage[ix]. Within this institutional setting, minimum wage policy turned a powerful re-distributional instrument.

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Another social policy instrument that gained high national and international visibility was the conditional cash transfer program *Bolsa Família.* It was designed to combat extreme poverty, and achieved an almost complete coverage of very poor families with kids in school age in the country. Its costs for public spending together with other anti-poverty programs remained very low.

Finally, fiscal policy was completely absent in the area of redistribution policies. While in OECD countries taxes are responsible for the bulk of public re-distribution, in Brazil the tax system even has a slightly regressive effect (Lustig et al., 2014).

5. Varieties of developmentalism over the PT governments: a classification

When we assess the policies adopted during the four PT governments, we find significant and repeated changes in the policies over time. Even if for some aspects exact and uniform periodization is rather difficult, we also find that these changes were largely associated to the external context. As pointed out in section 3, it is possible to identify three different phases in such context over the analyzed period, which defined the limits and possibilities of the domestic economic and social policies: the first one before from 2003 to the GFC; the second one, from September 2008 to 2010; the third one, from 2011 (Figure 1 and Table 1A in Appendix).

These same periods are used herein to elaborate a typology of policies along the different developmentalist and non-developmentalist varieties We argue that this systematization is worth its effort despite certain lack of clearness of these concepts, because it helps to uncover fundamental flaws regarding the macroeconomic foundation of redistributive policies for most of the period analyzed (Table 2).

Yet, the last phase (2011 to mid-2016) is split into two sub-periods in view of the changes in economic policies in Rousseff's second term. These were shaped, largely, by domestic factors, especially the political confidence crisis initiated in her first term with the street protests of June 2013, and further fostered in her second term by a mix of economic crisis and corruption scandal. It is worth mentioning that the 'Car Wash' operation (see footnote vii) contributed to the loss of political majority and of voters' backing, leaving the government with little support to fend off a power grab by political rivals who impeached President Rousseff not on charges of corruption, but of manipulating the federal budget (the so called 'creative accounting' that also took place in former governments).

The first phase from 2003 to September 2008 was marked by an orthodox macroeconomic policy. Moreover, following the path of other emerging economies, from 2005 the favorable external context had enabled Brazil to adopt the precautionary strategy of accumulating FX reserves, which had a key role in reducing external vulnerability, being coherent with both varieties of developmentalism. This policy stance was mixed with increasing elements of social developmentalism, namely, the formation of a market of mass consumption. That was boosted by increasing the minimum wage in real terms, stimulating private credit, as well as rising households' purchasing power in a setting of lowering prices of imported goods due to the currency appreciation. However, as industrial policy was mostly oriented towards strengthening exports, this policy field can be characterized as new-developmentalist, even if it has a secondary place in this perspective.

A second phase, from October 2008 to 2010, was the time when 'we were all Keynesians'. In the context of the contagion effect of the GFC, the Lula government in its second term launched a more flexible fiscal policy, including an increase in public investment that started in 2007 with the PAC, promoted a countercyclical role of state-owned banks, and boosted social policies. These measures, coherent with social developmentalism, were taken with some pragmatism and departed from what we labelled as orthodox policies before the crisis. In a second stage, when the economy recovered, the government adopted price-based capital controls and macro-prudential regulations on the credit market to curb, respectively, the currency appreciation and the credit boom. Although these two types of financial regulation (Ocampo, 2012) were included to some degree in the conventional toolkit of macroeconomic recommendations after the 2008 global crisis (Blanchard et. al., 2010), they fit within both new and socio-developmentalism (e.g., Rossi, 2015).

The third phase was characterized by strong oscillation in the macroeconomic policy between orthodoxy and developmentalism, and classification becomes especially difficult. One could interpret the so-called 'New Macroeconomic Matrix' as influenced by new developmentalism prescriptions due to the currency devaluation and the decreasing policy rate backed by fiscal austerity in the beginning, but other elements of this approach were not present, especially regarding fiscal policy in 2013-2014. This policy was not only increasingly expansive, but also supply side-oriented instead of focusing on the public demand side. Indeed, public investment decreased in 2010-2014. Then, they were even criticized by social developmentalists (Bastos, 2015). However, from 2013, a more orthodox approach in terms of monetary and exchange rate policies towards inflation stabilization was resumed. At the same time, in the first Roussef government, the pillars of social developmentalism of the first two phases were maintained, i.e. minimum wage increases, stimulus to private credit, and an active role of public banks and of industrial policies. Hence, taking into account all the economic and social policies, in this period predominated a mix of social and new developmentalism, as Singer (2015) also suggests[x].

As we have already pointed out, the second Roussef's government (2015-2016) was marked by a radical shift, with the implementation of orthodoxy mainly in the field of fiscal and monetary policies. As for the exchange rate policy, Central Bank of Brazil implemented a strategy to reduce volatility and provide a hedge against exchange rate risk, but did not intend to be involved with the determination of the exchange rate. In terms of social policies there were no significant changes. As we have seen in the former section, the rule for minimum wage readjustment remained in place, although high inflation in 2015-2016 and low growth in the years before limited real wage increases.

