

Exchange rate policy, distributive conflict and structural heterogeneity. The Argentinean and Brazilian cases

Alejandro Fiorito and Fabián Amico¹

"so a suitable exchange rate policy, it would seem, might significantly increase the ability and freedom of monetary authorities to control the level of rr [real interest rate] by establishing the appropriate level of m [nominal interest rate]. But the overall effects of exchange-rate changes should be taken into account" (Pivetti, 1991, p. 57)

Abstract:

This paper is a comparative study of monetary policy and the inflationary process in Argentina and Brazil in particular, based on the classical approach to determination of prices and distribution. The aim is to suggest some lines of inquiry in a specific framework for the analysis of inflation and of its relation to macroeconomic policies and structural heterogeneity in the Argentine's and Brazil's cases.

We will discuss the inflationary processes in those developing countries that face up strong external restrictions to development, at the light of monetary theory of distribution. In the more general framework of the classical approach, we introduce a specific topic belonging to these countries, like a structural heterogeneity and its implications on macroeconomic policies and development.

The cases of Argentina and Brazil under analysis seem to suggest that normal distribution is governed by a monetary determination, where no room to a "natural" or "neutral money" determination is possible. The specific way of governance in this determination is an exchange rate policy instead of an interest rate policy. The most important issue in this context is that no mechanical or "a priori" link can be generally claimed between the exchange rate, interest rate and the wage rate.

The so-called unbalanced productive structure underlying the factors that influence and constrain the Central Bank's policy and those factors are focused on exchange rate policy. In the heart of development problems we have the central feature of the distributive conflict between social actors in their fight for redistributing the associated costs of the exchange rate policy impinging on each one. These structural factors primarily govern the monetary and the exchange rate policy and stimulate a specific form of distributive conflict.

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1. Introduction

This paper is a comparative study of monetary policy and the inflationary process in Argentina and Brazil in particular, based on the classical approach to determination of prices and distribution. The aim is to suggest some lines of inquiry in a specific framework for the analysis of inflation and of its relation to macroeconomic policies and structural heterogeneity in the Argentine's and Brazil's cases.

The period under analysis it is since 1990s from today. This phase it is significant because it allow to compare different international trends (for instance, in the commodity prices) and their impact on domestic economies, together with several inflationary processes and monetary policy regimes in countries with strong features of structural heterogeneity.

We will discuss the inflationary processes in those developing countries that face up strong external restrictions to development, at the light of monetary theory of distribution. In the more general framework of the classical approach, we introduce a specific topic belonging to these countries, like a structural heterogeneity and its implications on macroeconomic policies and development. We find that among the many factors that influence and constrain the Central Bank's policy, the conflicts that emerge from the structural heterogeneity have an outstanding place so the exchange rate policy is one of the fundamental areas where that conflict is settled.

Thus, the cases under analysis seem to suggest that normal distribution is governed by a monetary determination, where no room to a "natural" or "neutral money" determination is possible. The specific way of governance in this determination is an exchange rate policy instead of an interest rate policy. The most important issue in this context is that no mechanical or "a priori" link can be generally claimed between the exchange rate, interest rate and the wage rate.

Both Argentina's and Brazil's economies have shown that the heart of the development problem lies in the distributive conflict among three actors: the workers, the industrial capitalist sector, and the agribusiness-financial groups. This struggle is for whom is to pay for the burden of the diverse exchange rate policy in time. The interaction of these structural factors that primarily govern the monetary policy, explain the divergent results that we can observe during the recent period. We analyze two variables in both economies in terms of inflation, income distribution and overall growth.

In section 2, we begin with a brief discussion on the classical approach to price determination and inflation by examining some contributions by Pivetti. Then, in section 3, we describe the inflationary processes in both countries for the period 1990-2010. We found that the exchange rate channel to the monetary policy has a decisively importance

both for the Argentinean and for the Brazilian case. In section 4, in line with Diamand's analysis (Diamand, 1986) and some other recent contributions (Medeiros, 2010), we will discuss the relationship between the exchange rate policy and the unbalanced productive structures (UPS). Finally, section 5 concludes with a few remarks.

2. Monetary theory of distribution, exchange rate and inflation

In line with the classical approach to economic theory, inflation is regarded as the result of incompatible influences and claims over income distribution, like other strands in heterodox economic thought. But the question is what determines the profit rate underlying the pricing decisions of firms. We can find an answer in the ideas, developed within the surplus approach, on the influence of the rate of interest on the profit rate.

Within this framework, a main criticism raised by Pivetti (1991) on the Kaleckian and others heterodox models aims at the indetermination limits in the mark-up level. Certainly Pivetti (1991), Serrano (1993, 2010) and Stirati (1999) have developed a research line focusing on the possibility that the mark-up pricing, instead of being a description of the pricing mechanism, actually becomes an *exogenous* distributive variable with respect to real wage. Thus, instead of assuming a mark-up to a level consistent with a given real wage, it is the latter which depends on the former. Consequently, the share of wages on surplus (i.e. above the subsistence) will depend on the level achieved by the real mark-up.

A relationship between interest rate and prices it is analyzed in several papers by Brazilian and Argentinean economists, though without drawing more general implications in relation to the distribution determination (see, for example, Frenkel, 1979; Arida & Resende, 1985).² Certainly, in the monetary theory of distribution the role of the interest rate as the determinant of the opportunity cost of capital is considered a *more general* approach. Indeed in Pivetti's view the *whole* capital invested in the real sector is subject to the same arbitrage process between interest and profit rates, even though it takes a long time. In other words, the profitability of the productive capital cannot persistently be far off from the interest rate over a long period of time.

On the other hand, Pivetti pointed out in many places the relationship between interest rate and exchange rate (see Pivetti, 1991, 2001, 2008). In Pivetti (2001) it is examined the connection between the notion of endogenous money with a monetary non-neutrality, "which would become hardly disputable once the rate of interest was

² In Frenkel (1979) there are opportunity costs of unsold stocks in terms of current interest rate. This unsold products come from an overestimation in a future raise of costs (and prices). Frenkel forecasts a bias of a persistent *overestimation* on inflation expectations, so that the real mark-up determinants depend on a bias process of expectations constitutions. Thus, the greater the mistake on overestimation of inflation expectations is, the greater the real mark-up is. In this framework, does not exist any superior limit to nominal mark-ups (see Bastos, 2001). On the other hand, Arida & Lara-Resende (1985) sets out a more general relationship. In this case, a profitability of no-financial capital cannot be far off from the interest rate due to arbitrage process.

acknowledged as a monetary phenomenon” (Pivetti, 2001, 104-105). In this approach, given money wages and production techniques, a lowering (rising) of the money rate of interest by the central bank would actually drive the price level down (up), “owing to the adaptation of prices to normal costs caused by competition” (Pivetti, 2001, 112). In this case, there would not be anything “paradoxical” (i.e. the Gibson case) in the positive correlation between interest and prices.

In this framework, the money rate of interest is conceived as an autonomous determinant of money normal production costs which governs the ratio of prices to money wages. Thus wage bargaining and monetary policy “come out of this analysis as the main channels through which class relation act in determining distribution” (Pivetti, 2001). The class relations are seen as tending to act primarily upon the profit rate, via the money rate of interest. Thus, the real wage in a given specific situation is viewed as the final result of the whole process. In others words, it is a *residual*.

In turn, it has been observed that this argument could be made to stand on its head. For instance, as Serrano said:

“One could equally argue that corresponding to the exogenously given nominal rate of interest there is always a rate of increase in money wages that would produce enough inflation to reduce the real rate of interest and hence profits enough to allow the workers to obtain their desired real wage” (Serrano, 1993, p. 122).

In Pivetti’s view (Pivetti, 2007, 245), in principle it is true that the behavior of money wages might take the lead in the determination of real interest, (Pivetti accepts that situations in which the workers are strong enough throughout the economy to obtain their desired real wage cannot be ruled out a priori). The author consider that in actual fact it is generally much easier, both technically and politically, for the monetary authorities to establish the course of nominal interest rates than for the workers of money wages. However, Serrano’s observation maybe it is focusing to make a note of the different mechanisms and possibilities through the prices and distribution that are determined.

