

# Inflation, Structural Change and Conflict in post- disinflation Brazil: a structuralist appraisal

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**Keywords:** inflation inertia, structural change, conflicting claims, Real plan, Brazil

**JEL Codes:** E02, E31, B50

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André Roncaglia de Carvalho<sup>1</sup>

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## **1. Introduction**

Persistent inflation has become a dominant aspect of Brazilian economic reality.<sup>2</sup> The long coexistence with inflation has ingrained it in economic agents' memory, rendering it a chronic phenomenon. The Brazilian contribution to the inventory of inflationary experiences rests upon the persistence of institutional mechanisms designed to cope with inflation, even after disinflation measures aiming at stabilization took hold in 1994.

The Real Plan was a singular stabilization plan that resulted in a successful and sustained disinflation. The paper departs from the hypothesis that the institutional framework that followed the Real plan redefined the terms of the distributional conflicts and, coupled with a new set of pressures arising from inter-sector dynamics, established new basis for a downwardly-rigid inflation trend. The plan reinforced the distributive effects already under way from the preceding commercial and financial opening of the economy with the reduction in the role of the State in the economy. Such transformations affected the Brazilian productive structure and, consequently, the price-output dynamics.

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<sup>2</sup> In hindsight, from 1980 up to 1994, when a major disinflation took place with the Real plan, Brazil had four currencies, five price and wage freezes, nine stabilization plans, eleven price indexes to measure inflation, sixteen different wage policies, twenty-one proposals for external debt payment and fifty-four changes in price policy. Accumulated inflation in the fifteen-year period hit an impressive figure of 30.000.000.000 %. (FRANCO, 2005). In the nineteen-year period since disinflation in 1994 until September 2013, Brazil has endured around 234% accumulated inflation, if read by the Broad Consumer Price Index (IPCA-IBGE).

In the institutional realm, previous indexing practices persisted. Government-managed, regulated or administered prices are those defined or impacted by a public sector agency, whose variations are independent from current supply and demand conditions. Taken together these components account for around 28% of IPCA, reflecting their importance in daily expenditures of households in the income bracket from one to forty minimum wages.<sup>3</sup> In 2010, the minimum wage is set by the Congress and has recently been tied to  $IPCA_{t-1}$  and  $\Delta GDP_{t-2}$ .<sup>4</sup> The federal government has effective direct control only over wholesale prices of oil by-products, but has been managing them in accordance to international prices with varying lag-lengths, in order to prevent a pass-through to inflation indexes.

Altogether, the inheritances from the previous repressed hyperinflation inflation regime and these transformations renewed the repertoire of inflationary pressures stemming from institutional and structural forces, reinforcing previously embedded rigidities and thus making disinflation measures more costly to society.

We believe, in fact, that the present inflation is different from that of the 1980s and 1990s. We agree with Bacha's (2003) claim that people who suffered the effects of high inflation of the 1980s would hardly recognize the forces behind inflation in the post-Real plan period. We attempt to outline three specific pressures over inflation in Brazil from 1994, when disinflation measures took hold, and 2010, namely: (1) the inter-sector imbalance between those producing tradable and non-tradable goods, (2) the behavior of state-managed prices and (3) the change in the patterns of income distribution in Brazil. These pressures are tied to the structural changes undergone by the Brazilian economy in this period, which implies that inflation is treated as a development problem. That means that the structure of production and distribution has not reached the stage of maturity.<sup>5</sup>

The paper is organized in five sections beyond this introduction. The second section states the problem of inflation inertia and how Brazilian monetary authorities perceive it. The third part searches into the build-up of the macroeconomic consensus that sets the grounds for such an approach to monetary policy. The fourth section makes the case for a new contention between monetarists and structuralists based on the distributional imbalances that followed the Real plan, and the fifth provides an interpretation of some structural pressures over inflation in Brazil. The last section concludes the paper.

## 2. Indexation and Inertia in post-disinflation Brazil

In modern macroeconomics, inflation inertia is distinguished from inflation persistence. Inertia refers to the delayed and gradual response of inflation to shocks, while inflation

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<sup>3</sup> The major administered/regulated/State-managed prices are: 1) defined at the federal level: oil by-products, electricity fees, telephone and postal services fees, minimum wage; 2) defined at local governments' levels: water and swages fees, public transportation, property taxes. Still, 'managed' should not be understood as 'controlled', for a substantial part of these prices are public utility fees whose adjustments are based on concession contracts, which leave no room for discretion. (BOGDANSKI et.al.,2001).

<sup>4</sup> The Proposed Complementary Act (Projeto de Lei Complementar) 1/2011 reached the Senate in February 21<sup>st</sup>, 2011 and was approved two days later. The Law 12.382/2011, thus approved, established rules for minimum wage adjustments on these lines until 2015.

<sup>5</sup> For a discussion on deindustrialization and its relationship with the structure of production of economies along the development process, see Rowthorn and Ramaswamy (1999).

persistence refers to prolonged deviations of inflation from steady state following shocks. Persistence is thus associated with presence of unit roots in the data-generating process. Much empirical work has been devoted to accounting for inflationary persistence and inertia. Figueiredo e Marques (2009) show the existence of inertia in Brazil and detect a long-memory phenomenon embedded in the data-generating process. Tejada e Portugal (2001), Campêlo e Cribari-Neto (2003), Cribari-Neto e Cassiano (2005) e Araújo e Santos (2004) follow the same lines, and attempt to provide quantitative evidence on the effects – both temporary and permanent – of inflationary (or deflationary) shocks on the long run inflation trends in Brazil. Fasolo e Portugal (2003) formulate a nonlinear Phillips curve to the Brazilian economy and conclude in favor of a high persistence of inflation between 1990 and 2002, which is explained by an autonomous inertial component to price behavior.

A persistent downwardly-rigid behavior of prices may be related to a variety of causes. The range and intensity of their impact over price trends are connected to how deeply-embedded in the social structure they are.<sup>6</sup> Amongst these causes, we could mention informational asymmetries and imperfections, indexation of contracts and prices, a permanently expansionary fiscal and monetary policies, changes of economic policy regimes, and the recurrence of systematic random shocks, both internal and external - which in turn make some key macroeconomic prices - such as the exchange rate - more volatile, transmitting transitory impacts to prices. A combination of these, and other types, and their systematic occurrence account for inertia and persistence, as modern macroeconomics sees it.<sup>7</sup>

Inertia and persistence need not be explained solely on the grounds of the existence of indexation. Durevall (1999) claims that price rigidity alone is a sufficient condition to account for inertia. The author provides historical evidence on wage and price indexation experienced by many countries. Indexation plays at most a sustaining role, by turning adaptive expectations into institutionally backward-looking behavior. It is thus neither a necessary nor a sufficient condition to explain inertia, as Lopes (1985) had already argued.

Even so, indexing practices in Brazil became progressively disseminated throughout the economy since the 1960s and, by the early 1980s, had turned the economy almost entirely dependent upon its automatic nominal adjustment effects. The Real plan economic team, as expected, perceived it as the main obstacle to sustained stabilization following disinflation measures. However, the plan did not manage to provide a complete resolution to this problem; at most, it alleviated the symptom.

However sparsely present, concerns over inflation inertia were underplayed after the stabilization attempt in favor of issues regarding exchange rate management and financial capital flight risk. Indexing practices were allowed in specific markets, such as in public and private bond markets and for State-controlled prices of privatized public utilities companies, amongst others. More recently, minimum wages were tied to two-year-lagged output growth and one-year-lagged inflation rate. The emergence of systematic institutionalized pressures on prices, such as the above, tends to restore

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<sup>6</sup> The more fundamental the force, the longer and the more inevitable its effects; the more superficial it is, the more transitory its impact and the greater the possibility that it becomes entangled as an effect of more basic forces.

<sup>7</sup> As for its implication, inflation inertia makes the economy more sensitive to supply shocks and structural changes, as argued in the classic works by Gray (1976) and Fischer (1977). This has been also fully incorporated into mainstream macroeconomics, as it will be shown below.

automatic adjusting behavior to past inflation, which makes the inertial component of inflation more relevant.

In 1999, a new economic policy was presented to society, namely the Macroeconomic Stabilization Program (PEM, in Portuguese), which consisted of fiscal austerity (enacted by the Fiscal Accountability Act, approved by the Senate in the year 2000), a floating exchange rate and an inflation-targeting regime to monetary policy. This change was sponsored by the International Monetary Fund, under the terms of loan provided to alleviate the severe exchange crisis of 1999, when the overvalued exchange rate was allowed to float after a massive capital flight in early January that year. The new program placed the focus of macroeconomic management on the interest rate, substituting for the previous nominal anchor centered on the exchange rate, which up to then served as the main control variable over inflation. (BOGDANSKI et al, 2000). Inflation targeting has been the main focus of economic policy ever since, and has been fairly successful in maintaining price rises within the intervals stipulated by inflation targets along most of the 2000s, and has reduced inflation volatility (BEVILACQUA *et al.*, 2007; CATAO *et al.*, 2008). When compared to developed countries (within the 1-3% range), the levels of inflation targets in Brazil (4.5% per year) are high. (BARBOSA, 2008, p. 193) They reveal, on one hand, that inflation is under control – especially, when contrasted against the previous four-digit rates witnessed in pre-stabilization period. On the other hand, there seems to be a downward resistance of inflation levels that resembles, albeit in different proportions and due to different causes, the rigidity observed when inflation was deemed fully inertial or persistent, halfway along the 1980s.

There is evidence that, after 18 years since the enactment of the this plan, indexation has progressively spread across the price structure, and already affects around 24% of the average consumer's bundle of goods in Broad Consumer Price Index (IPCA-IBGE), mostly due to Government-managed prices. (BANCO CENTRAL DO BRASIL, 2012, p. 94-101). Its dissemination can be perceived when goods and services that have automatic adjustment clauses in their contracts are taken into consideration, reaching approximately a 38% share of IPCA-IBGE. (VALOR ECONÔMICO, 2012; KIRSTEN, 2013). This is not surprising. The goal of complete de-indexation could not be accomplished solely by means of provisional measures by the Executive branch of government. The root causes of the survival of such a social institution lies on the ingrained inflationary memory that springs from the distributional conflicts in Brazil. These in turn reach far back into past decades and are closely related to the country's socio-economic development process.<sup>8</sup>

In its *Inflation Report* (BANCO CENTRAL DO BRASIL, 2011), The Brazilian Central Bank decomposes the Broad Consumer Price Index (IPCA, in Portuguese) – calculated by the Brazilian Institute of Geography and Statistics (IBGE) and main indicator for the inflation targeting regime – four large components, namely: (1) exchange rate variation; (2) inflationary inertia; (3) expectations; and (4) State-controlled (or administered) prices. In what concerns inertia, the methodology of calculation infers persistence from a combination of past-inflation adjustment coefficient and the “excess inflation over target, transmitted from the previous year's

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<sup>8</sup> A brief historical background on Brazilian struggle against inflation, for those unfamiliar with Brazilian economic history, can be found in Simonsen (1970 and 1995) and Bacha (1999 and 2003) and also on Dutt & Ros (2003).

last quarter to the current year”. (BANCO CENTRAL DO BRASIL, 2011, p. 99). Freitas, Minella e Riella (2002, p. 10) provide the formula to obtain inertia.

$$I_t^g = (\pi_{t-1} - \pi_{t-1}^*) \cdot C_{inertia} \cdot W_{group} \quad (1)$$

$I_t^g$  denotes the effects of previous year’s last quarter inflation over current year’s first quarter index, estimated for a group  $g$  of goods pertaining to the index basket;  $\pi_{t-1}$  and  $\pi_{t-1}^*$  represent, respectively, observed inflation and target inflation in  $t-1$ ;  $W_{group}$  is the weight of the group (freely-adjusting prices or State-controlled) on IPCA; and  $C_{inertia}$  represents the coefficient of adjustment to previous quarter inflation rate, whose methodology is omitted by the Central Bank. The total effect of inertia is thus obtained by the combined product of inertia present in all groups of goods.