Table 2 here

5. Conclusions

Our assessment of the experience of policies during the long period of PT-led governments in Brazil shows that we cannot label this period neither as completely orthodox or neoliberal nor as overall developmentalist. Indeed, we find our first hypothesis confirmed: already at the conceptual level we can identify more than one recent variety of developmentalism, being the two most relevant in the economic debate the concepts of social and of new developmentalism. These share the aim of combining sustained economic growth with productive restructuring and income distribution by giving the State an active role. However, they diverge with regard to the priority given to policies to achieve this aim. The new developmentalist approach centers on the management of a competitive exchange rate to achieve an export surplus in manufactured goods and job creation in the industrial sector. On the other hand, the social developmentalist variety favors re-distributional policies to foster domestic demand and diversified domestic investment. So, when asking if the PT governments were developmentalist, the question should also consider what variety of developmentalist we have to account for in this context.

Our second hypothesis, regarding the classification of policies applied, is also confirmed. Some policies applied followed more explicitly the social developmentalist variety. This is the case of social policies and sub-fields of economic policies, such as public investment and financial policies regarding credit access for lower income households and the outstanding role given to public banks. The core of new developmentalist policies, the policy of achieving an undervalued currency supported by fiscal austerity, low interest rates and capital controls, were applied only for a rather limited period of time during the first Rousseff's government.

Yet, when concretely assessing the macroeconomic policies applied, it becomes clear that these followed the current orthodox prescription during the first phase. Against widespread interpretation in the field of orthodox economists, we cannot find a clear pattern of shifting macroeconomic policies towards a more developmentalist stance in uniform terms. Rather, the reaction to the spillovers of the GFC is shaped by countercyclical policies that were global standard in this context. And the third phase is characterized by a mixture of all types of policies, both the two varieties of developmentalism and orthodoxy, which changed in an astonishingly quick manner. This, for instance, applies to the monetary policy from the second half of 2012 on, and features especially president Roussef's second term. In its struggle against a widening and mutually nurturing economic and political crisis, that term was dominated by orthodox policies.

This takes us to conclude that our third hypothesis has higher relevance than expected. We encountered a number of difficulties to find clear criteria both in terms of periodization and classification, as the changes especially in macroeconomic policies were highly frequent. Certainly, policies should not be expected to be a pure result of theoretical considerations, but they are highly dependent on institutional path dependency and concrete circumstances, in interplay with specific interests. However, it is clear that the external context shaped policy options over the period. Regarding the third phase, the swift macroeconomic policy shifts certainly had to do with necessary adjustments to a volatile international environment. Beyond this, however, they may also reflect accumulating domestic conflicts among dominant economic actors over re-distributional aims and outcomes of public policies, which grew acute with the enlarging of the political corruption affair involving the governing parties.

Table 1A here (Annex)

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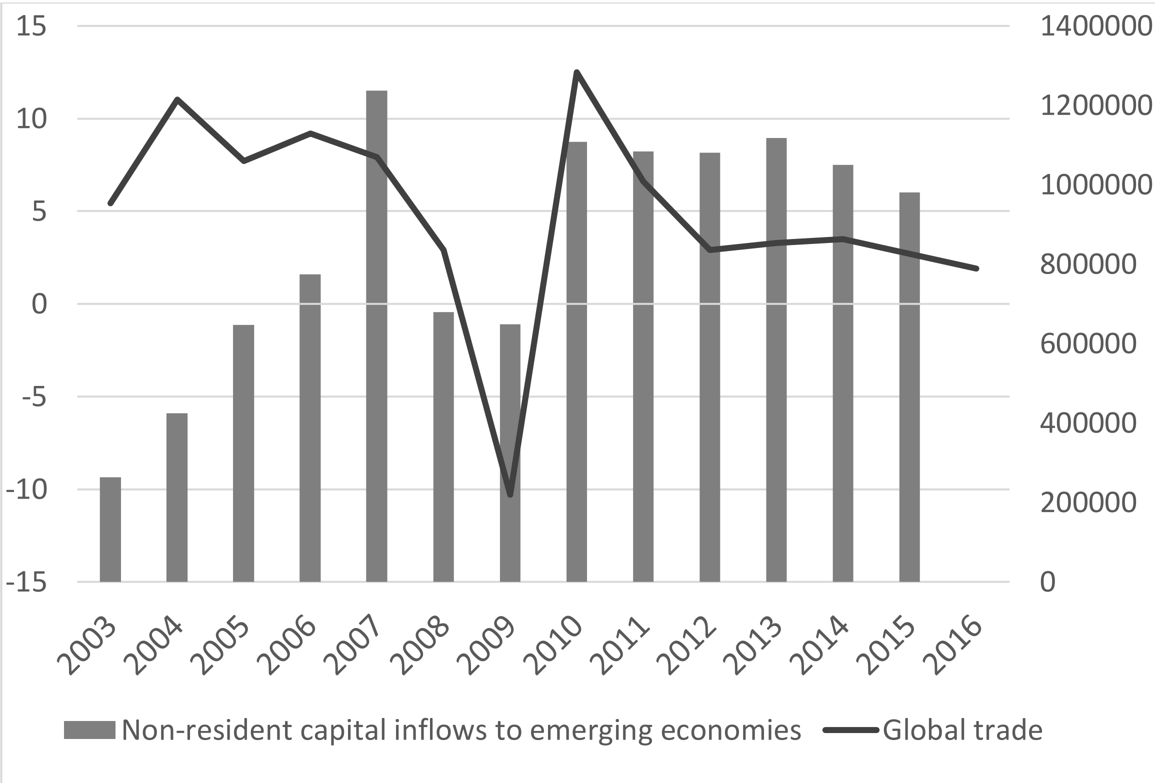
Tables