In the Pivetti’s framework, this result arises out of the fact that the rate of interest is regarded as a policy-determined variable, which is not subject to any general law, and is “determined from outside the system of production” (Sraffa, 1960). This rate can be described in terms of sets of *objectives* and *constraints* on the action of the central bank, which could be different among countries at a particular time or different within a particular country at different times.

In the mechanism suggested by Pivetti (1991) it is crucial the interaction between real and nominal interest rates and inflation rate. Thus:

“... given a policy-determined nominal interest rate, competition among firms within each industry should tend to cause the rate of profit to move in sympathy with the real rate of interest, rather than with nominal one, because it is the former which constitutes the actual price for the use of capital in production, or its opportunity cost” (Pivetti, 1991, p. 52).

Therefore, according to Pivetti the level of the nominal interest rate is determining the nominal mark-up and the nominal return, which is obtained by the firms in competition at the end of the process. If the real interest rate is an opportunity cost of capital, the relative profit rate of productive capital will not permanently differ from the average real return on public bonds. Thus, it is necessary that the firms have a pricing policy consistent with the orientation of monetary policy. When inflation rate increases, the central bank will change the nominal interest rate and so the firms will adjust their nominal margins accordingly.³

In this context, the rate of interest is a policy variable determined ultimately by class relations. Since the interest rate governs the ratio of prices to money wages, and given the nominal wages, a rise in interest rates by the central bank will raise the price level, because it increases the mark-ups, lowering at the same time the real wages.

“In this framework –Pivetti says- the rate of interest is thus regarded as an autonomous determinant of normal prices: a dearer money policy is *by itself inflationary*, through its direct impact on mark-ups. The *overall net impact* on the price level essentially depends on the effects that the policy determined interest rates will eventually exert on aggregate demand and employment, through their impact on income distribution and the other channels by which changes in interest rates are bound to affect activity levels, starting from the leverage they exert on net exports through *the exchange rate*” (Pivetti, 2008, underlined ours).

This paragraph suggests that a dearer money policy can be inflationary but the final result *can be the opposite*, according to interaction with *other* effects (aggregate demand, income distribution and exchange rate). Likewise, beyond the analysis of “overall net impact” on prices of interest rate changes, there is the topic of the many factors that determine the monetary policy.

In this respect, Stirati's analysis assumes as "given the alternative proposed a sort of 'taxonomy' of conditions that may lead to different inflationary processes, focusing on the influence of labour market conditions on price dynamics. The developed Stirati's analysis assumes “*given* alternative policies followed by the central bank concerning the interest rate” (Stirati, 2001). Therefore she does not discuss “the many factors that may influence and constrain the Central Bank's policy with respect to the interest rate. This, however, suggests itself as a very important area for research” (Stirati, 2001, 430)...

³ The adjustment path is not necessarily a unique and simple process either in regards of the level of the (nominal) mark-up or of the time-lags involved.

Precisely, this is a fundamental objective of the present paper. However, the purpose of analyzing the “many factors that may influence and constrain the Central Bank's policy” we must focus the analysis on the specific conditions to the economies (like Argentina and Brazil) with strong features of structural heterogeneity. Thus, in this context, the exchange rate policy plays a crucial role and in most cases the interest rate is a subordinated variable.

From the empirical side, it is clear that the exchange rate channel has actually played a decisive role in those cases in which tight money policies have succeeded in checking inflation. Therefore, in general, as Pivetti (2008) says, once *all* the transmission channels are taken into account, higher interest rates have succeeded in checking inflation because the higher ratio of prices to money wages they bring about, through their direct impact on mark-ups, is more than counterbalanced by:

a) The lowering of prices of, in general, imported goods (actually, they are tradable goods) denominated in domestic currency, through the exchange rate channel;

b) A reduction or slower rise of money wages as a result of the likely negative impact on employment brought about both by change in normal income distribution and by the change in the exchange rate –i.e. by the contractionary effects on consumption spending and net exports caused by higher interest rates.

In this framework, it is important to recall that the distribution of the surplus is “arbitrary” because it does not follow any law related to the productive structure or “mode of production”, but depends on the relative bargaining power of the parties. Thus, as mentioned before, monetary policy and wage bargaining are the main channels through which class relations act in determining distribution. The price level is determined *given* the long-term rate of interest and money wages. In a *closed* economy⁴, through manipulation of nominal interest “it is always possible in principle —albeit at the cost of an accelerating inflationary process— to leave distribution unaffected in the face of any increase in money wages or of any other initial agent of price increases” (244). In this respect, Pivetti says:

“Of course, non-distributional targets —such as debt management, balance of payments or exchange rate targets— may also strongly influence, in this or that concrete situation, policy decisions concerning interest rates. Given one or another of these targets, the monetary authorities might well decide, for example, to keep nominal interest rates unchanged in the face of increases in money wages” (244).

However, this “non-distributional targets” have strong *distributional* implications and, therefore, also an effect on output and inflation. Obviously in the Pivetti’s

⁴ Or in the case of the economy that issues the international currency accepted world-wide.

approach the level of interest rate has distributive effects and hence on marginal propensity to consume of the economy, on fiscal expenditure and on competitiveness. Therefore, a rise in interest rate would be accompanied by a decreasing activity levels and a reduction in the growth rate of nominal wages. In this case, we would have an *increasing* relationship in the price level/wage ratio together with a *decreasing* inflation rate. If so, the interest rate determination underlines the “arbitrary” nature of income distribution. The same mechanism underlines the exchange rate determination, which within certain limits is also an “arbitrary” variable and hence subject to the relative pressure from the several social groups. As to the interest rate, it is a “conventional” variable (see Vernengo, 2001)

Briefly, Pivetti’s aim is to find in general way the determinants of prices and income distribution, without any mechanical determination. Social actors can modify the distribution of income with their actions, and therefore there are no rules that can be generally expressed regarding that. Nevertheless, Pivetti points out that interest rate governs theoretically through prices levels, real wages and therefore the rate of profits and determination of normal distribution. In section 3 we will see that the “counterbalancing mechanisms” can be the more general case in the Argentina’s and Brazil’s economies, and possibly in Latin American countries.

3. A comparison between Argentina and Brazil

Thus, in the specific cases under analysis (Argentina and Brazil), long before the changes in interest rate can increase the price level, the raise in interest rate set in motion the exchange rate channel and through this mechanism ends up changing distribution and inflation. Moreover, exchange rate channel affect inflation in *opposite* direction that the straightforward effect of interest rate on prices⁵. In some cases, normal distribution is probably *in fact* governed by exchange rate policy, becoming the interest rate in a lesser important variable.

Certainly, the empirical analysis of Brazilian inflation in recent years based on the cost push approach does not confirm the existence of a cost-push channel of the monetary policy. In fact, this channel is more than compensated by the effect of interest rate differential on exchange rates. Thus, the evolution of nominal exchange rate and of the tradable goods prices in dollars were the main factors determining the Brazilian inflation in this period (see Bastos *et al* 2010, Serrano *et al* 2010). Likewise, wages did not exert any pressure on nominal costs and on the other hand, profit margins were preserved due

⁵ Certainly, under certain conditions, in the very short run the direct effect can prevail, that is, the increasing interest rate would carry out increasing prices. For example, in Argentina’s case, Cavallo (1977) argued that raise in nominal interest rate have “evil” effects on inflation rate through higher financial costs. However, two years later, in 1980, the raise in interest rates does not follow to higher inflation rate. The difference was that the firms can not fix freely they prices because the protection duty level was exhausted (Canitrot, 1981). Thus, firms were forced to absorb the higher financial costs or raise debt.

to the monetary policy and the high degree of monopoly in the administered price sectors of the economy (see Bastos *et al* 2010).

More in general, in the 1990s the interest rate policy has been focusing in external restriction.⁶ Likewise, since the 2000s Argentina reduced sharply the nominal and real interest rate and inflation went up due to exchange rate devaluation. While in the 1990s in Argentina we have a high real interest rate and low inflation, since the 2002 we have a relative low real interest rate with higher inflation. In both cases, the exchange rate channel has played a decisive role in set the path of inflation rates. Thus, the “counterbalancing mechanism” mentioned by Pivetti appears as the *more general case* in the Latin-American countries and the exchange rate channel as a *fundamental transmission mechanism* on distribution, output and inflation.