This current usage of inertia is tied to a generation of models known of as the New Neoclassical Synthesis (GOODFRIEND e KING, 1997) and is now fully incorporated into mainstream economics and has already reached undergraduate-level textbooks. (CARLIN & SOSKICE, 2006, chapters 3 & 5). These models seem to take inertia as a given property of the system and justify their presence on the basis of technical problems in the price index measurement procedure or the hypotheses that a zero inflation goal may keep the economy too close to a deflation trap or that it may turn the labor market less flexible, among others. These justifications are definitely due, but leave the building process of inertia unaccounted for. Such a measure of inertia is simply a statistical carry over between two quarters. Moreover, it leaves unaddressed the issue that the very estimation of a target is likely to generate a pass-through of inflationary memory accumulated in previous periods (some type of inflation prefixing), thereby setting a floor to inflation expectations rendering prices downwardly rigid.<sup>9</sup>

If this is correct, the current consensus on monetary policy is likely to impose higher costs to disinflation and stabilization measures when applied to different institutional schemes (SEGURA-UBIERGO, 2012). That seems to be so for the Brazilian case (TOMBINI & ALVES, 2006). Such costs however are hardly subject to generalizations and may differ among countries, according to historical and institutional specificities. (TAYLOR, 1988).<sup>10</sup>

This recent approach to inertia and persistence is to some extent at odds with the one previously followed in stabilization debates, as recognized by the Brazilian specialized audience from the works by Simonsen (1970, 1995), Modiano (1988), Lopes (1985) and Lara-Resende (1979), among others. In this earlier generation of inertial inflation models, conflict dynamics, structural and institutional aspects came into play to inherently disturb the economy. The “inertial inflation hypothesis” received much attention along the stabilization debates in the late 1970s and during the troubled 1980s. It was largely based on the widely disseminated usage of indexing contractual clauses and inflation-adjusting behavior, endogenously enticing changes in price trends.

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<sup>9</sup> This was noted by Franco (2005, p. 283, note 40) in his analysis of the Brazilian long struggle against inflation, but also by Bernanke and Mishkin (1997, p. 18) on a broader perspective of the Inflation Targeting framework for monetary policy.

<sup>10</sup> Our goal is not to present a detailed account of the inflation-targeting framework or the more general traits of the emerging consensus on monetary policy, which can be found in Goodfriend & King (1997; 2004). but rather to point out that its application to policy decisions may have unintended effects (ARESTIS & SAWYER, 2003) when it comes to an economy with deeply-rooted conflict-infused inflationary memory, such as Brazil. For instance, Bogdanski et al. (2001) discuss its application and point out its shortcomings and the challenges the Inflation Targeting framework faces. Therefore, one cannot say such theoretical apparatus has not been naively done by monetary authorities in Brazil.

This discrepancy begs the following question: what are the forces behind – and implications of – the aforementioned change in the understanding and relevance of inflation inertia in Brazil? Additionally, has the phenomenon been so completely altered in its basic structure by the 1994 stabilization attempt? Moreover, is it justified to simply take it as similar to the inertial inflation observed in developed countries, such as it is depicted in the new Keynesian models that provide the cornerstone to modern monetary policy?

The following section delves into this new arrangement in the economics discipline, aiming to shed light upon the emergence of this consensus on macroeconomic theory and policy. Against this historical context there seems to be a shift in understanding of inflation inertia in Brazil. We ascribe it to the convergence observed in macroeconomic matters, which underrates inflation as a matter of simple monetary mechanics, stripping it from its developmental and distributional aspects.

### **3. An emerging New Consensus Macroeconomics in policy and theory**

The 1990s inaugurated an era of convergence on macroeconomics. The foundations of growth and stabilization were summarized in the Washington Consensus, which basically proclaimed that working out institutional framework in the right direction promotes more efficient markets; that in turn leads the economy to a stable trajectory of growth.<sup>11</sup> Parallel to these stabilization matters, there emerged the New Consensus Macroeconomics, after the collapse of the “Grand Neoclassical Synthesis” in the 1970s, as a result of the challenge of stabilizing prices in industrialized countries in the aftermath of the 1979 oil shock.

At the time, monetary policy reflected deep divisions within the academic world. Inflation was commonly believed to be driven primarily by factors other than monetary policy: fiscal deficits, commodity price shocks, inflation psychology, aggressive labor unions, or monopolistically competitive firms (GOODFRIEND, 2007). Monetarists such as Milton Friedman, Karl Brunner and Allan Meltzer restored the primacy of monetary aspects and instruments in order to deal with short run and long run inflation. Expectations had also been long realized to play a relevant role in wage and price inflation.<sup>12</sup>

The consensus is thus named after the rise above dispute between previously-contending schools of thought.<sup>13</sup> Inflation is then given priority over other goals for policy, core inflation is preferred over headline CPI inflation, credibility is of utmost importance for low inflation, and preemptive operation of interest rate policy must be supported by a transparent outline of objectives and procedures to be followed.

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<sup>11</sup> For a detailed account of the crisis-bred process of reform in Latin America and the build-up of a policy consensus, see Haggard & Kaufman (1995; 2003, chapter 7) and Edwards (1995).

<sup>12</sup> For historical background of the intense “disarray” in monetary theory and policy, see Toyne (1987) Goodfriend (2007, p. 50).

<sup>13</sup> We quote Goodfriend (2007, p. 59-60) at length: “Much of the disarray reflected earlier in disputes between monetarist and Keynesian economists has been resolved in the consensus benchmark model of monetary policy referred to as the New Neoclassical Synthesis or New Keynesian model, the two names reflecting the two directions from which the convergence came. The consensus model incorporates classical features such as intertemporal optimization, rational expectations, and a real business cycle core, together with Keynesian features such as monopolistically competitive firms, staggered sticky nominal price setting and a central role for monetary stabilization policy”.



Additionally, “the fact that central banks can control inflation if they want to (and are allowed to) can no longer be debated, after the worldwide success of disinflationary policies in the 1980s and 1990s”, since it is now “widely accepted as well that it is reasonable to charge central banks with responsibility for keeping the inflation rate within reasonable bounds”. (WOODFORD, 2009, p. 280).

There has been widespread adoption of inflation-targeting schemes of monetary policy since the early 1990s by central banks in New Zealand, Canada, Sweden and the United Kingdom, which have consolidated the focus of economic policy on price stability. Emerging market economies followed suit at the end of the decade, usually in the aftermath of fixed exchange rate collapse due to a series of highly contagious currency crises. Amongst them, South Korea, Thailand, and the Philippines began targeting inflation in 1998, 2000, and 2002, respectively, soon after the East Asian crisis of 1997. The International Monetary Fund accepted an inflation target as the new nominal anchor in its financial assistance program for Brazil in 1999 after that country’s dollar peg collapsed. The IMF has utilized since then inflation targets in many of its assistance programs. (BATINI & LAXTON, 2006).<sup>14</sup>

Parallel to these developments in policy questions, there arose a convergence onto a well-defined theoretical approach to monetary theory. The new neoclassical synthesis on matters of monetary policy was born out of a cross-fertilization of post-Wicksellian and Real Business Cycles approaches. (CLARIDA et al., 1999; WOODFORD, 2003; DUARTE, 2011). These models are oriented by intertemporal optimizing rational behavior of economic entities, such as households, government authorities and firms. Microfoundations and rational expectations provide de logical premises for economic behavior.<sup>15</sup>

In general, the economy portrayed by these models consists of a continuum of measure one for each group of agents, namely, households, firms, financial intermediaries and a government. Optimality and other equilibrium conditions for each of these groups of agents are clearly and mandatorily presented. It is no wonder that enormous amounts of academic energy must be devoted to finding ways a perfect equilibrium model such as these may be able to accommodate for indisputable traits of macroeconomic realities, such as institutions, habits and rigidities etc.

Models from this lineage are built on individualistic premises that take systemic behavior as given static properties encompassed by discount rates and intertemporal utility functions of optimizing agents. As a result, inflation inertia in these models is mainly ascribed to price setting assumptions of rational, forward-looking optimization. The available literature concentrates on private sector learning, or information acquisition, about monetary policy as the economy undergoes real shocks that are absorbed in agents’ information sets. A popular approach to introducing inflation inertia

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<sup>14</sup> For further detail on the framework of constrained discretion within inflation targeting see Bernanke & Mishkin (1997) and King (2005).

<sup>15</sup> Goodfriend (2007, p. 58) shows that the foundations of the current consensus theory of monetary policy had already reached a degree of convergence in 1980. The assertions were basically: that prices are marked up over costs (mainly wages) and have their trends depending on expectations; that there is a natural rate of unemployment at which wage and price setters perpetuate the ongoing rate of inflation; that inflation accelerates when output is expected to exceed potential; and that inflation decelerates when output is expected to be below its potential level. (TOBIN, 1980). However, the unresolved problems were crucial ones involving how to model 1) the price and wage-setting process, 2) expectations, 3) the transmission of monetary policy, and 4) real factors influencing business cycles, all in a dynamic way suitable for analyzing monetary stabilization policy. These problems were addressed one by one. For further discussion on these topics, see Goodfriend (2007, p. 58-64).

into rational expectations models is the ‘hybrid’ NKPC, introduced by Clarida et al. (1999) and Galí and Gertler (1999). This combines a rational forward-looking element with some dependence on lagged inflation.

A similar role is played by indexation to past inflation in the work of Christiano et al. (2005).<sup>16</sup> However, backward-looking expectations are perceived as a second-best theoretical premise - and can be deemed “arbitrary”. The supposed lack of robust justification is attributed to the assumption that agents draw information from past occurrences, rather than learn from them in order to infer future developments based on presently available information. Nonetheless, the majority of the orthodox branch of the profession seems to hold views similar to Galí et al. (2005), with the understanding that backward-looking price setting behavior is quantitatively modest but nevertheless statistically significant. Still, it is the one that best generates high intrinsic inflation inertia.