Table 1. Varieties of developmentalism and the orthodox approach: a comparison

	Orthodox approach (ORT)	Social developmentalism (SD)	New developmentalism (ND)
Aims	Increase of total factor productivity	Productive change with broad income redistribution Industrialization pushed by domestic market growth	Productive change with moderate income redistribution Re-industrialization
Targets	Price stability Reduced state intervention Private Investment International competitiveness based on comparative advantages	Increase of domestic demand Industrial production Reduction of Gini Balanced trade account	Export surplus (manufactured) Industrial production Moderate reduction of Gini
Tools	Inflation targeting Fiscal neutrality Floating exchange rate Privatization Commercial and financial opening Labor market flexibilization Targeted social policies	Wage policy: real increases Social policies (income transfers) Active fiscal policies: public investment Industrial policies Financial policies: public banks; consumer credit Monetary policies: low interest rates	Exchange rate policy: competitive exchange rate Monetary policy: low interest rate Fiscal policy: anticyclical with austerity bias Wage policy: real increases along with productivity Capital controls: limiting external debt and net capital flows

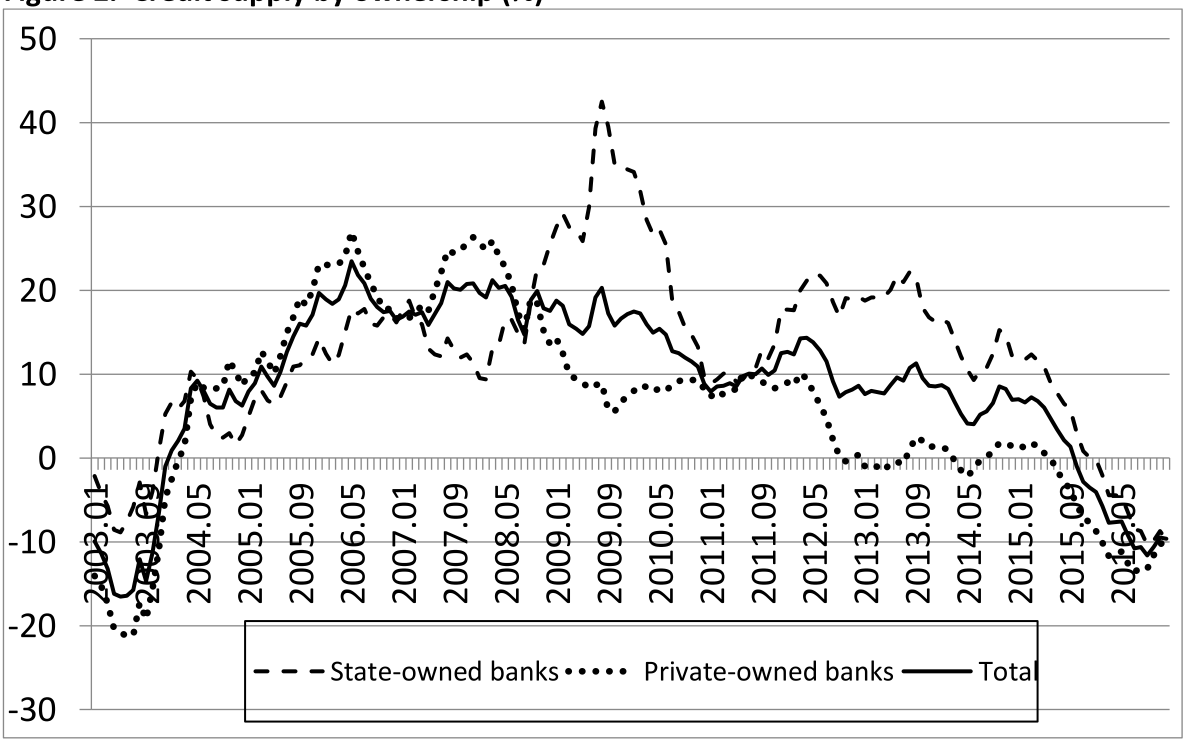
Source: Authors' elaboration

Figure 1. World Trade (annual change in percent) and capital flows (USD billion)



Source: IMF (2017). Authors' elaboration.