Likewise, several research studies on Latin American countries showed that the elasticity of aggregate demand to changes on interest rate is weak, which rules out the new consensus prediction that increasing interest rates will fight inflation via the slowing down of aggregate demand (see Barbosa, 2006 & 2008 on Brazil’s case; Galindo & Ros, 2008 on México, and Chang, 2007, on several Latin-American economies). Therefore, the transmission mechanism of interest rate to the inflation rate was mainly the exchange rate dynamics, and not the rate of change in the aggregate demand.

In all cases, this research confirmed that inflation goes down systematically, whereas interest rates increase; in fact inflation slows down systematically whereas interest rates increases and these results were related to the inflation-targeting policies. All cases show at the same time sustained processes of exchange rate revaluation (i.e. increasing strong domestic currencies). Likewise, these processes exhibited low growth rates of output. This is the set of stylized fact in terms of exchange rate, interest rates and inflation.

Research on these countries emphasizes that the exchange rate appreciation is a crucial factor. Likewise it shows a *negative* relationship between interest rate and the exchange rate tendency. The anti-inflationary policy based on high interest rates lead to an increasing foreign exchange supply, which was reflected in an exchange rate appreciation tendency. The downturn of exchange rate was a more significant factor in the inflation slows down.

In the following sections we will point out the main facts in the evolution of inflationary processes in Argentina and Brazil in the light of the hypothesis discussed in the previous sections. Toward 1995 both Brazil and Argentina put an end to its

⁶ Something like that happened in Argentina. Frenkel said: “The worst distortions in real interest rates in developing countries have usually been related to the misalignment of the real exchange rate. Appreciated real exchange rates led to unsustainable balance of payments and external debt trends. Very high interest rates resulted from those trends pushed by high country risk premiums or induced by monetary policies that aimed to attract capital flows” (Frenkel, 2004, 117).

hyperinflation processes (Argentina in 1991 and Brazil in 1995). Even with special features, in the 1980s both countries follow a similar path. Toward early 1980s Brazil and Argentina (and the most of the Latin American countries) lost access to external financing at the same time that the terms of trade worsened, the international interest rate rise and the external demand slowed down due to the world recession. These tendencies led to the economies of the region to balance of payments crisis. The reaction of the countries in the region was a recessive control of imports and aggressive exchange rate policies trying to increase exports. These policies led to economic stagnation and inflationary explosion (see Medeiros & Serrano, 2006). The objective was the repayment of external debt and as the back side of the phenomenon was low growth and high inflation.

3.1. Argentina: from the currency board toward the crisis and managed floating exchange rate

In the Argentinean case, the so-called high inflation regime collapsed with two hyperinflationary episodes in 1989 and 1990. In this context, the central bank aimed at keeping the nominal exchange rate relatively stable. In the meantime, the inflation rate remained very high and the resulting real exchange rate (RER) appreciation led in early 1991 to a new round of runs against the peso and a rise in the exchange rate. Fearing that new depreciation could lead the economy towards hyperinflation again, the government fixed the exchange rate. In March 1991 the congress established a fixed parity between the domestic currency and the U.S. dollar by law (the so-called convertibility law), and the full backing of the monetary base with foreign exchange reserves.

This law transformed the central bank into a currency board: any issuing of domestic currency by the central bank should be backed by an equivalent purchase of U.S. dollars. The system included from early 1991 an almost complete liberalization of trade flows and full deregulation of the capital account, accompanied by a strong process of market-friendly reforms, including the privatization of state-owned firms.

The program was successful in curbing high inflation, but given the legal constraints on monetary autonomy of the central bank, the business cycle was almost fully dependent on the balance of payment result. Given the fact that the government cannot monetize the fiscal deficit, public expenditure in social areas and investment were squeezed. In this regime, the autonomous private expenditure dynamics depends on the credit availability. In turn this variable depends on net exports and capital inflows. Thus, the accumulation (contraction) of foreign exchange reserves by the central bank would lead to an expansion (contraction) of domestic demand and output.

Under the convertibility regime, Argentina experienced two periods of sustained capital inflows that spurred growth. The first occurred between the 1991 and the contagion of the Mexican crisis in 1995. The second was shorter; it began shortly after

the “tequila effect” and stopped in mid 1998. Then the economy remained in a strong depression that led to the dramatic collapse of the regime in 2001-2002, and conclude with abandonment of the currency board, a big devaluation and default on the external public debt.

The focus on fiscal irresponsibility as the main cause of the convertibility crisis is very controversial. Several authors showed that the authorities followed a contractionary policy from 1999 and that the increase in public expenditure was mainly due to increasing debt services (Frenkel & Rapetti 2010). In a context of exchange rate appreciation, given that the improvement in labour productivity and other measures were insufficient to correct the lack of competitiveness in the tradable sector, a significant deflation of domestic non-tradable goods prices would have been required to correct the RER misalignment. But prices (wages) are downward inflexible

In the peak of the cycle, RER appreciation deriving from such a macroeconomic set-up tends to stimulate domestic demand (non-tradable goods sector) and if there is no early correction of the RER misalignment, a persistent current account deficit may lead to an unsustainable accumulation of external debt. Then, the required RER depreciation could make foreign-indebted domestic agents (in either the private or public sector) go bankrupt.

The recovery of economic activity since 2002 was associated with pragmatic macroeconomic policies that offset the external and fiscal imbalances, while providing incentives for tradable activities. In both cases, the exchange rate policy was oriented towards maintaining a competitive exchange rate⁷. In 2003, the government started to intervene actively in the foreign exchange market to contain the appreciation pressure. Thus, the effective real exchange rate was 93% higher than during the convertibility regime (1991-2001) and 23% higher than the average during the period from 1980 to 2001. The central bank, however, never made an explicit mention of an exchange rate target.

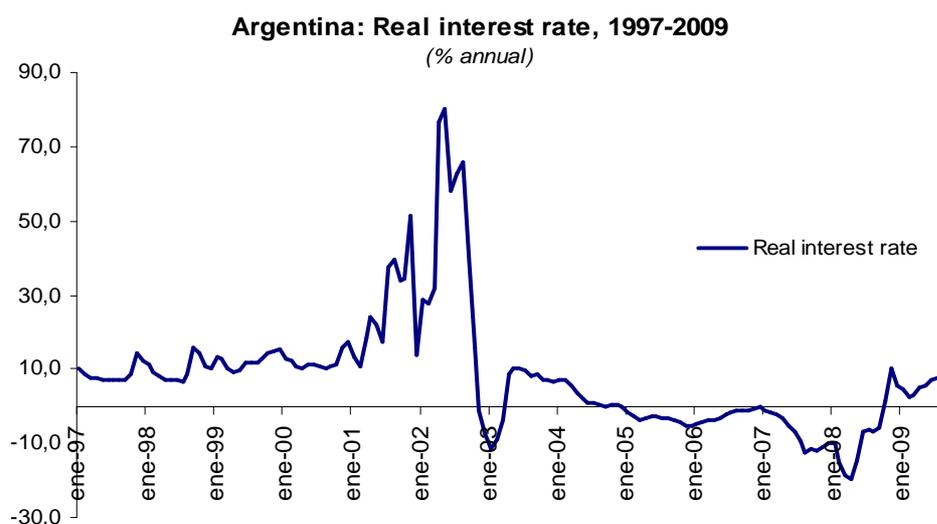
Although the Parliament passed a law revoking the currency board, the government decided to maintain the central bank’s independence with a basic mandate of pursuing low inflation. In 2004 a proposal was rejected to establish an inflation targeting regime. Thus, instead of following an inflation-targeting scheme as the other Latin American countries, Argentina opted to follow a policy based on *quantitative monetary targets*.

To achieve this goal, the central bank relied on “sterilization” operations via the issuing of central banks bonds⁸. At the same time, the Argentine government introduced

⁷ By “competitive exchange rate” it is understood a level of real exchange rate higher than typical of primary exports, so that allows to grow exports from industrial sector.