By virtue (or vice?) of such a methodological stance, the new consensus models tend to underplay relevant structural aspects of the economy. Among them, we can cite the patterns of income distribution and their implications in terms of mutually compatible compositions of supply and demand, the role that monetary forces play in inducing investment decisions under uncertainty, the primary pressures stemming from imbalances in the structure of production and the cost-push channels running from these forces to the price level combined with those emanating from monetary policy (TAYLOR, 2004, chapter 3; BALTAR, 2013, chapter 3).<sup>17</sup> If these pressures are found to be significant, a sizeable portion of structural inflation inertia and persistence remain unexplained by the New Consensus Models.

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<sup>16</sup> A survey of recent studies on inertia can be found in Julliard et al. (2008).

<sup>17</sup> More often than not, structural aspects are pushed into the conceptual category of exogenous factors, which are dealt with by the growing number of specialized fields of research in economics, but only in fractional form. This division of theoretical labor implies losing grasp of the “whole” and creates multiple tasks that end up missing important features of developmental problems. However, this fragmentation was a by-product of a severe crisis in the western capitalist system of the 1970s. These tidal waves in theory and policy, development economics underwent a major shift in its focus, as it drew attention from neoclassical economists, interested in the engines of economic growth and development. This “emerging consensus” on both stabilization and monetary policies is contemporary to the dissolution of classical development theory. However, stating a causality relationship between the two processes would lead us too far astray from our goal. A few notes on this matter help to support our view that inflation should be understood as a development problem. In his biography of development economics, Meier (2005, p. 183) underscores the tendency of new development economists to “think small” by slicing the problems in ever smaller parts, in a reductionist model of analysis, therefore failing to focus on development as a dynamic process and to account for the interrelation of parts. From the 1980s on, the development economics discipline became fragmented (DUTT & ROS, 2003, p. 6-7), in contrast to Krugman’s (1995, p. 3) obituary of the development economics. Two of its branches are tied to the neoclassical advances on microeconomics of institutions, income distribution and poverty as well of the new macroeconomics of growth. We believe this fragmentation consolidated the construction of independent fields of research in economics, ever more specialized, with objects of inquiry disconnected from others that pertain to the whole of economic systems. Consequently, inflation was displaced into an insipidly simple “world” of neo-Wicksellian monetary mechanics, losing its previous development-led theoretical drive. Other lines of theoretical development can be ascribed to: (1) neo-structuralist approach - along the lines followed by Lance Taylor (1991, 1993) and Ros (2000) - that blends macroeconomic theory drawn on the works of classical economists such as Marx, Keynes and Kalecki, which analyses the determinants of growth, income distribution, inflation and fiscal and balance of payment issues; (2) interdisciplinary works incorporating ideas from sociology, political science, among other disciplines, to examine the actual experience of newly industrialized developing countries, especially those in East Asia. Needless to say, these last two persist as dissenting voices from the first two above cited approaches, which carry on as economic science mainstream.

From this viewpoint, the New Consensus Macroeconomics is to a large extent incomplete and superficial, when dealing with more fundamental aspects of the economy. By not stressing the role played by structural forces, the New Neoclassical Synthesis fails to provide a rationale for inflation dynamics in post-disinflation Brazil.

Inflation is not solely a matter of sound monetary policy and a rigorous control of government finances. It is also correlated with the stage of development of a given country. Therefore, applying a uniform set of “one-size-fits-all” policies may not suit any economy seeking its long-term goals. Were it not the case, developing countries focusing its policies on price stability would receive pressure by Bretton Woods institutions to rapidly seek 1-2% inflation rates. This does not seem to be the case, for it is only suggested as an “eventual” goal to be achieved. Besides, targets should be determined according to local economic reality (FISCHER, 1997, p. 16). Nonetheless, the premise behind this assertion is that countries should - and would be able to - achieve such a goal, if they simply follow “widely accepted” central banking good practices. We advocate that there is no such “gravitational force” pulling economies onto 1-2% inflation levels.

Consequently, we cannot abide by Michael Woodford’s assertion that we have reached a juncture at which no alternatives to “mainstream macroeconomic thinking” are available.<sup>18</sup> The 2008 crisis has come to question how much we really know about macroeconomics and if there is really any basis for a consensus (McCOMBIE & PIKE, 2013). Under this pretext, following the taxonomy set out by Toye (1987), we claim that a third round of the monetarist-structuralist debate on economic stabilization is in effect. The agenda of the debate varies according to local or regional economic realities. We discuss its Brazilian chapter below.

#### **4. The Real plan and ensuing dynamic distributional imbalances**

Stabilization measures were adopted in 1994 and, since then, there is a Real GDP convergence to a 4% rate of growth per year, while inflation is sustained at a 6% level, slowly converging to a 4,5% inflation rate.<sup>19</sup> It is widely accepted that a low-inflation environment is beneficial to business and hence to economic growth.

When it comes to high-inflation experiences, stabilization provides a revival in economic sentiments and enhances the functionality of the productive system. It also entails significant changes in the way the economy works, depending on its previous structure and the way it interacts with international markets in a given historical period. The incompleteness of a stabilization plan is therefore “always and everywhere” an expected result, for it necessarily deals with the economy in its previous setting, being

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<sup>18</sup> Woodford (2009, p. 280) bluntly states that “there are really no longer alternative approaches to the resolution of macroeconomic issues”, at least when it comes to the “fundamental” ones. He stretches his argument further, by saying that: “In the context of this history, I believe that there has been a considerable convergence of opinion among macroeconomists over the past ten or fifteen years. While the problems of the field have hardly all been resolved, there are no longer such fundamental disagreements among leading macroeconomists about what kind of questions one might reasonably seek to answer or what kinds of theoretical analyses or empirical studies should even be admitted as contributions to knowledge. (...) The cessation of methodological struggle within macroeconomics is largely due to the development of a new synthesis (...) that incorporates important elements of each of the apparently irreconcilable traditions of macroeconomic thought” (p. 270).

<sup>19</sup> For a recent account on the challenges faced by economic authorities in Brazil due to a “high interest-rate puzzle”, see Segura-Ubierno (2012).

powerless to contain or even direct the ensuing changes in society's productive framework.

Through such lenses, a stabilization plan is merely an institutional device attempting to discipline distributive conflicts by establishing a specific pattern of income distribution that minimizes society's aspiration gap, along the lines set by Rowthorn (1977) and Vera (2005). It is therefore expected of a stabilization plan to reset society's endowments, in such a way as to ensure that "bygones are bygones". This in turn should allow for a focus on what lies ahead. The efficacy of the distribution of wealth set out by the plan is therefore crucial to its following results, for the aftermath of a stabilization process is largely determined not only by the set of policy instruments design to restrain the different groups' income claims, but also by how these groups react to such pattern of wealth distribution in the context of a changing economic structure. These distributional dynamics are intimately tied to the long run trends in the economy's economic development.

As we have claimed before, the persistence of indexing practices following inflation stabilization is an expected outcome. Considering that indexation plays an uncertainty-mitigating role in the decision-making process, indexation is but a symptom that the previously inflation-feeding social tensions remain embedded in the economic structure, albeit alleviated and transformed in character. Consequently, in a still widely indexed-prices economic setting, such as Brazil, demand-side-driven monetary policy fails to countervail cost-push forces stemming from adaptive price expectations built in indexing behavior. This impairs monetary authorities' effort to bring down inflation rates, while maintaining highly remunerative financial rates through public debt. The absence of empirical evidence on the effects of indexation on investment have removed from the research efforts in this area the hypothesis that Brazilian inflation may be a supply-side problem, at least as much as demand-side one, turning the discussion about inflation a short-term one, hence missing its long-term structural and institutional variables.<sup>20</sup>

In order to contribute in supplying for this explanatory deficiency, we assume that the Real plan entailed a distributional imbalance between largely-defined income groups. First, those with flexible prices (mainly firms in the tradable and non-tradable sectors) and those with their income defined by periodically revised contractual prices (mainly workers, rents and public utilities).<sup>21</sup> The former group was allowed to freely adjust their prices within the period of synchronization of prices, while the latter had its "prices" defined as a moving average of the previous four months, starting in march 1994, when the URV (in English, Real Value Unit) period began. Secondly, the financial sector faced irreversible and permanent losses, due to the extinction of earnings reaped from high nominal interest rates permitted by soaring inflation. Finally, an encompassing privatization process generated a set of regulated public utilities companies that not only incorporate indexation practices in its contracts with

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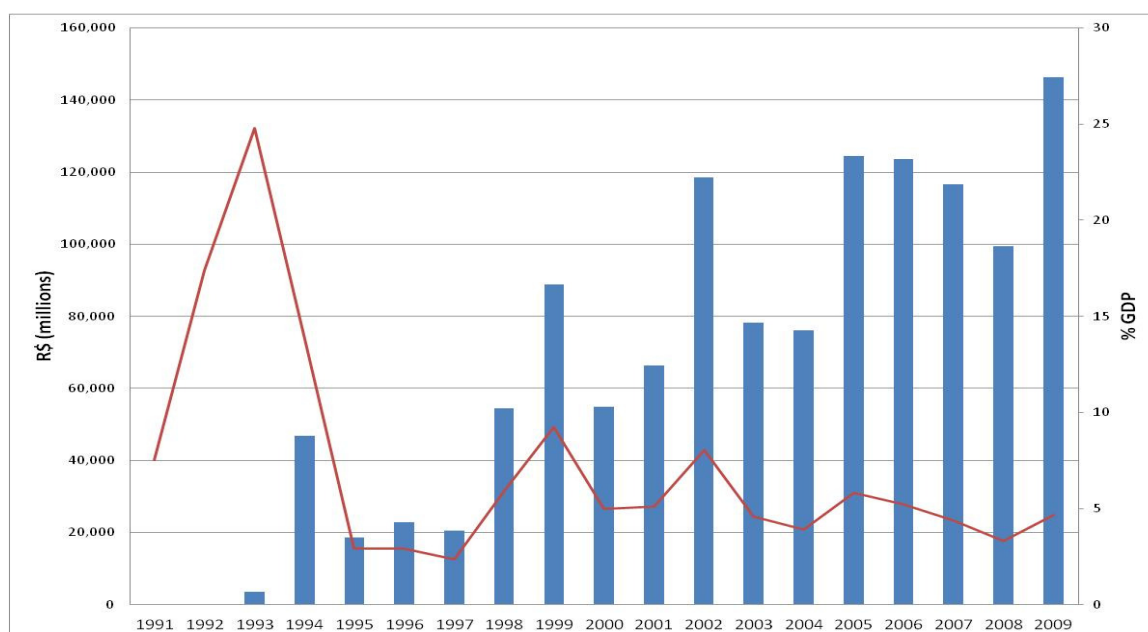
<sup>20</sup> Bogdanski et al. (2002, p. 24) comment as follows: "given our institutional setting with, among other characteristics, a high weight of government-managed prices in the consumer basket, policy responses are different from those under an environment where all prices are market determined. Moreover, one has to consider other features of the basic IT framework when discussing policy reactions. These are the absence of escape clauses, the use of a headline index and the adoption of disinflating multi-year targets. All these peculiarities end up leaving less room for accommodation by monetary policy".