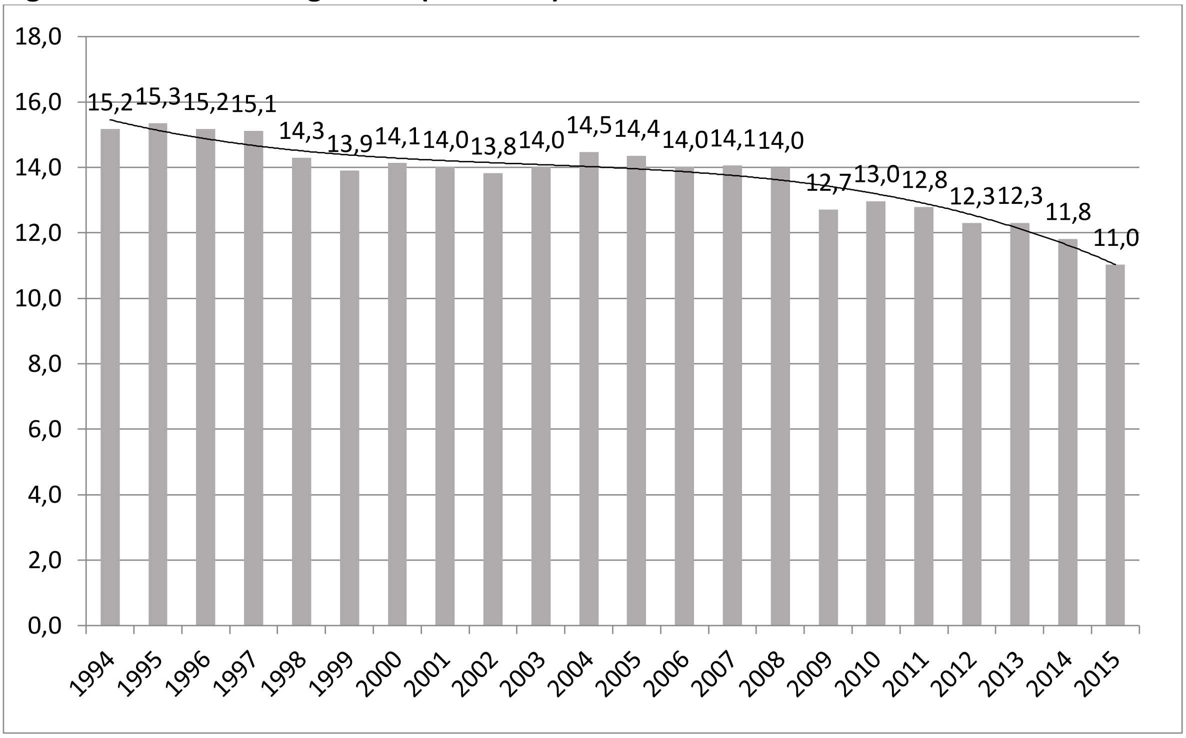
Figure 2. Credit supply by ownership (%)*



Source: Central Bank of Brazil (2017). Authors' elaboration.

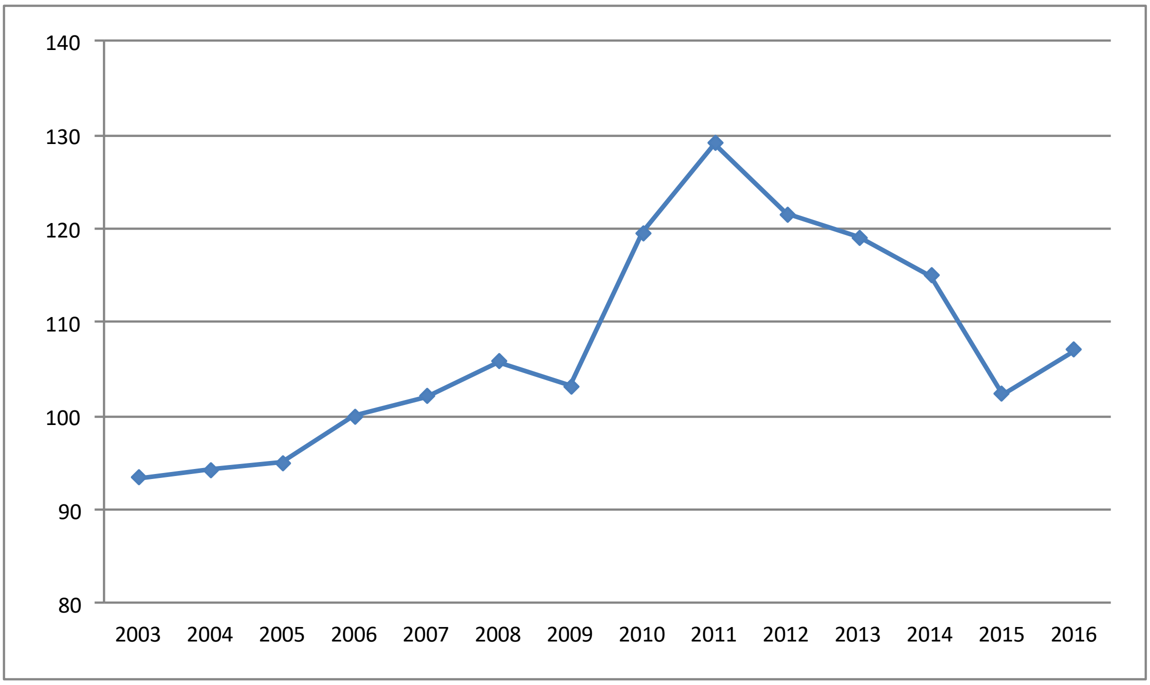
(*) Growth rate compared to 12 months before, with data in real values (deflated by IPCA)