⁸ On sterilization process, see Lavoie & Wang (2009).

capital controls in June 2005. The government required that all capital inflows were subject to a 30% unremunerated reserve requirement for at least a year. Several analysts believed such controls were ineffective and that they were rather introduced as a signal of the official willingness to maintain a competitive exchange rate strategy than as an effective control mechanism. Likewise, during this period the domestic interest rates were relatively low. The higher interest rates until 2002 resulted from those trends pushed by high country risk premiums or induced by monetary policies that aimed to attract capital flows. Before the devaluation in 2002, the strong surplus obtained in the current account makes possible the reduction in the level of interest rate.



Fuente: Banco Central de la República Argentina and Cenda.

Following this strategy Argentina experienced one of the most successful growth episodes in its economic history. From mid-2002 to mid-2008, the economy grew at an 8.5% average annual rate. The favourable external conditions -especially the higher demand by commodities coming from China and others countries, with the high international prices of the agricultural commodities that the country exports- were important, but they only explain a part of the economic performance. It was the expansion of the tradable sector as a whole that pulled the economy up and put it on a rapid growth path. Then, this boost was transmitted to domestic demand (Consumption and investment), and since 2004 the growth process has been driven by domestic demand factors.

At this point it is important to distinguish clearly the two different roles played by exports in the Argentinian economic growth. Certainly, the expansion of exports is capable of simultaneously relaxing two different constraints that may hinder growth, namely the “external financing constraint” and the “effective demand constraint”⁹. As a source of demand, exports combine with the other components of aggregate demand,

⁹ For a more general approach to the relationship between exports and growth see Serrano & Medeiros (2003) and Palumbo 2008.

determine the level and the rate of growth of actual output. As a source of finance for imports, exports set the limit (together with the other sources of international finance) beyond which actual output cannot expand. Thus, in the beginning of Argentinian recovery exports played an important role in the two aspects (i.e., as a source of demand and as a source of finance for imports). But since 2003 the economic growth process was led increasing for domestic factors, like a consumption and private investment.

There are two crucial factors that explain this unusual expansion. Firstly, as was mentioned, the positive evolution of commodities prices in world market combined with a competitive exchange rate. Secondly, it was, the first time in more than three decades that the government does not use demand-constraining policies and unemployment to fight inflation (more below). In this context, the economy expanded while maintaining a stable current account surplus.

However, in this period inflation started to accelerate in 2005. Certainly, an inflationary factor was the global rise in commodities prices, especially during 2007 and 2008. Besides, unlike Brazil, the effect of increasing commodity prices in Argentine inflation was strengthened by the competitive exchange rate. Many economists in Argentina (see Frenkel, 2008) suggest that inflation is the result of demand pressures. But aggregate investment reacted with high sensitivity to economic growth and, with the exception of some particular sectors, capacity remained far from fully utilized.

The evidence seems to suggest that inflation accelerated as a result derived from tightening conditions in the labour market in a context of high export prices. The reduction of unemployment and underemployment, dropped from 17.3% and 17.1% in 2003 to 7.9% and 8.8% in 2008, respectively, contributed to the rise of nominal wages. In many sectors, this led to real wage increases far beyond productivity growth.¹⁰

Besides, in 2002 Argentina introduced a tax scheme on commodity exports (food, soya and other crops). This tax is a fixed rate on export value. Thus wage goods' prices turned to be lower than their level previous to the taxation on exports. But this tax couldn't avoid inflation *acceleration*. Given the fact that the Argentine export structure is based on wage goods, then the rise in commodity prices pushed up nominal wages.

Empirical evidence suggests that there is a persistent attempt on the part of the workers to obtain real gains. This is an index of the existence of a certain level of inconsistent claims over income, which would make the inflation tendency rise. But actually there are three actors that take part in conflict dynamics: workers, industrial capitalist sector and the agribusiness groups connected with rent's capture.

¹⁰ For instance, in the manufacturing sector between the first quarter of 2003 and the last quarter of 2007, nominal wages rose 175% while average productivity per worker increased about 20%. The nominal average unit labour cost increased 130%. In the same period, manufacturing wholesale prices rose 50% (Frenkel & Rapetti, 2010).

Actually, the dramatic conflict that emerged in 2008 was related to how much the level of the tax on exports should be, and indeed unveil the distinctive feature of the distributive conflict among the three actors. In a word, it has been a fight for how to redistribute the costs associated with the competitive exchange rate.

In this context, a principal trouble of the present regime is the lack of alternative policies to check inflation that results from the conflict between wages, profits and rents. The distributive changes must translate in a rise in the price level and then it becomes difficult to maintain low inflation rates. Hence, it is very important to find a suitable set of income policies for this specific situation. High rates of growth involve low unemployment and sooner or later increase the worker's bargaining power. If the government does not intervene, then the invisible hand of the market can translate these inconsistent claims on income in inflation acceleration. Then, the exchange rate will appreciate and will set out the devaluation. Finally, this process drives the economy in the traditional path of stop and go cycles and the so-called "Argentinean pendulum" (see Diamand, 1986).

3.2. Brazil: hyperinflation, Real Plan and inflation targeting

As a way out to the hyperinflation, the Brazilian economy adopted a fixed exchange rate as part of the Real Plan in 1994. This fixed exchange rate regime led to an appreciation of its currency and greater current account deficits. After a decade of very high inflation rates, in 1994 the government reissued the real and set up a crawling peg. The new regime stabilized inflation for the first time in decades.

But the Brazilian macroeconomic stabilization strategy was heavily dependent on the continuous inflow of foreign capital and, as a result, the international financial position of Brazil became increasingly fragile after the contagion effects from the East Asian currency crises of 1997 and the Russian currency crisis of 1998. Thus, by the end of 1998 Brazil's current-account deficit reached 4.5% of GDP and the low stock of foreign reserves of the Brazilian Central Bank did not allow a defense of the Brazilian currency, the real, in case another speculative attack hit the country (see Barbosa, 2008).

After the January 1999 crisis, Brazil adopted an inflation targeting regime and the operational independence of Central Bank has *de facto* taken place. Some authors have argued that building credibility with a fixed exchange rate, and through inflation-targeting, was not central for stabilization (see Vernengo, 2008). In the Brazilian case real interest rates have remained high during the inflation-targeting periods. Also, the real exchange rate tended to appreciate after the strategy was implemented. It is a fact that appreciation has benign effects for price stability and depreciation tends to be inflationary.

In this line, Barbosa (2008) concluded that inflation targeting managed to reduce inflation in Brazil after its 1999 and 2002 currency crises, with a substantial help of exchange-rate appreciation. Besides, economic growth was slower under inflation targeting than under exchange-rate targeting. Likewise, the real interest rate of the Brazilian economy remained well above international standards (more than three times higher than the GDP growth rate in 1999-2006) and required a substantial increase in fiscal austerity by the government. A key has been that the high domestic real interest rates and the favourable international trade and financial conditions in the rest of the world allowed the Brazilian government to accumulate foreign reserves and repay most of its foreign debt.¹¹

At the same time, it is important to point out that the switch to inflation-targeting kept the same commitment towards the neoliberal policy agenda. Both arrangements promote central bank's independence and were possible only after financial liberalization, when the commitment to low inflation imposed by international financial markets gained strength.

Brazil: Inflation targeting, 1999-2008

Año	Target	Interval	Actual inflation	Fulfillment
1999	8,0	6.0 to 10.0	8,9	Yes
2000	6,0	4.0 to 8.0	6,0	Yes
2001	4,0	2.0 to 6.0	7,7	No
2002	3,5	1.5 to 5.5	12,5	No
2003	8,5	8.51	9,3	No
2004	5,5	3.0 to 8.02	7,6	Yes
2005	4,5	2.0 to 7.0	5,7	Yes
2006	4,5	2.5 to 6.5	3,1	Yes
2007	4,5	2.5 to 6.5	4,5	Yes
2008	4,5	2.5 to 6.5	5,9	Yes

Source: Banco Central do Brasil.