<sup>21</sup> For a thorough theoretical and institutional analysis of stabilization plans and their distributional dynamics, see the works of Taylor (1988, 1989 and 1993).

government but adjust prices with varying markups in order to finance future investments in capacity expansion.

In order to better grasp the economic reasons behind the persistence of inflation, we find it necessary to understand it in light of inter-sector distributional imbalances that have pervaded the Brazilian economy. In this sense, the hypothesis thereby entertained concerns the causation running from structural change to inflation rates, along the lines of structuralist tradition of inflation-feeding bottlenecks. This is justified on the grounds that changes in the economic structure may stir up or alleviate social tensions, altering inflation trends.

In many Latin American countries, lasting disinflation was largely due to the significant surpluses in balance of payments, which provided the necessary foreign currency reserves for accommodating the typical post-disinflation imports-driven consumption boom, under an overvalued exchange rate. Balance of trade hit negative figures and interest payments on the government debt were thrown in a snowball trajectory, as seen in the Figure 1 and Figure 2 below. (BASTOS, 2002, chapter 6).

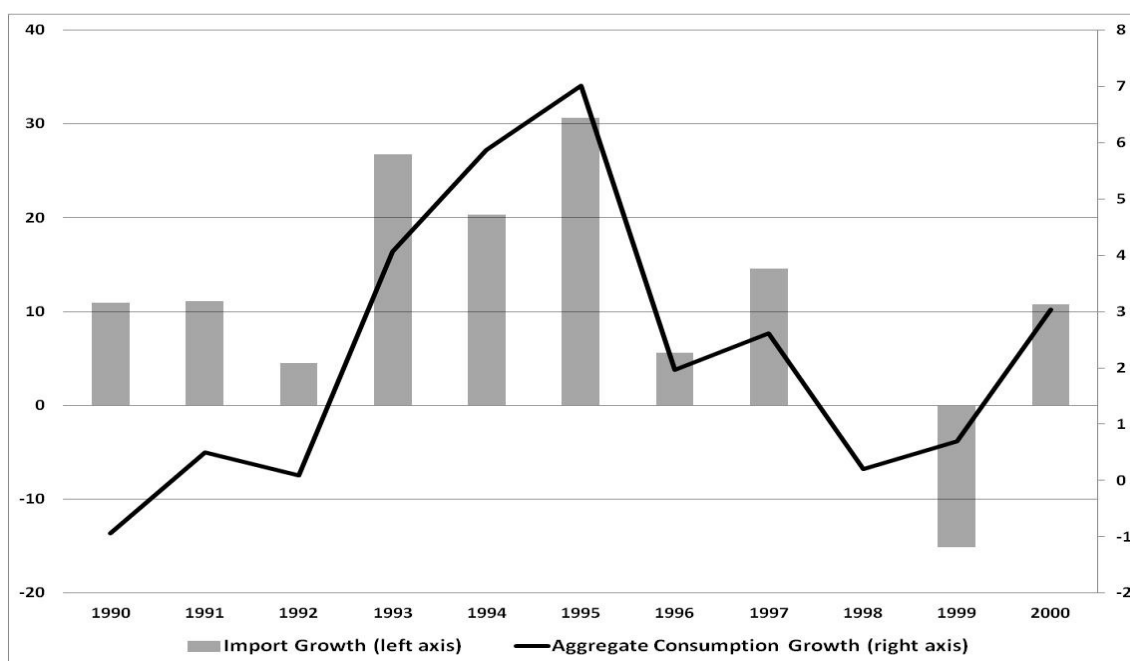


**Figure 1** - Interest Payments on the Public Debt – Nominal Public Deficit of Federal Government and Central Bank - (R\$ millions – bars on left axis; % GDP – line on right axis). Source: Central Bank of Brazil.

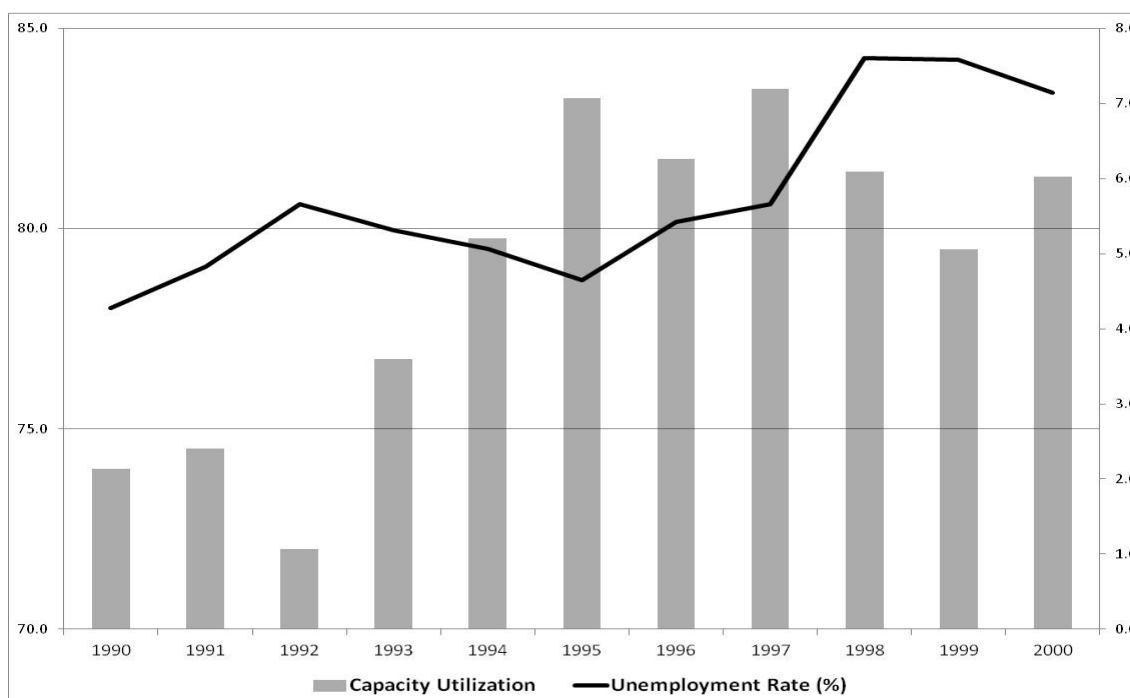
However, Krugman (1979) had long before shown that a fixed nominal exchange rate cannot be maintained under conditions of major fiscal imbalances financed by the creation of domestic credit. If inflationary pressures exceed the foreign rate of inflation, international reserves decline, overvaluation of real exchange rate takes over, and a speculative attack on the central bank's foreign exchange reserves ensues. In this sense, disinflation should not be taken as a synonym with full macroeconomic stabilization.

The Real plan thus entailed a distributional imbalance between two largely-defined income groups, namely, those with flexible prices (mainly firms in the tradable and non-tradable sectors) and those with their income defined by periodically revised

contractual prices (mainly workers, rents and public utilities).<sup>22</sup> The former group was allowed to freely adjust their prices within the period of synchronization of prices, while the latter had its “prices” defined as a moving average of the previous four months, starting in march 1994, when the URV (in English, Real Value Unit) period began.



**Figure 2** - Annual Growth Rates (%) of Imports (bars – left axis) and of Aggregate Consumption (line, right axis). Source: Brazilian Institute of Geography and Statistics (IBGE).



**Figure 3** - Rate of Utilization Capacity (%) and Unemployment rate (%) – 1990-2000. Source: Fundação Getúlio Vargas (Capacity Utilization Index) and Brazilian Institute of Geography and Statistics (IBGE) (Unemployment Rate).

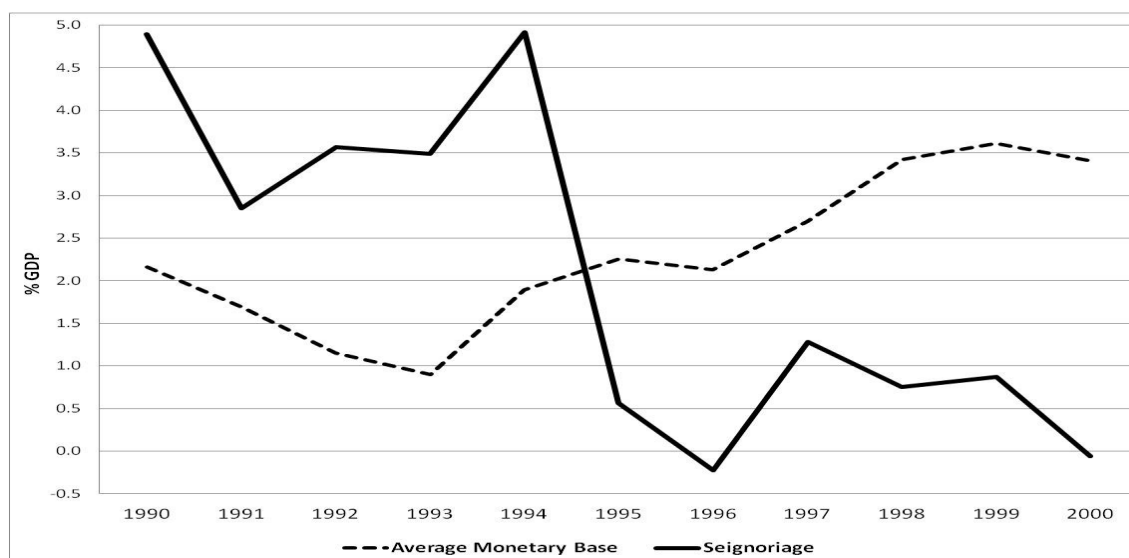
<sup>22</sup> Bacha (1999) provides a comprehensive discussion of the Real Plan imbalances, especially on the fiscal front.

In addition, the employment rate and the informality degree would bear the adjustment in distribution of wealth and income (see Table 1). Moreover, an aggressive policy of privatization of State-owned companies aimed at reducing the potentially boosting effects over the public debt as a result of such adjustment.<sup>23</sup>

Date	Degree of Informality – overall	Degree of Informality - Metropolitan areas	Degree of Informality – Non-Metropolitan areas	Degree of Informality - Rural areas	Degree of Informality - Urban Non-Metropolitan areas
1992	56.4	40.6	63.8	83.4	55.8
1993	57.2	41.5	64.6	82.7	57.2
1995	57.8	43.7	64.8	82.2	58.0
1996	57.8	44.7	64.2	80.7	58.3
1997	58.0	44.9	64.4	81.6	58.1
1998	58.8	45.6	65.1	81.6	59.0
1999	59.6	47.8	65.3	81.0	59.4
2001	58.1	48.5	62.9	83.2	57.4
2002	58.2	49.0	62.7	83.0	57.5

**Table 1 – Degree of Occupation Informality – Definition 1 – 1992-2002.** Source: Institute of Applied Economic Research (IPEA).<sup>24</sup>

The fiscal accounts faced shortages of revenues due to a plunge in seigniorage extraction (Figure 4). Additionally, the financial sector faced severe losses, due to the extinction of earnings reaped from high nominal interest rates permitted by soaring inflation, but managed to rapidly adapt to the new low-inflation environment (CARVALHO & OLIVEIRA, 2002; CARVALHO, 2005). Figure 3 above depicts the rise in unemployment as capacity utilization of industry increased in the years following disinflation.