Figure 3. Manufacturing sector (% of GDP)



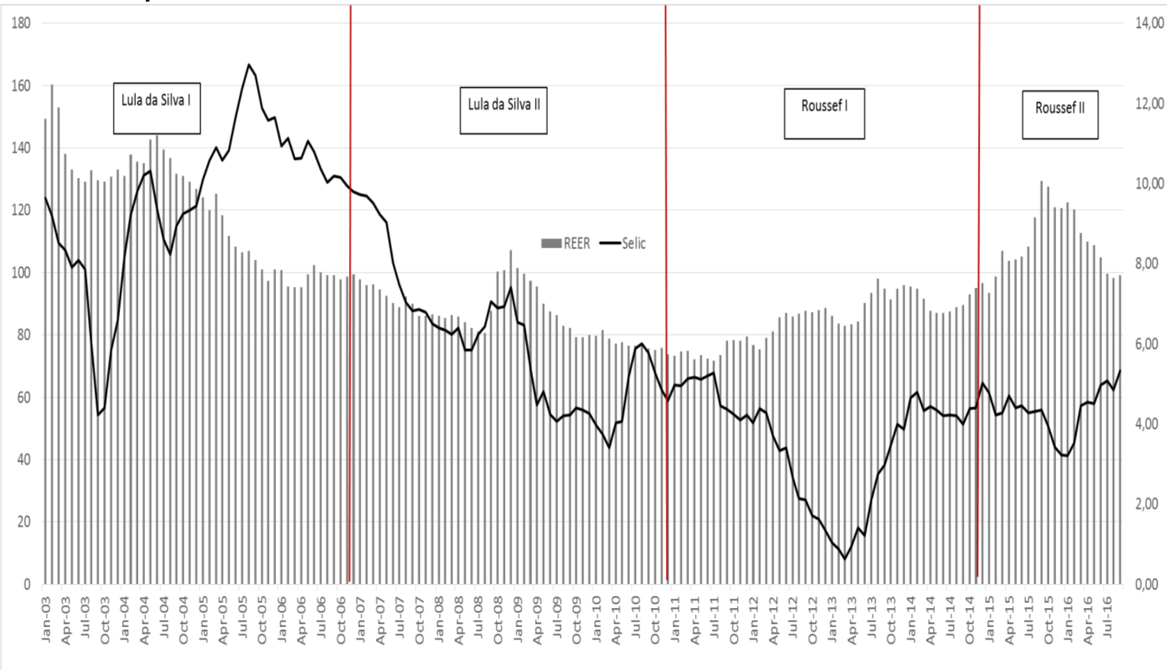
Source: IBGE (2017)

Figure 4. Terms of Trade (Average 2006 = 100)



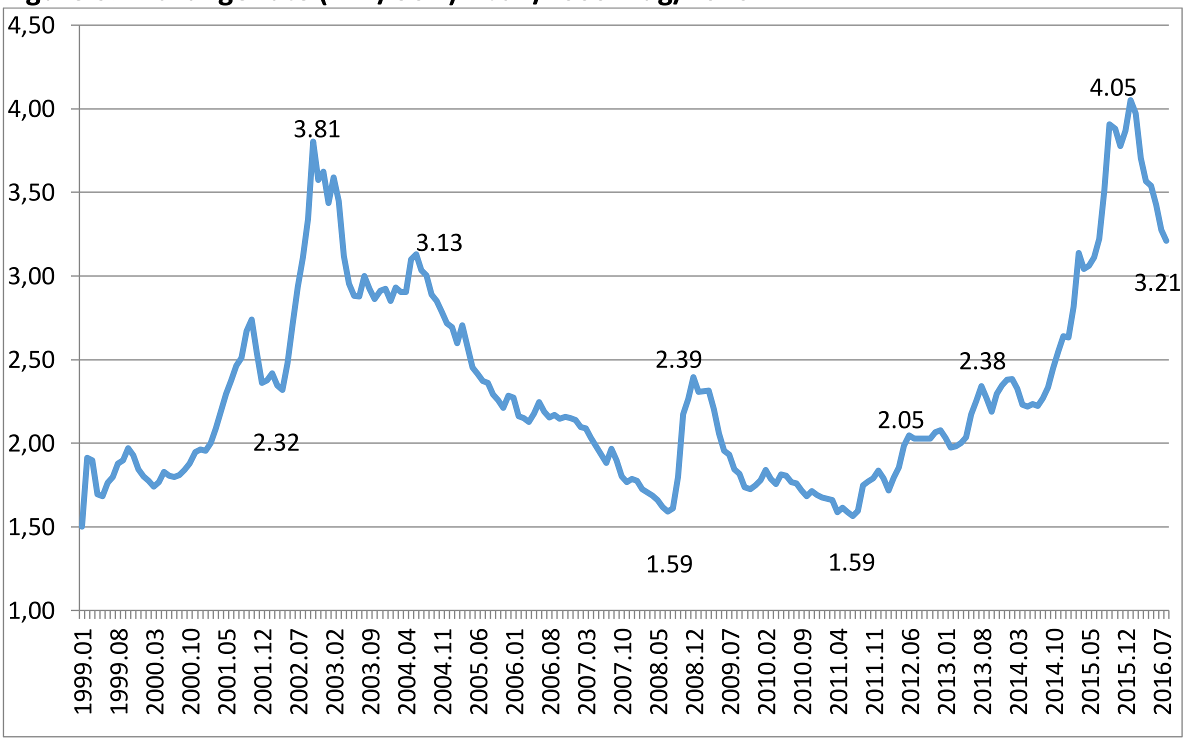
Source: Central Bank of Brazil (2017).