If one looks at the inflation targets, since 1999 the actual inflation rate fit into the target in 1999, 2000, 2004, 2005, 2006, 2007 y 2008 (remain above the target between 2001 and 2003).¹² The use of a broad inflation index in the Brazilian case rather than a core inflation target (i.e. excluding energy and food prices) implies that if inflation is caused by supply-side shocks then the inflation-targeting framework, which is based on the supposition that inflation is caused by demand factors, will lead to higher interest rates in order to reduce demand pressures (Vernengo, 2008).

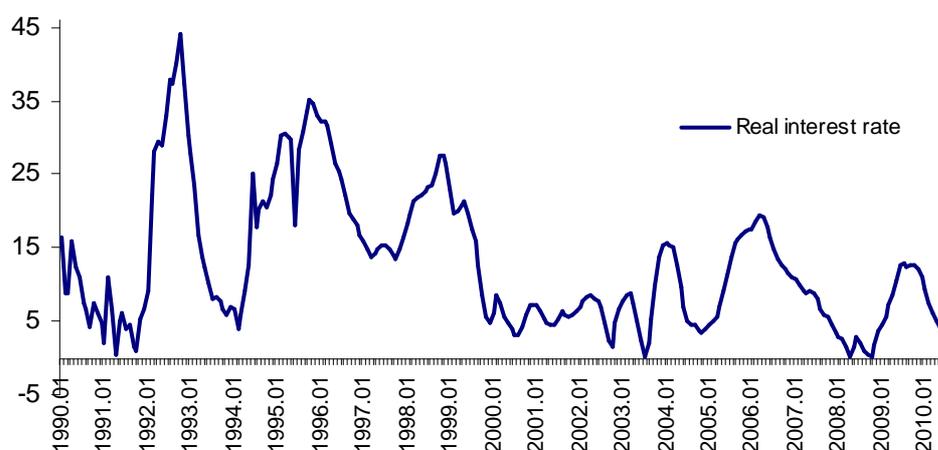
But several authors have shown that it does not exist an empirical relationship between demand (i.e. output gap) and inflation acceleration (see Serrano, 2010; Summa, 2010). Thus, a question emerges: how is it possible to check inflation from interest rate in an economy which does not seem feasible to regulate inflation through demand control?

¹¹ Of course, because of the endogeneity of potential output sometimes inflation targeting do not avoid a self-fulfilling monetary policy that locks the economy in a slow-growth path.

¹² It must be noted, however, that the 2003 target was adjusted twice from 3.25 to 4, and then to 8.5%; the targets for 2004 and 2005 were also increased (see Vernengo 2008).

Serrano (2010) showed that indeed the system works in a different way to the postulate for the conventional theory. Thus, a raise in domestic interest rate generates positive interest differentials and produces a revaluation of domestic currency. In turn this revaluation transforms the *negative* supply shocks (i.e. increasing commodities prices in the world market) into a *positive* supply shock in terms of domestic inflation. Obviously other outcome of this interest rate policy would be less demand, slower output growth and higher unemployment. Possibly these effects will result in a low growth of nominal wages.

Brazil: real interest rate, 1990-2010



Source: Ipeadata.

Thus, in those years in which actual inflation rate has been steered towards the target the nominal exchange rate was appreciated. In a context of strong increases of commodities prices, the exchange rate was a mechanism that allows actual inflation to fit in the target. However the fundamental reason for low inflation underlying the success of the system was the low wage indexation and the lack of wage resistance.

Since 2004, the wages in Brazil shows an invariable level, considerably slower than in the middle-1980s. This fact implicates that the real wages grew less than industrial productivity until 2003. Between 2004 and 2009, wages and productivity grew at the same pace. In that period there was an increase in the aspiration gap of the workers, which was not significant variable to explain inflation. This data is a sign of the low bargaining power of the workers (see Bastos *et al*, 2010). Thus, the anchor of the system it is the low wage resistance (Serrano 2010, p.68).

In this context, between 1994 and 2002, the exchange rate depreciation was compensated to some extent by the slowdown tendency in commodity prices, reducing the depreciation impact on domestic inflation. Likewise, between 2003 and 2008 the

reverse it is the case: the increasing commodity prices was compensated domestically through an exchange rate appreciation (Serrano & Ferreira, 2010).

4. Exchange rate policy and unbalanced productive structures (UPS)

The inflation tendency in Argentina and Brazil, and its relationship with the exchange rate policy cannot be understood without analyzing the many factors that may influence and constrain the Central Bank's policy with respect to the interest rate and exchange rate in the specific structural situations of Brazilian and Argentinean economies. In these cases there is no simple relationship between workers (wage bargaining) and capitalist (central bank policy), but a more complex social, political and economic structure that interact in the determination of monetary policy and in particular in the exchange rate policy as the main transmission channel to distribution, inflation and output.

It is possible to identify three main actors or social groups. In the first place, the primary-financial sector (the agribusiness groups) which is interested in inflation control and integration into world economy based on primary exports and financial expansion. In the second place, the industrial sector is interested in competitive exchange rate and higher rates of growth and demand. The workers are the third actor, who is interested in higher wages, employment expansion, and social protection and to improve share wages. Likewise, in the specific conditions of Argentina and Brazil, with strong features of structural heterogeneity, these social groups interact in several ways to determine the monetary policy.

In general terms, the structural heterogeneity that characterizes countries like Argentina and Brazil is a bit different to the traditional view of ECLAC (Economic Commission for Latin America and the Caribbean).¹³ According to this specific view, both Argentina and Brazil exhibit a structural imbalance between the productivity of primary export sector and industrial productivity (see Diamand, 1986). The option to industrialize in these countries implies industrial prices higher than international prices. Due to historical antecedents, the exchange rate is based on the costs of the more productive primary sector. When expressed in dollars based on the primary exchange rate, relatively higher industrial costs and prices turn out to be higher than current prices on the international market. So as to enable industry to be born and to subsist, it is indispensable to protect it by means of high import duties, which amount to a system of *multiple* exchange rates for imports, with an industrial dollar costing more than the primary one.

We arrive at peculiar productive structures. Their main feature is the coexistence of two sectors with very different productivities: the less dynamic primary sector which works at international prices and exports, and the protected and more dynamic industrial

¹³ See for instance Rodríguez (2001).

sector which works at prices higher than international ones and -unless it is given special industrial exchange rates for export-, produces only for domestic consumption. Marcelo Diamand called these arrangements *unbalanced productive structures* (UPS) (see Diamand, 1986).¹⁴

In this arrangement, without any special intervention of state, the exchange rate is generally adjusted to the primary production level.¹⁵ This exchange rate level is inadequate for industrial exports. Rises in the exchange rate imply a fall in real wages, which societies are reluctant to accept. In this context, those imbalances in productive structure result in an exchange rate which is uncompetitive for industrial exports. In conditions of financial deregulation and opening capital account, these circumstances are worse if are put together with a domestic interest rates higher than international ones (i.e., Brazil's case).

In the present situation, Argentina could neutralize partially this tendency through tax on commodity exports, a lower interest rate and major controls over capital account. This policy avoids a strong revaluation of peso and check deindustrialization trend induced by high commodities prices. On the other hand, Brazil does not have any mechanism to avoid the strong revaluation of the Real, and they use instead this revaluation for disinflation purposes.

These unbalanced productive structures make a big difference between the development experiences in Latin-American countries (Argentina and Brazil) and the Asian cases. In Korea and China's cases the domestic currency depreciation strengthens and unifies the interests of productive sectors around industrial objectives. However in Argentina and Brazil things are different. In these countries the ownership classes (industrial capitalist, landowner, financial groups) and the workers are divided in determining the effective exchange rate, and multiple exchange rates favorable to industrial capitalists (for example through tax export) find powerful opponents (see Medeiros, 2010).

At the same time, the determination of a higher real exchange rate favorable to export diversification *without* tax exports involve a lower real wage and creates a conflict with the workers. Thus, exchange rate appreciation is functional to increasing real wages, and then the strategy of competitive real exchange rate faces up strong political troubles. Likewise, things are even more complex given the fact that industrial sector although loses competitiveness is favoured due to increasing real wages.¹⁶

¹⁴ Certainly, in the 1960s, when industrialization accelerates, Brazil does not seem to fit in this description, but it is the case since the 1980s.

¹⁵ With liberalization of capital account, that level is in reality "primary-financial".