**Figure 4 - Average Monetary Base and Seigniorage (% GDP) 1990-2000.** Source: Central Bank of Brazil

<sup>23</sup> Theoretical support of this statement can be found in Arida (1992, p. 191).

<sup>24</sup> Obs.: "Definition 1" adopts the following methodology of calculation: (informal employment + own business) / (formal employment + informal employment + own business). Elaboration: Disoc/Ipea.

Two sets of questions arise immediately. First, if the principal mechanism – namely, indexation – to which the perpetuation of inflation was ascribed is not entirely to blame, what are the perceived underlying causes of this long-lived inflationary process? Since indexation plays an uncertainty-mitigating role in the decision making process, its existence is clearly a function of both the level and acceleration of inflation, which is in its turn a symptom of a society's distributive conflicts. Secondly, in spite of the permanence of indexation practices, has inflation been successfully tamed or do the social tensions that previously provoked its soaring behavior remain embedded in the economic structure? An extension of the latter possibility gives way to the reciprocal causation, that is, changes in the economic structure may stir up or alleviate social tensions, altering inflation trends. These questions have not received sufficient attention in the literature concerning stabilization plans, and the Brazilian case is no exception. Next section delves into the structural components of Brazilian inflation.

## **5. A structuralist interpretation of Brazilian post-1994 inflationary behavior**

In 1999, inflation targeting became the monetary policy regime, and its adoption was not without controversy. Inflation targeting was set in 1999-2000, establishing the short-term interest rate as the price regulator mechanism in the economy. Its single-minded application has been the determinant factor for the Brazilian Central Bank's growing credibility in managing monetary policy. Still, inflation targeting in Brazil has faced many difficulties, namely: (1) government bonds and public utility services are indexed to inflation rates; (2) private sector adopts indexation clauses in contracts; (3) fiscal policy sets the basis for scrutiny of monetary policy by the financial markets, pressing upon the Central Bank the urge to keep interest rates at high levels; and (4) inflation targeting protocol requires the Central Bank to pursue a pre-established inflation rate, which might come to pre-index the economy through the price-expectation channel, therefore pushing prices upward. Recent price indicators raise questions as to whether demand-led inflation offers a convincing case about the Brazilian case.<sup>25</sup>

At least two major pressures over prices stem from long-term processes. First, the inter-sectoral dynamics largely influenced by exchange rate behavior that induces investment to get locked-in the services sector, not being able to incorporate new activities endowed with substantial economies of scale. (BALTAR, 2013, p. 13). The services sector is suspected of facing lower average productivity when compared to secondary sector, although evidence on this is scant and controversial. (ALDRIGHI & COLISTETE, 2013).

Secondly, the intensively-promoted income distribution which resulted from three different effects: (1) the wealth and income effects associated with lasting disinflation; (2) intensive planned redistributive policies (such as Bolsa Família, among several other grants provided by the government, not to mention systematic and increasing expenditures in healthcare, education and social security)<sup>26</sup>; and (3) a major international commodity price inflation that provided a foreign currency bonanza along from 2003 until 2008, when the financial crisis set in. There is still scant evidence

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<sup>25</sup> Further details on outcomes of the inflation targeting regime in Brazil can be found in Barbosa (2008) and Bevilacqua et al. (2007).

<sup>26</sup> For a discussion on redistributive policies in Brazil and its connection to growth see Lisboa & Latif (2013). For an analysis with a wider scope on Latin America, see Teichman (2008).

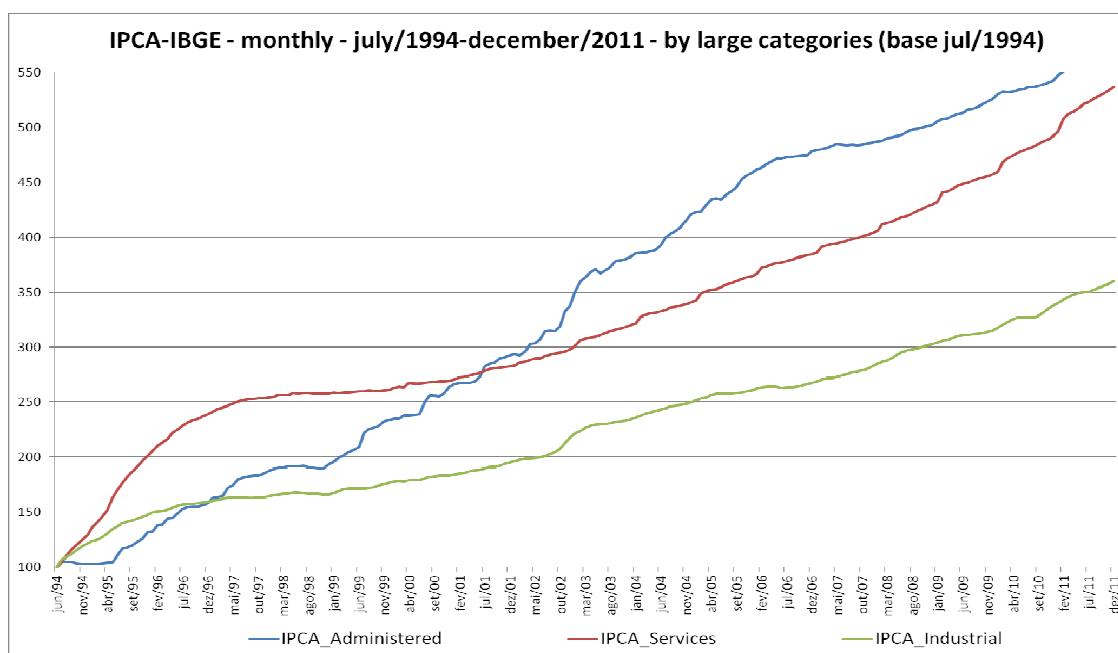


concerning the effectiveness of Engel's law in Brazil in direction of services. But the available data suggest that it may be the case.

We first describe some evidence on these two forces. At the end, we entertain some rationale for the dynamics to be further pursued in a formal model, which, however, extends beyond our present focus. The purpose is to set out a two-sector model that portrays the interplay of industrial and services sectors. Figure 5 below shows the behavior of the three main groups of prices in Brazil. It is clear that prices of services runs higher with some degree of co-linearity with industrial prices.

Moreover, the acceleration of the regulated prices after the year 2000 stands out. These prices relate to public utilities, such as telecommunications, electricity, health insurance, taxes, public transportation etc. These prices may act as basic levers of subsequent price increases farther ahead in the supply chain. They are basic inputs of production which have state-controlled prices.

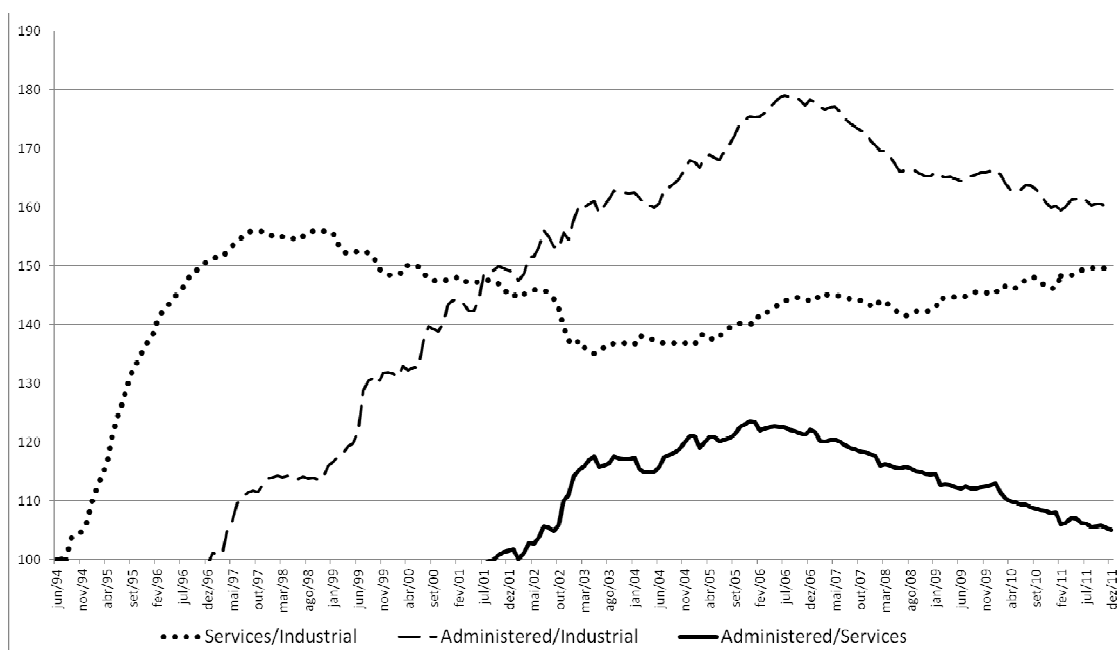
Turning to relative price trends, Figure 6 above shows that services and administered prices were benefited in detriment of industrial prices. It is beyond doubt that regulated prices are the period's great winners in the distributional struggle following stabilization. The exchange-rate restriction is noteworthy, for between 1994 and 1999 it is set in lower levels. After the external crisis of January 1999, the exchange rate skyrocketed, but the relative prices between industry and services do not present the reciprocal dynamics.