Figure 5. Policy rate (SELIC interest rate - % p.a.) and real effective exchange rate (June 1994 = 100)



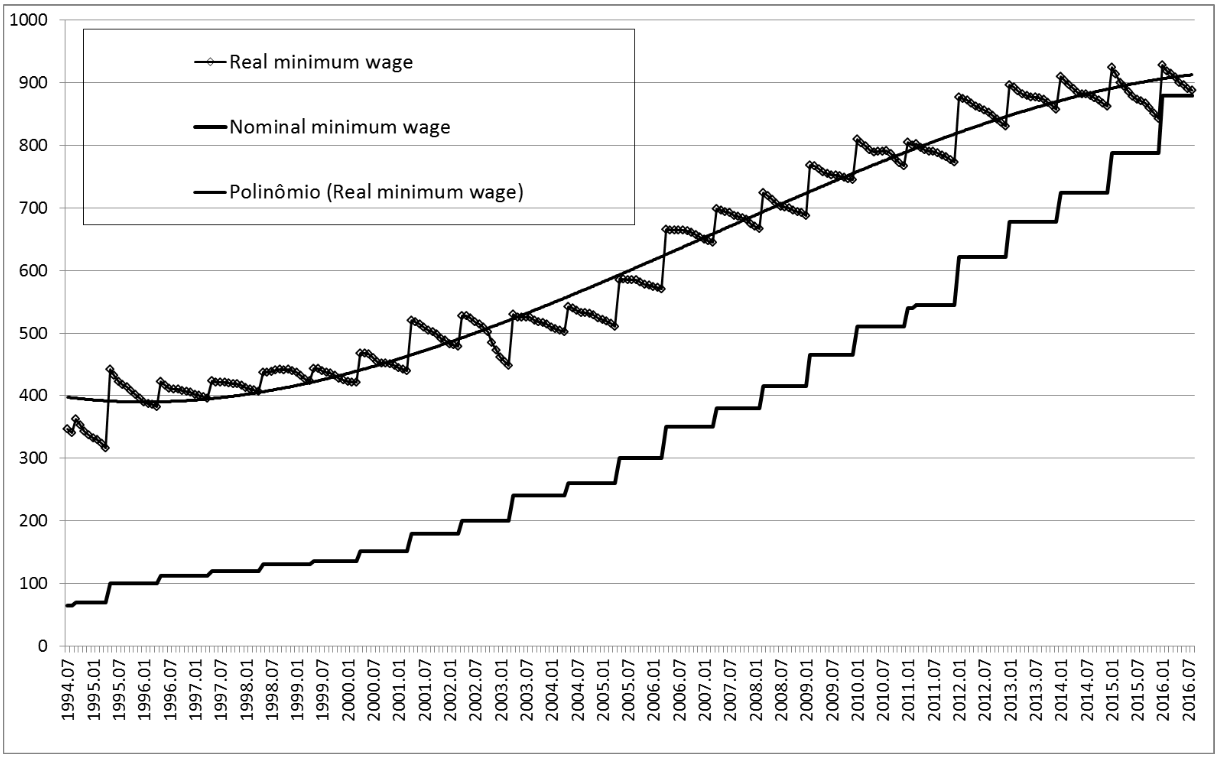
Source: Central Bank of Brazil (2017). Authors´ elaboration.

Figure 6. Exchange rate (BRL/USD) – Jan/1999-Aug/2016



Source: Central Bank of Brazil (2017).