¹⁶ The ambiguity in the effects to the exchange rate appreciation on industrial sector has only validity in a short run. However, in the long run the domestic currency appreciation has lethal effects on industrial performance.

Moreover, in both Argentina and Brazil, there is evidence in support of the hypothesis that a relatively productive primary exports posed a great obstacle to a full reorientation of policy from import substitution industrialization to an export-oriented industrialization path. Basically, in these two economies, an export-oriented industrialization would require a big income sacrifice to achieve international competitive low wage costs via devaluation (Mahon, 1992, 242)¹⁷. In these countries the cyclical trend in terms of trade was a weak and inconstant motivation for policy change sympathetic to industrial exports.

According to Diamand's view, this unbalanced productive structure it is the key factor behind the exchange rate policy and the class conflict. Due to abundant primary exports the exchange rate tends to appreciate permanently. At this exchange rate the country's manufacturers are relatively uncompetitive internationally (import-competing activities have to be protected in other ways). The reforms pro-industrial export-oriented involve a large cost in domestic income and wages due to the huge real devaluation that is necessary to make industrial exports competitive. The "opportunity cost" of reorienting policy toward a competitive industrial sector will be greater as a primary sector are relatively more productive. In a context of full deregulation of the capital account, this historical fact is aggravated due to the huge capital inflows that set in motion the exchange rate appreciation.

Thus, the structural heterogeneity (defined as an unbalanced productive structure) is a very big trap that can curb the development process and macroeconomic policies in an economic model of primary-product export through a short run cycles series of prosperity and recession. By the way, because of the same causes the import-substituting industrialization (ISI) was supported not only for factory owners but also for workers. Unions were especially prominent in rejecting and/or postponing devaluation. Besides policy makers found a good excuse in the "technical" reasons for resisting devaluations (based on "elasticity pessimism"). These trends led to the economic and social process in both countries to deadlock. Thus industrial growth was accompanied by recurrent exchange crises. Latter, the debt crisis in 1980s (was deepening) the original problem.

However, all this does not mean that low wages *per sé* would have been a solution for structural problem. In fact, with the debt crisis in the 1980s real wages have fallen steely in Latin American countries, which at the same time entered in the so-called "debt-financed" deindustrialization process. Moreover, huge real devaluations both in Argentina and Brazil produced hyperinflation; which was part of the trend pushing real wages down.

In general terms and particularly in this kind of economies there is an opposite relationship between exchange rates and real wages. Hence, there is a clear connection

¹⁷ "Export-oriented industrialization" does not mean "export-led" growth, but a diversification in export structure.

between exchange rate and income distribution and inflation. Thus, between the subsistence wage level and the maximum wage rate (corresponding to net surplus to necessary investment to reproduce the system) there is a wide range of value for wages and exchange rates.

In this context, we can identify *two possible strategies* within which the interactions of the three main actors or social groups may take place. First, a strategy of industrial-developmental which tends to competitive exchange rate, higher rates of growth and social inclusion. In this scheme there is less financial opening and the *real* exchange rate is stable and competitive¹⁸. The interest rate loses importance in support to exchange rate regime. In the presence of external fragility this strategy appeal to real devaluations of exchange rate more than increasing interest rates aimed to attract capital flows. On the one hand, these devaluations reduces wage costs in foreign exchange terms and increasing employment in exporter sectors. On the other hand, the devaluation increase prices of wage goods, which reduces real wages. Then, it is possible that workers demand a nominal wage rise and so we would have wage inflation as long as it is the pass through of higher costs to prices. In this case, there are two options: i) set up an income policy supporting the growth process which it is very difficult given the conflicting interests around exchange rate determination and its effects on prices; ii) to raise the interest rates and restrict fiscal policy to discipline worker's demands and to reduce real wages.

The second strategy is the primary-financial growth based on financial deregulation coupled with integration into world economy based on commodity primary exports. In this case, we have a relatively stable nominal exchange rate and the interest rate policy have a main role. The more fragile the current account evolution is, the higher the interest rates are (or the interest differentials between domestic and international ones). Thus, given the effects of interest rate on prices and exchange rate, it will be necessary to reduce the activity levels and to contain the growth in nominal wages to allow the mark-ups to increase.

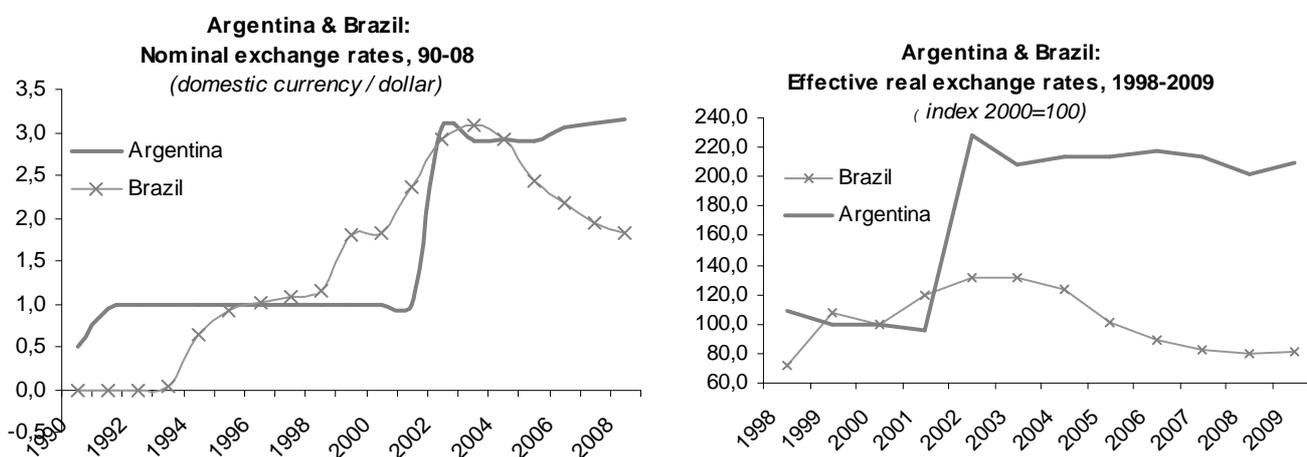
Obviously, the exchange rate appreciation reduces inflation and contributes to moderate nominal wages growth. At the same time, given the fact that the wage costs in foreign currency goes up then the competitiveness depends on the reduction of wage costs via nominal wage contractions and increases of productivity in exporter sectors. If the wage resistance is high a combination of higher interest rate and aggregate demand contraction will be imposed. In both cases, it is important to point out that no mechanical or "a priori" link can be claimed between these variables.

Certainly, given the macroeconomic policies (more competitive exchange rate, low interest rate), Argentine's strategy tends to look like an industrial-developmental one.

¹⁸ Would be the case referred by Dooley et al. (2003) as "countries of trade account" (for the Asian cases) in contrast to Latin American countries in the 1990s described as "countries of capital account."

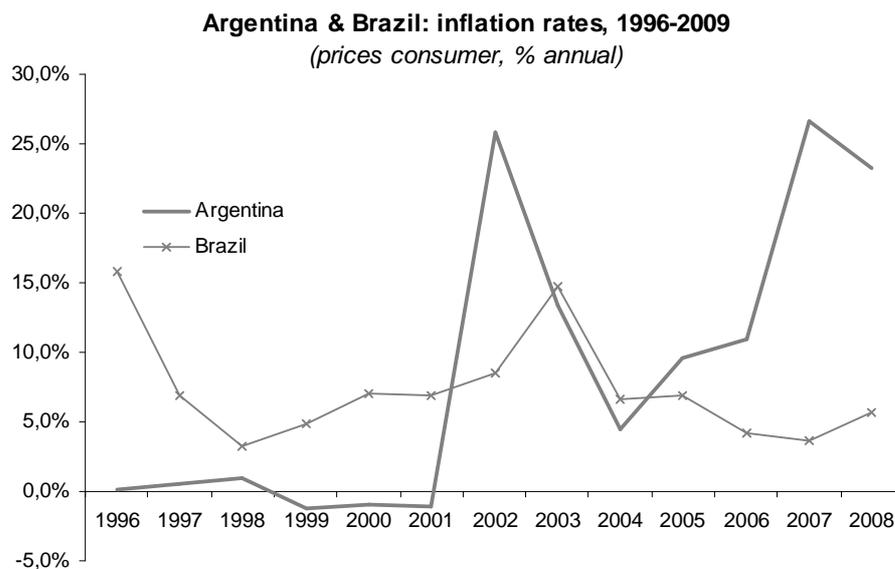
However, this country does not have industrial policies at all. These industrial policies would allow a productive diversification and increase productivity. On the other hand, Brazil has a more clearly-defined strategy of primary-financial growth.