**Figure 5** - Consumer Price Index – IPCA-IBGE – by large categories (jun 1994 = 100). Source: Brazilian Institute of Geography and Statistics (IBGE)

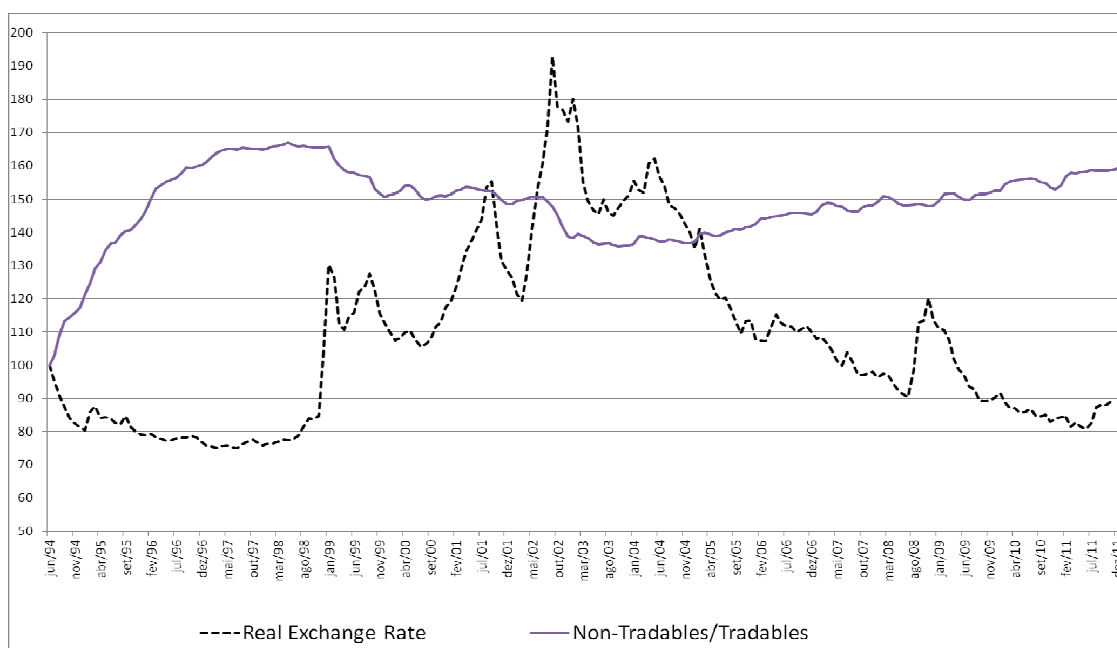
The evidence above and in Figure 7 below may indicate an asymmetry in relative price dynamics that calls for further investigation. This downward rigidity may impose significant obstacles to monetary policy effectiveness. In search of such, a downright austere credibility-seeking Central Banker may lay too much emphasis on the interest-rate instrument, aggravating further the very imbalance that put pressure on prices in the

first place, by curtailing economic growth, hence enticing further conflict among income claimants.



**Figure 6** – Broad Consumer Price Index - Relative prices among large categories (June 1994 = 100). Source: IPCA - Brazilian Institute of Geography and Statistics (IBGE).

The rationale may be laid out straightforwardly: the relative prices between industrial and services sector may bring about a permanent pressure on inflation levels. This is done by way of exchange rate allowance of adjustments of those relative prices. In case of a devaluation of the domestic currency, the industrial sector is provided protection against competition from abroad and realizes greater profit margins, while the service sector faces a cut in receipts, due especially to reduction in volume, rather than price adjustment.



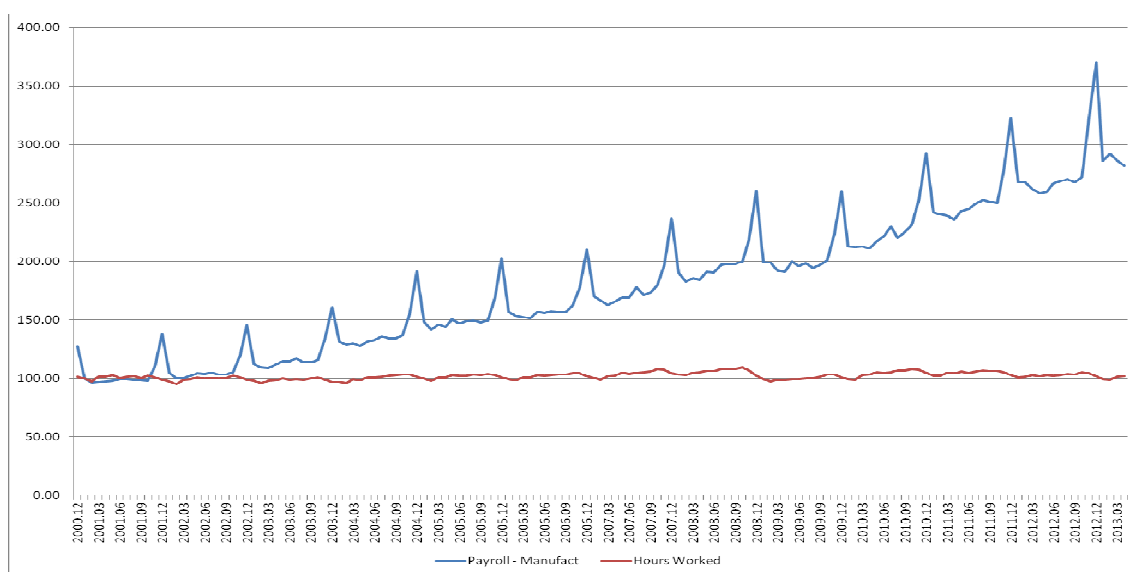
**Figure 7** - Real exchange rate vs. relative prices between non-tradable and tradable goods (June 1994 = 100). Source: Central Bank of Brazil – Department of Economic Research.

This downwardly rigid price behavior is explained by the overall indexation and future-margin-anticipating markup practices by public utilities companies (termed in “administered prices” in Figure 6), whose pricing strategies impose a floor to price adjustments by firms positioned farther ahead in the production process.

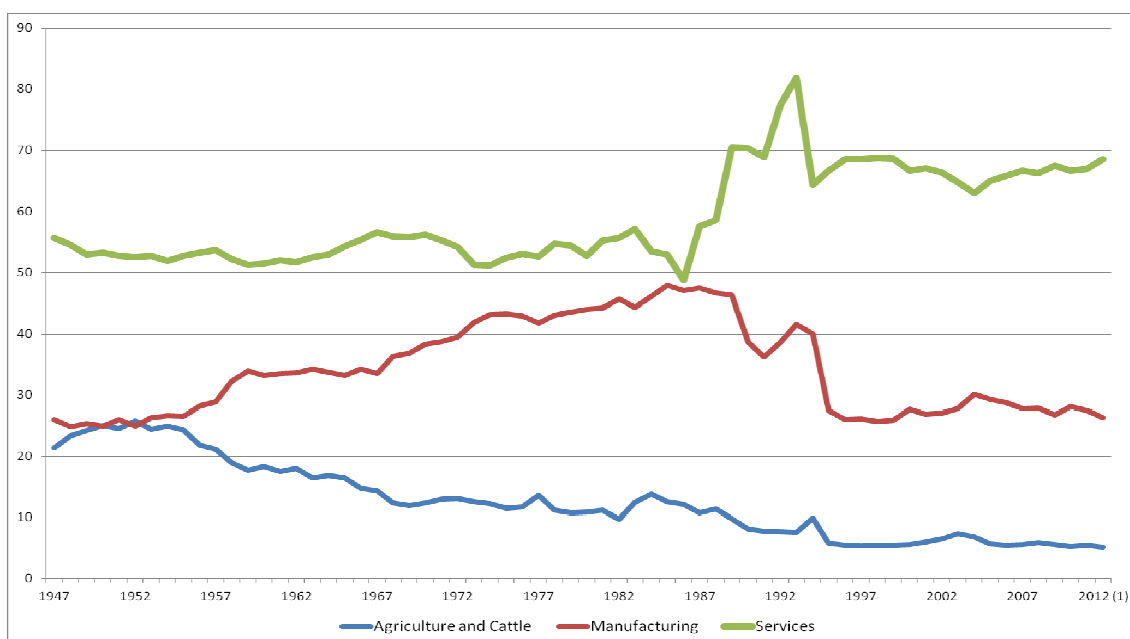
Considering the case of an appreciation of the domestic currency, the industrial sector bears the burden of adjustment. Figure 8 indicates the costs faced by manufacturing sectors in retaining workers. Payroll expenditures steadily increases as hours worked remain stable throughout the period.

Additionally, Figure 9 displays the recent trends in output composition, by which the services sector takes the lead in pulling growth rates. Between the year 2000 and 2009, unit labor costs (US\$ per man/hour) varied from US\$ 3,6 to US\$ 6,8, a 90% increase. (DIEESE, 2011c, p. 224). This means manufacturing sector is put under a lot of stress, for productivity increases are not sufficient to offset labor costs increases, while profit margins tend to get squeezed due to exchange rate appreciation.

The forces that impose hard times on manufacturing leave the non-tradable goods sector fairly free to adjust prices upwards. As incomes grow and the prices of manufactured goods are pushed down, household budget resources are shifted towards services. Once this happens, labor market dynamics pushes labor in the same direction, thereby concentrating a greater share of the labor force on tasks characterized by lower productivity - at least, when it is compared to industrial-sector economies of scale. Then lower productivity implies higher costs and, given overall labor market legal institutions, higher tendency to transmit them to prices. This is the supply side explanation.

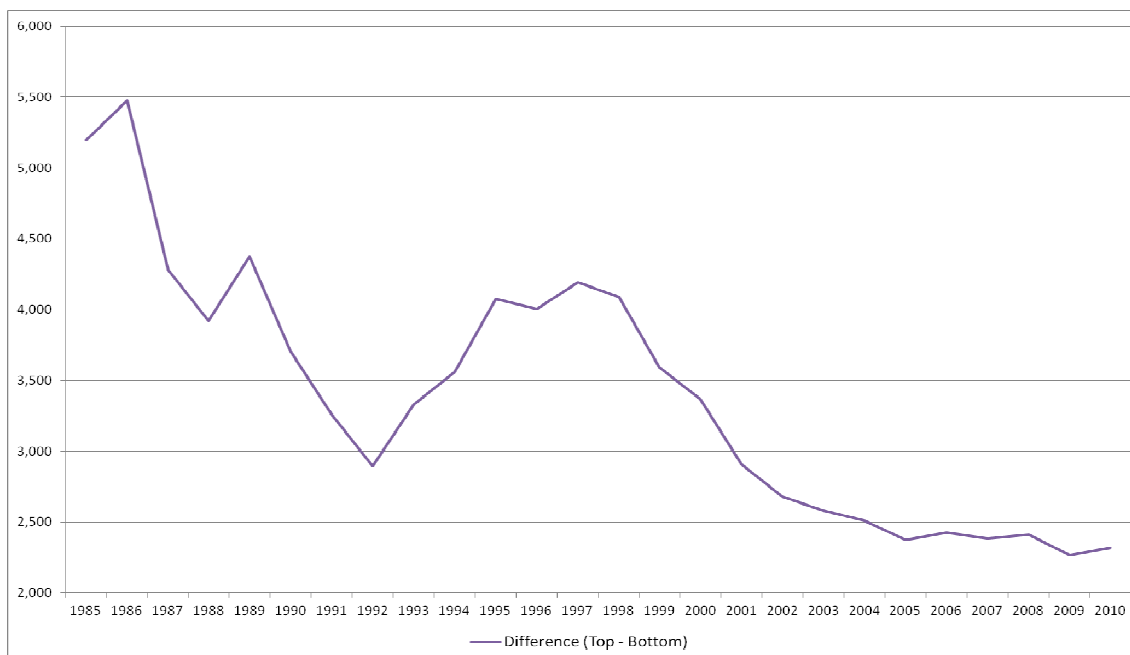


**Figure 8** - Payroll vs. Hired Working Hours (jan.2001=100). Source: Monthly Survey on Manufacturing Employment and Wages (PIMES) - Brazilian Institute of Geography and Statistics (IBGE)