Figure 7. Minimum wage – nominal and real*



Source: IPEADATA (2017). Authors' elaboration.
(*) Deflated by National Index of Consumer Prices (INPC)

Table 2. Typology of policies

	2003 – Aug. 2008	Sept. 2008 - 2010	2011 – mid 2016	
	Lula before GFC	Lula during GFC and double speed recovery	Dilma I (2011 – 2014)	Dilma II (2015 – 5/16)
Macroeconomic policies				
Monetary policy	ORT	ORT; ND/SD; ORT	ND/SD; ORT	ORT
Exchange rate policy	ORT	ORT; ND	ND; ORT	ORT
Fiscal policy	ORT	SD; ORT	ORT/ND; (SD)	ORT
Social policies	SD	SD	SD	SD
Public investment	SD	SD	(SD)	ORT
Financial policies	SD	SD	SD	ORT
Industrial policies	(ND)	SD	SD	SD

Source: Authors' elaboration.
Notes:
- Strategy in parenthesis: influenced by a certain strategy.
- ORT means orthodoxy policies; SD: social developmentalist policies; ND: new developmentalist policies.

Classifications separated by ";": temporal sequence of strategies within one phase.

Appendix. Table 1. Brazil: main economic indicators

Economic Indicator/Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ECONOMIC ACTIVITY														
Inflation Rate (IPCA[1]), %	9.3	7.6	5.7	3.1	4.4	5.9	4.3	5.9	6.5	5.8	5.9	6.4	10.7	6.3
GDP growth (%)[1]	1.14	5.76	3.2	3.96	6.07	5.09	-0.13	7.53	3.97	1.92	3.0	0.5	-3.77	-3.5
Agricultural	8.31	2.0	1.12	4.64	3.25	5.77	-3.73	6.7	5.64	-3.08	8.36	2.79	3.61	n.a.
Industry	0.1	8.21	1.99	2.01	6.21	4.1	-4.7	10.2	4.11	-0.72	2.17	-1.51	-6.33	n.a.
Services	0.99	5.01	3.66	4.33	5.83	4.82	2.07	5.8	3.46	2.9	2.75	0.99	-2.7	n.a.
Unemployment rate (%)	12.4	11.0	9.7	9.7	8.6	7.9	8.0	6.2	5.5	5.4	5.1	5.0	8.1	n.a.
Investment rate (% GDP)	16.6	17.3	17.1	17.2	18.0	19.4	19.1	20.5	20.6	20.7	20.9	19.9	n.a.	n.a.
Manufacturing sector (% GDP)	26.1	26.8	26.5	26.1	26.2	26,0	24.8	25.6	25.7	25.1	24.9	24.7	23.9	n.a.
MONETARY AND CREDIT INDICATORS														
Interest rate (Selic), average (%)	16.5	17.75	18.0	13.25	11.25	13.75	8.75	10.75	11.0	7.25	10.0	11.75	14.25	13.75
Domestic credit (% GDP)	n.a.	n.a.	n.a.	n.a.	34.7	39.68	42.62	44.08	46.48	49.19	50.85	52.21	53.65	49.39
Household credit (% GDP)	n.a.	n.a.	n.a.	n.a.	15.88	17.18	18.8	19.96	21.06	22.33	23.38	24.44	25.2	24.82
Corporate credit (% GDP)	n.a.	n.a.	n.a.	n.a.	18.82	22.5	23.82	24.11	25.41	26.86	27.47	27.77	28.45	24.57
EXTERNAL SECTOR														
Real effective exchange rate[2]	137.4	135.0	110.3	98.5	91.4	88.9	88.4	77.1	75.0	84.1	89.9	91.2	111.4	105.7
Commodity price index (% growth p.a.)	10.2	4.8	13.7	26.0	8.2	-23.4	33.0	29.0	-12.2	4.2	-3.4	-9.3	19.1	13.6
Brazil's terms of trade (% growth p.a.)	3.1	-2.0	5.1	7.3	-0.9	0.5	7.8	14.9	-3.4	-3.4	-1.8	-6.7	-12.3	16.4
Trade balance (US$ billion)	23,75	32,54	43,43	45,12	38,483	23,802	24,958	18,491	27,625	17,42	389	-6,629	17,67	45,037
Net public external debt (US$ billion)	65,686	57,744	29,021	-13,015	-112,036	-142,299	-168,083	-215,979	-287,168	-303,206	-305,156	-296,129	-295,124	-295,864
Manufacturing import coeficient (%)[3]	15.2	15.5	14.5	14.9	15.3	17.0	15.3	16.3	17.4	18.7	19.4	19.2	21.7	19.1
Current account (% GDP)	0.67	1.70	1.52	1.18	0.03	-1.81	-1.57	-3.43	-2.95	-3.02	-3.04	-4.31	-3.31	-1.30
Foreign Direct Investment (% GDP)	1.83	2.73	1.71	1.76	2.59	2.84	1.25	4.00	3.87	3.52	2.80	3.95	4.16	4.37
Foreign reserves (US$ billion)	46,684	52,411	53,145	84,463	163,526	190,929	228,644	276,148	343,180	362,064	349,029	354,805	348,844	353,851
External solvency indicators[4]														
Net external Liability/Total exports	3.65	2.91	2.52	2.54	3.08	1.23	3.65	4.49	3.20	3.32	3.06	3.44	2.50	3.77
Net external Liability/Manufacturing exports	4.66	3.71	3.25	3.33	4.17	1.77	5.49	7.27	5.54	5.59	5.07	5.81	3.98	5.73
External liquidity indicators														
Standard&Poors indicator[5]	2.71	1.52	0.50	0.32	0.34	0.46	0.33	0.53	0.44	0.40	0.41	0.62	0.47	0.36
Standard&Poors + Portfolio in the country[6]	5.43	4.42	2.92	2.76	2.48	1.37	2.14	2.41	1.75	1.67	1.64	1.76	1.20	1.37
PUBLIC FINANCE														
Primary fiscal result (% GDP)	3.2	3.7	3.7	3.2	3.2	3.3	1.9	2.6	2.9	2.2	1.7	-0.6	-1.94	-2.5
Public debt service (% GDP)	-8.4	-6.6	7.3	-6.7	-6.0	-5.3	-5.1	-5.0	-5.4	-4.4	-4.7	-5.4	-8.4	-6.5
Nominal fiscal result (% GDP)	-5.2	-2.9	-3.5	-3.6	-2.7	-2.0	-3.2	-2.4	-2.5	-2.3	-3.0	-6.0	-10.2	-9.0
Gross public debt (% GDP)[7]	n.a.	n.a.	n.a.	55.5	56.7	56.0	59.2	51.8	51.3	53.8	51.5	56.3	65.3	69.6
Net public debt (% GDP)	54.3	50.2	47.9	46.5	44.5	37.6	40.8	37.9	34.5	32.2	30.5	32.6	35.6	46.0
SOCIAL INDICATORS														
Gini index (%)	0.58	0.57	0.57	0.56	0.56	0.55	0.54	n.a.	0.53	0.53	0.53	0.52	n.a.	n.a.
Poverty index (% of population)	35.75	33.71	30.83	26.75	25.36	22.6	21.41	n.a.	18.42	15.93	15.09	13.29	n.a.	n.a.
Wage share[8]	36.55	35.7	36.68	38.15	38.87	39.81	41.53	41.81	42.68	45.28	45.14	n.a.	n.a.	n.a.