While in the 1990s both countries have chosen a similar path, after the crisis in 2001-2002 Argentina and Brazil follows different ways. Beyond the specific features of both countries, there is a crucial difference in the period under analysis: while Argentina breaks down in 2002, Brazil could sustain its financial situation. The bankrupt, devaluation and default debt in Argentina were forced results, not decisions, which the government and main social actors tried to avoid. Later, faced with facts consummate, the emergent government follows a pragmatic policy and can avoid the pressures of IMF would have driven to exchange rate appreciation (i.e., through the implementation of the inflation targeting regimen). Besides, internally the neoliberal agenda was very discredited by the unusual depth of the crisis.



Source: Ipeadata and ECLAC.

Toward mid-2002 Brazil seemed likely to default its external debt and thus would have been following the Argentinean path. But this was not the case. The appreciation process triggered in Brazil has made more costly (for instance, in inflationary terms) to improve the exchange rate (i.e., to check the appreciation tendency) and has encouraged the government to persist in the same way, strengthening the appreciation of the domestic currency. This path depicts a vicious cycle, which only could be justified on the basis of a sufficiently severe situation brought about by the crisis. This feature is underlined by Barbosa *et al* (2010), who analyze the impact of the real exchange rate on growth in developing countries and suggest that “the optimal exchange rate for economic growth might not be compatible with the inflation target desired by the population” (Barbosa *et al*, 2010, p.11). Of course, the differences between the exchange rate policies give rise to different levels in of the inflation rates, especially since 2002 onwards.



Source: ECLAC.

A similar difficult points out Serrano (2010) when he emphasizes the harsh dilemmas that emerge when the Brazilian economy sought to resume a path of development. Serrano suggests exploring a set of policies similar to Argentina post-2002. But he emphasizes that the costs of policy reorientation would be lower if it had a strong expansionary effect on public investment, aiming at improving productivity both in those less competitive industrial sectors and in the wage goods' production sector.

Therefore, the more productive the industrial sector is, the lower the income sacrifices are in terms of the high exchange rate and lower real wages. However, in a context of high commodities prices, it may be not enough to improve the productivity in wage goods sector and perhaps it is necessary to introduce tax exports and/or other measures to *separate* domestic prices of good wages from the international ones.

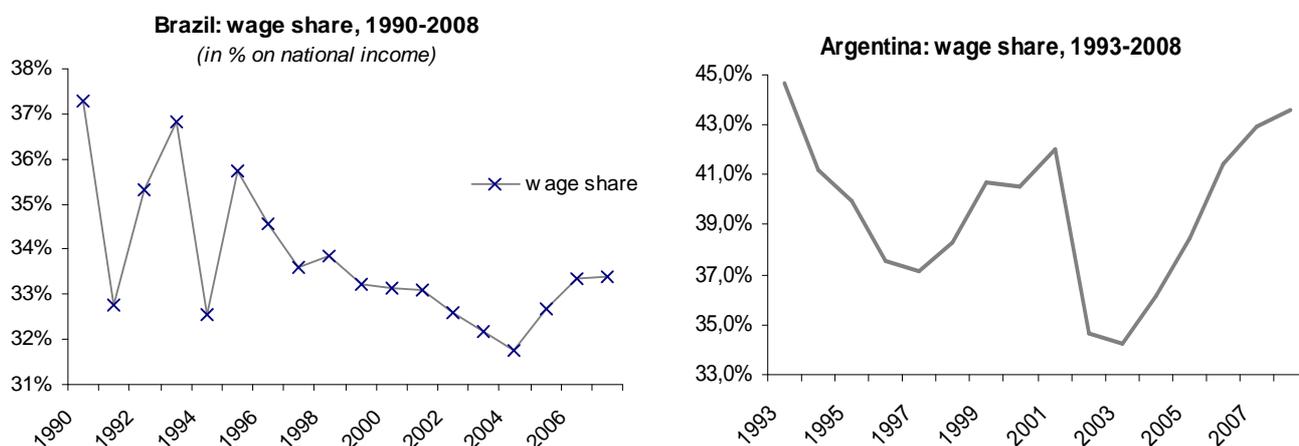
For the time being, even if proper industrial policies are totally lacking in Argentina, this country shows a more favorable situation to take up again an industrial development strategy.

Argentina & Brazil
GDP growth, 2000-2009
(real growth rate, %)

	Argentina	Brazil
2000	-3,0	0,8
2001	0,8	4,2
2002	-14,7	1,9
2003	-14,7	1,0
2004	8,7	-0,2
2005	8,3	5,1
2006	9,2	2,3
2007	8,5	3,7
2008	8,7	5,4
2009	6,8	5,1

Source: ECLAC.

Since 2003, Argentina's economic growth rates have almost doubled the Brazilian figures for the same period. Although Argentina has shown higher inflation rates than Brazil in the same period, income distribution has been improved in Argentina *vis-à-vis* Brazil since 2002.



Source: Ipeadata and Mecon (Ministerio de Economía y Finanzas de Argentina)

On the other hand, given the fact that Argentina has not an industrial base like Brazil, these successful results can be ephemeral if there is not a marked change in the productive structure. In order to overcome external constraints and enhance economic growth in the future, Argentina could aim at coordinating both industrialization and expansionary demand-management policies, and in so doing, diversify the productive structures. If not so, it will be very hard to continue in the future with the current Argentina's exchange rate policy, if industrial and development policies are not applied. This is because Argentina is subject to increasing pressures and conflicts from the agribusiness-financial groups and workers. Finally it is important to point out that the strategy Argentina has followed over the recent years cannot be regarded as being a neoliberal program, rather the current situation seems to depict a transitional stage with an ultimate uncertain end.

Regarding Brazil, the macroeconomic policy is part of a neoliberal strategy of integrating the country into the world market, where financial or rentier interests benefit from the current monetary regime, while the manufacturing sector and workers bear the costs of this policy. Certainly, this negative macroeconomic trend on growth and income distribution regime was in some way offset by specific policies, as the federal government's minimum-income program, the "Bolsa-Família", or the role of the Brazilian National Development Bank (BNDES), which in its turn offered a series of special credit facilities for enterprises and exports, especially in time crisis (see Barbosa, 2010).

However, as Bastos & Braga (2010) point out, the exchange rate appreciation has a negative effect both on competitiveness and on exports and imports composition (for instance, the *real* import coefficient between 2004 and 2008 rose more than 60%). On the other hand, in the commodity export sector the effect due to exchange rate appreciation can be compensated by rising quantities and commodity prices. But it is extremely harmful for industrial exports and for the survival of many industrial sectors.

Finally, despite its strong industrialization process in the 1960s, the political-social and ideological changes in the 1980s and in the 1990s have created internal conditions in Brazil for the emergence of a new coalition of rentiers that imposed the free capital mobility and high financial earnings (Bastos & Salles, 2010). And these demands have been incorporated as immutable parameters of macroeconomic policies. This new coalition of rentiers strengthens its power through the continuity of the macroeconomic policy.

5. Concluding remarks

In the cases under analysis, the relationship between interest rates and price level postulated by the monetary theory of distribution must be qualified. Thus, the exchange rate channel has actually played a decisive role in those cases in which dear money policies have succeeded in checking inflation (i.e. in Brazil's case). On the other hand, in the case of Argentina the exchange rate policy has been the main battlefield of the distributive conflict between workers, industrial capitalists and agribusiness-financial groups.