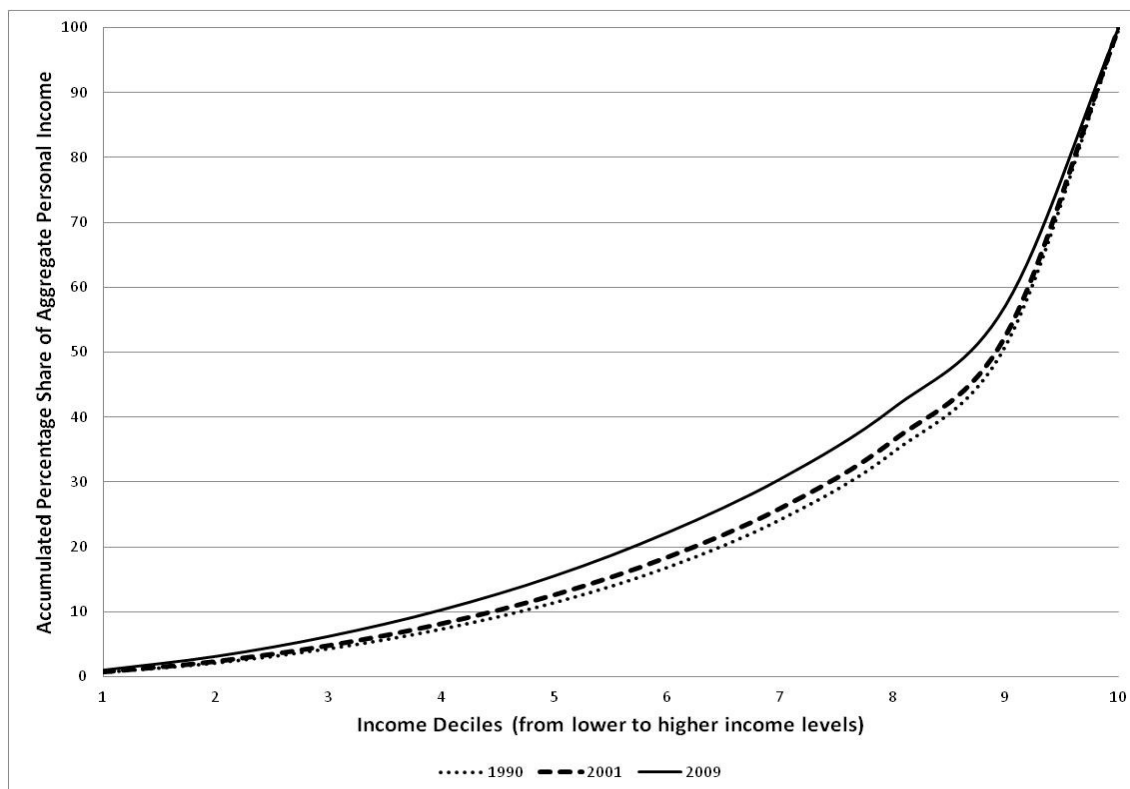
**Figure 9** - Sectors' Share of Value Added to GDP – 1947-2012. Source: Brazilian Institute of Geography and Statistics (IBGE)

As for the factors arising from the demand side, they relate to the evolving distribution of income towards lower concentration and a high income-elasticity of demand for services, as per capita income pushes upwards. In addition, public spending patterns tend to overstimulate demand both by means of income distribution policies (such as the Bolsa-Família and other government transfers to households) and by heavy interest services payments on the public debt, given the varying proportion of *ex post* interest-rate-indexed bonds in total public debt. When the distance between the 10% wealthiest and the 10% poorest is framed as a ratio, Figure 10 below displays the amazingly rapid closing gap between top and bottom segments of income.



**Figure 10** - Absolute Difference in Average real earnings of 10% poorest and the 10% richest in São Paulo Metropolitan Area (1985-2010). Source: DIEESE – Interunion Department of Labor Statistics– (Deflated by Cost-of-Living Index – Reais of November 2008).

Additionally, Figure 11 portrays the also impressive narrowing of the Brazilian Lorenz curve depicted in three ten-year-long periods. It is easy to see the emergence of the so called middle-income class, as the curve narrows in further in the middle income deciles.



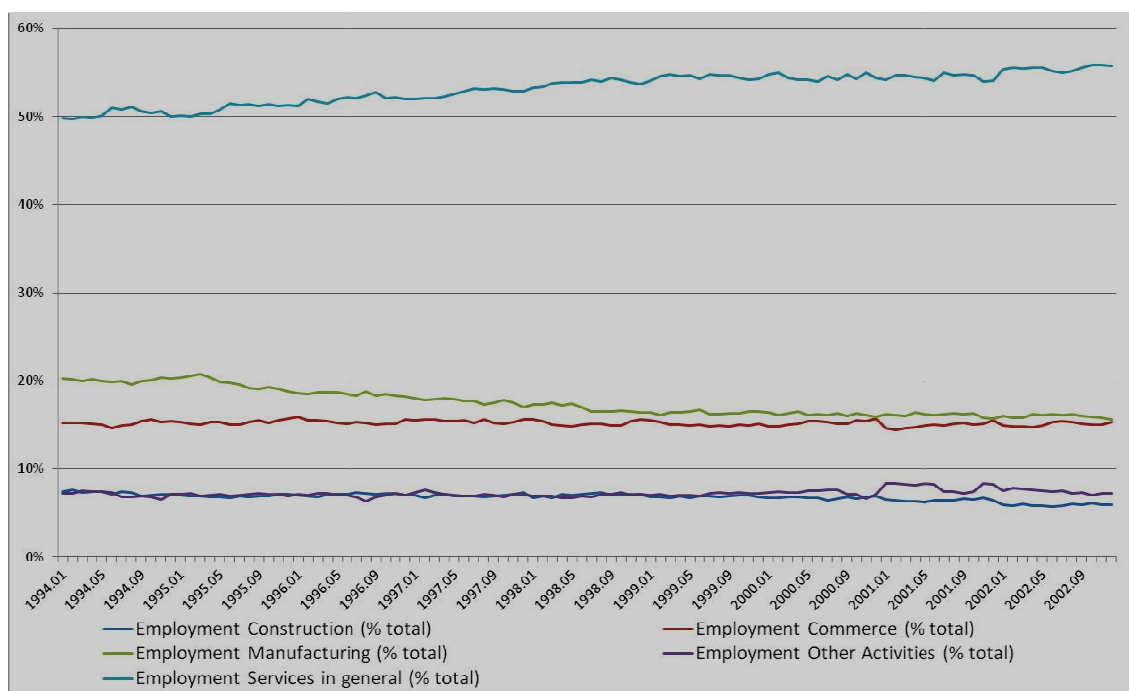
**Figure 11 - Personal Distribution of Income (1990, 2001 and 2009).** Source: Brazilian Institute of Geography and Statistics (IBGE) – National Research on Household Samples (PNAD) – Data compiled by Institute of Applied Economic Research (IPEA).

In sum, we claim that when both the aforementioned forces act in coordination under a widely-indexed economy, interest-rate-led monetary policy may fail to provide balanced distributive effects across sectors, reinforcing structural movements that tend to feedback on inflation. As an echo from a distant structuralist golden-age past, we may be facing a development trap, in the sense of a dynamic imbalance between supply and demand, with self-reinforcing features directed at a combination of downwardly-rigid prices with stagnant output growth.

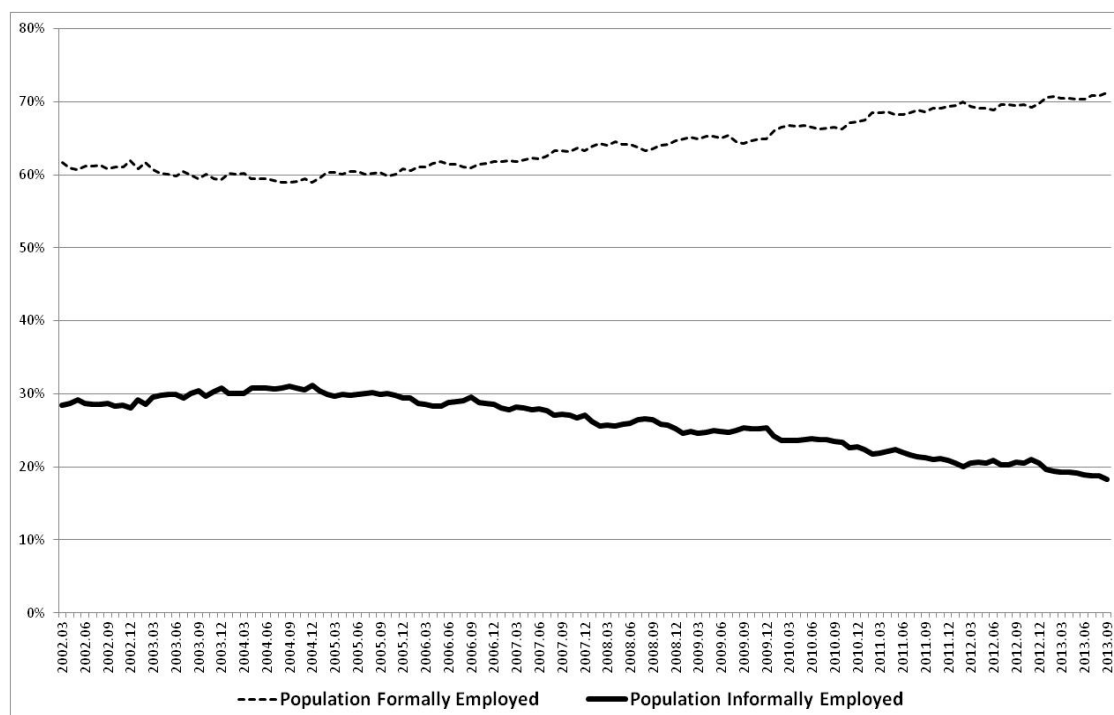
As income grows and becomes less unevenly distributed, aggregate demand composition directs resource allocation away from comparatively more productive sectors, such as manufacturing. Labor demand is shifted toward labor-intensive production of services, which face lower productivity scores. This shift can be seen in Figure 12 below (and, as already seen, above in Table 1).

The combination of higher employment in low-productivity sectors combined with an increased of formally-employed population, such as depicted in Figure 13, creates enormous pressure over wage costs. In the institutional context of widespread indexation, the decision by firms to raise prices becomes less risky, even though some quantity adjustments are observed as prices increase. Price setting behavior is based largely on two components, namely: inflation expectations and production cost increases. The first may become increasingly backward-looking as adaptive behavior spreads across social groups, in emulation of government managed-price-setting

patterns. The second is consistently pushed upwards by speedy administered price rises. Both provide basis for an “institutionally backward-looking” price-setting macroeconomic behavior in Brazil.