Source: Banco Central do Brasil (2017), except investment rate, Gini index and porverty index (IPEADATA), manufacturing import coefficient and manufacturing sector as share of GDP (CEMACRO), terms of trade (FUNCEX) and Wage share (authors' calculation based on IBGE).

Notes: (1) For 2016, IMF estimates; (2) Yearly average, June 1994 = 100; (3) Ratio "total value of imports of industial sector" over "total value of domestic output of industrial sector"; (4) "Net external liability" refers to the "Net international investment position"; (5) Ratio "Gross External Financing Needs (GEFN)" over "External Reserves", where GEFN= Current account+ short term external debt + long term external debt repayment in the next 12 months; (6) Ratio "GEFN + portfolio investment in the country"over "External Reserves" (7) Data according to new metodology implemented in 2006; (8) Salary mass (deflated by INPC) divided by GDP (deflated by the implicit deflator).

[i] This concept has been proposed by Hall and Soskice (2001) to describe different forms of capitalism with regard to diverging forms of institutional complementarity and coordination of economic systems; French regulationists also do refer to this concept, based on a different theoretical framework (e.g., Boyer, 2002).

[ii] According to some authors (e.g., Cunha and Ferrari, 2009), such strategy was also adopted in Argentina during the government of President Néstor Kirchner (2003-2007).

[iii] The debate has also flourished among political scientists. For instance, Boito and Berringer (2014) analyse the political coalition supporting the PT governments' strategy, which they call 'neodevelopmentalism'. Singer (2015), in turn, examines the setting-up and dissolution of the political coalition of the first Rousseff's term which he names a 'desenvolvimentalist essay'.

[iv] For an extended comparative analysis to the two recent developmentalist concepts see Fritz et al. (2017).

[v] According to some authors (e.g. Carvalho, 2014), 'neoliberalism' refers to a general paradigm that gives economic policies a general guidance for economic liberalization and reduction of state intervention, yet without establishing a well-defined set of policies to be adopted. Conversely, following a Marxist approach, Saad-Filho (2017) calls 'neoliberalism' the current system of accumulation of global capitalism.

[vi] According to Morgan (2017), in 2001/2015 the average income of the richest 1% grew 31.4%, while 50% poorer (favored by the policy of real growth of the minimum wage) grew 28.7%, and the middle class (middle 40% with average income of US$ 15,760 p.a. in 2015 PPP) grew only 11.5%.

[vii] 'Car Wash' operation is an investigation being carried out by the Federal Police of Brazil and the Court since March 17, 2014 that cover allegations of corruption at the state-controlled oil company Petrobras. Transparency International (2018) defines corruption as 'the abuse of entrusted power for private gain'.

[viii] This subsection is based on Almeida and Novais (2014); and Kupfer (2013).

[ix] According to Saboia and Hallak-Neto (2015), the minimum wage adjustment policy improved income distribution over 2004-2013 through the labor market as well through pensions and other public transfers.

[x] According to Singer (2015), in her first term, president Roussef would have embraced the agenda of the main industry entities, what led to what he calls 'developmentalist essay'. Mello and Rossi (2017) supports the same argument, yet name the strategy of Rousseff's first term 'industrialism'.