Thus, the cases under analysis seem to suggest that normal distribution is actually governed by a monetary determination, where no room to a "natural" or "neutral money" determination is possible. The specific way of governance in this determination is an exchange rate policy instead of an interest rate policy. The most important issue in this context is that no mechanical or "a priori" link can be generally claimed between the exchange rate, interest rate and the wage rate.

In this context, the main differences between Argentina and Brazil emerge since 2002, where the exchange rate and monetary policy diverge. In the case of Argentina the interest rate becoming in a lesser important variable and the exchange rate it is the main place of the distributive conflict and inflation process. On the other hand, in Brazil the interest rate affects the exchange rate and, in turn, it affects prices and inflation too.

Obviously the choice for one or other exchange rate policy depends of the relative power of each social group in the social and economic structure. Thus, after the default debt of Argentina in 2002, this country choose an depreciated domestic currency (a high exchange rate) and pay the cost of higher inflation in a context of the higher wage

resistance. Likewise, tax exports (that determine a low domestic price to wage goods) entailed a conflict with agribusiness groups.

In the Brazilian case, however, there is a low wage resistance and since 2003 the exchange rate policy has been used for check inflation through domestic currency appreciation. Brazil has a lower inflation but has a primarization process in its exports structure and a lower growth rate.

Thus the cases of Argentina and Brazil show that the so-called unbalanced productive structure underlying the factors that influence and constrain the Central Bank's policy and those factors are focused on exchange rate policy. In the heart of development problems we have the central feature of the distributive conflict between these three actors in their fight for redistributing the associated costs of the exchange rate policy impinging on each one. These structural factors primarily govern the monetary and the exchange rate policy and stimulate a specific form of distributive conflict. This struggle is for who is to pay for the burden of the diverse exchange rate policy in time. Finally, this different interaction explains the diverse results that we can see in the Argentina and Brazil economies in terms of inflation, distribution and growth in the recent period.

References:

Arida, P. & Resende, L. (1985). "Recessão e taxa de juros: o Brasil nos primórdios da década de 1980", *Revista de Economia Política*, jan.-mar. 1985.

Barbosa, N. (2010). "Latin America: Counter-Cyclical Policy in Brazil: 2008-09", *Journal of Globalization and Development*, Volume 1, Issue 1 2010 Article 13.

Barbosa, N., Silva, J., Goto, F. and Silva, B. (2010). "Real Exchange Rate, Capital Accumulation and Growth in Brazil", Paper to be presented at the Fourth Annual Conference on Development and Change, Johannesburg, South Africa, April 9-11, 2010.

Barbosa-Filho, N. (2008). "Inflation Targeting in Brazil: 1999-2006", *International Review of Applied Economics*, 22 (2008), 2, 187-200.

Bastos, C. & Braga, J. (2010). "Conflito Distributivo e Inflação no Brasil: uma aplicação ao período recente", XV Encontro Nacional de Economia Política, SEP, junho de 2010, São Luis, Brazil.

Bastos, C. & Salles, E. (2010). "Adeus capitalismo dependente. Olá neo-primário exportador?", *Universidade Federal Fluminense*, Rio de Janeiro, Brazil, mimeo.

Canitrot, A. (1981). "Teoría y práctica del liberalismo. Política antiinflacionaria y apertura económica en la Argentina, 1976-1981", *Desarrollo Económico*, Vol. 21, No. 82. (Jul. - Sep., 1981), pp. 131-189.

Cavallo, D. (1977). "Los efectos recesivos e inflacionarios iniciales de las políticas monetaristas de estabilización", Banco Central de la República Argentina, *Ensayos Económicos*, Nro.4, diciembre de 1977, 2da Parte, p.107-148.

Chang, R. (2007). "Inflation Targeting, Reserves Accumulation, and Exchange Rate Management in Latin America", Rutgers University/ National Bureau of Economic Research, October.

Diamand, M. (1986) "Overcoming Argentina's Stop and Go Economic Cycles" in J. Hartlyn e S. Morley (edits) *Latin American Political Economy: Financial Crisis and Political Change*. Boulder: Co West view Press;

Dooley, M.; Folkerts-Landau, D.; & Garber P. (2003). "An Essay on the Revived Bretton Woods System", Working Paper no.w9971, NBER, Cambridge, MA, September 2003.

Frenkel, R. & Rapetti, M. (2010). "A Concise History of Exchange Rate Regimes in Latin America".

Frenkel, R. (2004). "Right" Prices for Interest and Exchange Rates', included in "Diversity in Development Reconsidering the Washington Consensus", Edited by Jan Joost Teunissen and Age Akkerman, FONDAD, The Hague, December 2004, www.fondad.org.

Frenkel, R. (2008). "The competitive real exchange-rate regime, inflation and monetary policy", *Cepal review* 96, December 2008.

Galindo, L. & Ros, J. (2008). "Alternatives to inflation targeting in Mexico", *International Review of Applied Economics*, 22 (2008), 2, 201-214.

Lavoie, M. & Wang, P. (2009). "The compensation thesis, as exemplified by the case of the Chinese central bank", ROBINSON, Working Paper No. 09-02, March 2009.

Medeiros, C. (2010). "Auge e Declínio dos Estados Desenvolvimentistas. Novos Desafios", presented in international seminar "Estado Desenvolvimentista: Crise e Retomada?", UFRJ, Rio de Janeiro, jun 2010.

Medeiros, C. & Serrano, F. (2006). "Capital Flows to Emerging Markets under the Flexible Dollar Standart: A Critical View Based on Brazilian Experience", In: Matias Vernengo. (Org.). *Monetary Integration and Dollarization*. Northampton: Edward Elgar, 2006, p. 218-242.

Palumbo., A. (2008). "On the theory of the balance-of-payments-constrained growth", forthcoming.

Pivetti, M. (1991). "An Essay on Money and Distribution", London, Macmillan.

Pivetti, M. (1999). "On Sraffa's, cost & surplus concept of wages and its policy implications", *Rivista Italiana degli Economisti*, Vol.IV, nro 2.

Pivetti, M. (2001). "Money Endogeneity and Monetary Non-Neutrality: A Sraffian Perspective", in: Rochon, L.-P., Vernengo, M. (eds.), *Credit, Interest Rates and the Open Economy. Essays in Horizontalism* (Cheltenham: Edward Elgar).

Pivetti, M. (2007). "Distribution, Inflation and Policy Analysis", *Review of Political Economy*, 19:2, 243 – 247.

Pivetti, M. (2008). "Interest and inflation: some critical notes on 'the new consensus monetary policy model'", october 2008, Università di Roma "La Sapienza", mimeo.

Rodríguez, O. (2001). "Prebisch: Actualidad de sus ideas básicas", *Revista de Cepal Nro75*, diciembre de 2001.

Serrano, F. & Ferreira, S. (2010). "Commodities, Câmbio e Inflação de Custos no Brasil 1994-2009", *Versus Acadêmica*, Nro.4, Abril de 2010.

Serrano, F. & Medeiros, C. (2003). "Inserção externa, exportações e crescimento no Brasil". In: J. C. Ferraz; M. Crocco; L. A. Elias. (Org.). *Liberalização econômica e desenvolvimento*. São Paulo: Futura, 2003, p. 324-349.

Serrano, F. (2010). "Juros, câmbio e o sistema de metas de inflação no Brasil", *Revista de Economia Política*, vol. 30, nº 1 (117), pp. 63-72, janeiro-março/2010.

Stirati, A. (2001). "Inflation, unemployment and hysteresis: an alternative view", *Review of Political Economy*, 13 (2001), 4 (October), 427-451.

Summa, R. (2010). "Um modelo alternativo ao "novo consenso" para economia aberta", Unpublished Ph.D. thesis, Instituto de Economia da Universidade Federal do Rio de Janeiro, 2010 march.

Vernengo, M. (2001). "Foreign Exchange, Interest and Prices: The Conventional Exchange Rate", in *Credit, Interest Rates and the Open Economy: Essays on Horizontalism*, Louis-Philippe Rochon (Editor), Matias Vernengo (Editor), Edward Elgar Pub.

Vernengo, M. (2008). 'The Political Economy of Monetary Institutions in Brazil: The Limits of the Inflation-targeting Strategy, 1999-2005', *Review of Political Economy*, 20:1, 95-110.