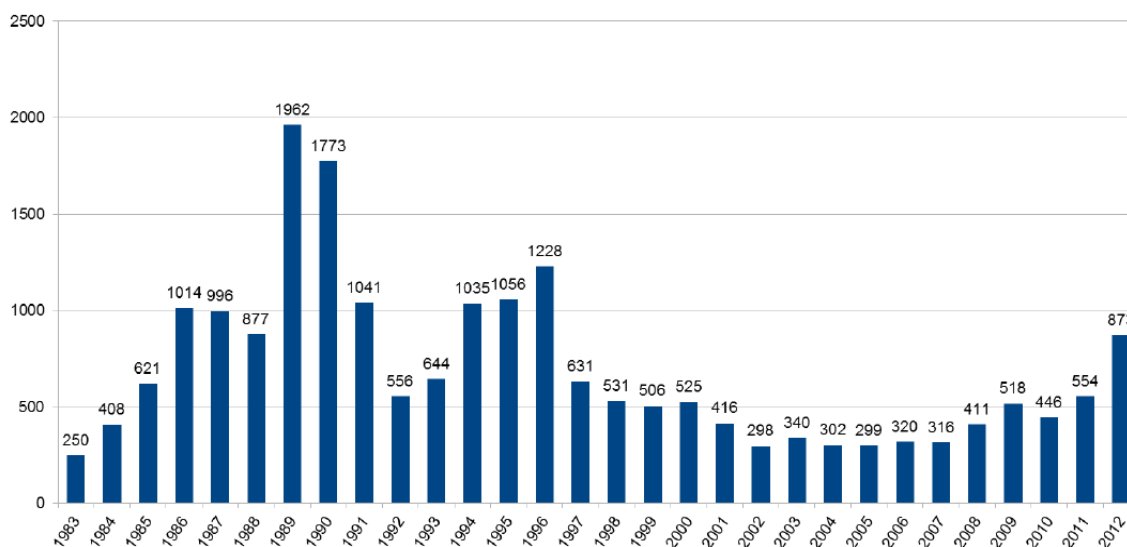
**Figure 12** – Share of Total Employment – by selected aggregate sectors - Source: Brazilian Institute of Geography and Statistics (IBGE) – Monthly Employment Survey – past methodology (IBGE/PME antiga). Obs.: sums may exceed 100% due to partial overlap between categories arbitrarily defined.



**Figure 13** – Share of formal and informal employment – March 2003-September 2013. Source: Brazilian Institute of Geography and Statistics (IBGE) – Monthly Employment Survey – past methodology (IBGE/PME antiga).

Turning to the labor market, we can observe the conflict dynamics by, at least, two indicators, namely: (1) cost-of-living adjustments of wages and (2) unionized share of workers and its implications. In regard to wage negotiations, many labor categories

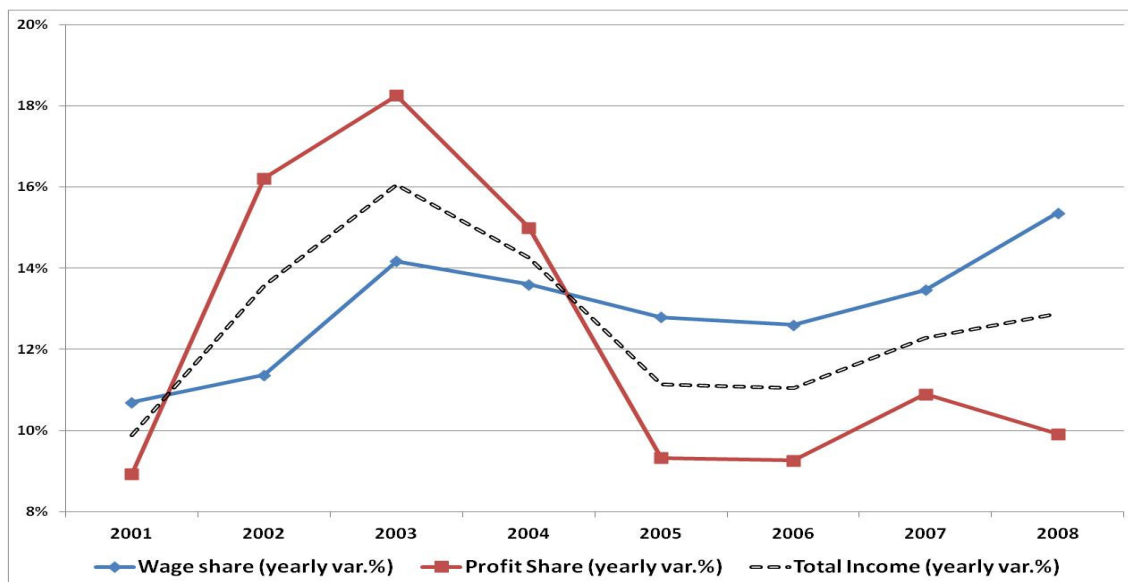
had wages lag behind inflation for many years. (MOLLO e SAAD FILHO, 2001). This generated a repressed gap between desired and effective wages. The external sector bonanza between 2004 and 2008 shifted bargaining power in direction of workers. From 2005 until 2010, no less than 72% of the categories managed to have wages vary above inflation, as measured by the National Consumer Price Index. If we add to this figure those categories that were successful in adjusting per inflation, around 90% of them managed to maintain or increase real wages – in 2006 and 2007, respectively, only 3.1% and 4.1% of categories had adjustment rates below inflation. (DIEESE, 2011b, p. 3). Analysis accounting for inter-sector differences indicates widespread above-inflation adjustments of wages can be observed. In 2010, manufacturing, services and retail sectors managed to achieve a 90% share of adjustments equal to or above inflation (97.4%, 92.8% and 96.6%, respectively), in contrast to lower shares in 2008 (93.9%, 80.3% and 92.1%, respectively). (DIEESE, 2011b, p. 5).



**Figure 14** – Number of Strikes per year – 1983-2012. Source: DIEESE (2013, p. 33) – Interunion Department of Statistics of Labor – Strikes Monitoring System– (SAG-DIEESE – Sistema de Acompanhamento de Greves).

Figure 14 above shows that the bargaining power of workers has increased in steady fashion throughout the late years 2000. It illustrates workers progressive loss in bargaining power a few years after disinflation. This is seen through the decrease in the number of strikes from 1997 and 2007. Only in 2012, had workers been able to exert greater pressure on management in order to achieve higher earnings. It is interesting to see that between 2004 and 2008, wages increased above the inflation pace with a slightly changing number of strikes. This can be explained by the acceleration of output growth in this period, which allows for stable resolution of conflict over income.

Figure 15 illustrates the yearly variation in shares of wages and profits between 2000 and 2008. It is easy to see that wages have steadily gained terrain in the functional distributional dispute over income. As unemployment rates started to hit historical lows along the 2000 decade, wages share have increased more steadily in detriment of profits. In this framework, each social group awaits favorable conditions to restore previous real income levels, as it is commonly seen in conflicting claims stories, as the one set forth by Braga (2010).



**Figure 15** - Percentage variation in wage and profit share of nominal income in Brazil (2000-2008). Source: Brazilian Institute of Geography and Statistics (IBGE).

From this viewpoint, a decrease in profits provides enormous disincentive to investment and innovation, especially in the face of high costs entailed by the Brazilian infrastructure framework, State expenditures obligations coupled with a dysfunctional tax structure and still lagging educational indicators (HAUSMAN, 2008). Nonetheless, it is striking that the previous period (2001-2004), when profits increased more sharply, does not account for a boost in innovative activities and productivity. Quite the contrary, manufacturing sectors have face tremendous difficulties and keeping up with the type of services-led growth the above evidence shows for the case of Brazil. When social conflict over income is not mediated by labor-saving innovations that feed into productivity increases, the available mechanism to restore consistency to the system is inflation. It is in this sense that we understand that the structuralist approach allows for a better understanding of inflation in Brazil, for it deals with the social and structural forces underlying economic indicators. We believe further research in this area will provide greater support for the view that inflation is tightly connected to development issues e not only, however important, to central banking good practices.

## 6. Concluding remarks

The paper made the case that Brazilian inflation can be better understood in its root causes only if the terms of distributional conflict and inter-sector dynamics are considered within the framework of development economics, which includes the structural changes undergone by the Brazilian economy after the Real plan. Two primary pressures were analyzed, namely: the increase in the tertiary sector's share of total value added in aggregate output combined with an aggressive policy of income distribution. The interplay of supply and demand forces in a widely-indexed economic environment paints a more detailed picture of the current challenges faced by the ongoing monetary policy regime in Brazil than the one found in most recent generation of modern macroeconomic models, under the guise of the "new macroeconomic consensus". We argued that there is both a historical and a methodological gap between stabilization theory followed by Latin American countries – particularly Brazil - in the late 1980s and early 1990s and this new approach to macroeconomics. This dual gap can only be bridge by the dismembering of development economics into fragmented



fields. Such fragmentation effected changes in the policies sponsored by the Bretton Woods institutions.

By the early 1990s, the then recent stabilization attempts based on fixed exchange rate regimes began to face the limits of such models. A series of currency crises triggered once again the IMF-World Bank conditionality-based political clout over the domestic economic policies of these countries. In the Brazilian case, the inflation targeting framework was agreed upon by both parties as a substitute nominal anchor to the previous scheme, thereby triggering the adoption of the emerging monetary framework based on new Keynesian models. We contend that these models are well-suited – if at all – to portray economies that have already reached maturity and are to a large extent stabilized. This is not the general case of Latin American economies, particularly Brazil, as we tried to show. This may explain – although it does not justify – why in these models inertia is defined as what Latin American structuralists termed “propagation mechanisms”. Therefore, they fail to provide a detailed account of the underlying social and technical-productive processes that exert pressure over prices.

Our intent was to provide both some evidence and a rationale for the interplay of these structural forces, in order to tell a different story about inflation. Basically, we restore the Latin American structuralists’ claim that the imbalance between the composition of demand and that of supply combined with the failure of the price system to fully adjust to structural changes – especially downwards – tends to excite distributional conflicts among social groups, thereby making inflation the promptest – albeit not the only - way to restore consistency to the economic system. The reason why inflation is a recurrent policy “choice” has to do with an embedded inflationary memory in society’s institutions, reflected most clearly on the persistence of indexation practices, even after disinflation.

Therefore, in the context of partially institutionalized backward-looking price-setting behavior, the structural changes brought with disinflation and the ensuing structural reforms widely acknowledged in the literature on the recent history of Latin America has altered the terms and the nature of the underlying conflicts that sustain inflation, requiring sharper changes in monetary policy in order to counteract these forces. However, several issues can be raised as to the neutrality of an interest-rate based policy, but we will not be pursued here. If it is not neutral in its effects, inflation targeting monetary policy may instill further instability in the output-price dynamics, rendering its measures ever more ineffective.

The above mentioned evidence suggests there are grounds for a structuralist interpretation of post-Real plan inflation patterns. This effort provides an alternative account of the relative rigidity of price behavior in Brazil, by considering a wider range of determinants beyond those encompassed by the new-Keynesian approach. We believe that a richer story can be told by the structuralist framework. Political, social, historical and economic factors can be better fitted into this approach and may provide us with some evidence on why Brazilian long term development has fallen prey to an inflation-constrained unstable growth trajectory.

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