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Macroeconomic Adjustment and Structural Change: The Experience of Argentina, Brazil and Chile in 2000-2010

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***Abstract*:** This paper attempts to throw light upon the influence macroeconomic policies have on structural change and microeconomic behaviour. We compare the cases of Chile and Brazil, on the one hand, and Argentina on the other, as these countries opted for different macroeconomic policy regimes. Whereas Chile and Brazil adopted an 'inflation targeting' regime, Argentina proceeded on the basis of an administrated exchange rate regime. The main conclusion of our research is that both regimes were incapable of adequately dealing with issues of international competitiveness and of equity improvement and had to be supplemented with further public sector interventions beyond management of the fundamentals in the economy. The evidence suggests that more than adequate management of macro fundamentals is needed in 'real life' policy making.

***Keywords*:** macroeconomic policy, macro-to-micro interactions, structural change

***JEL classifications*:** E60, O11

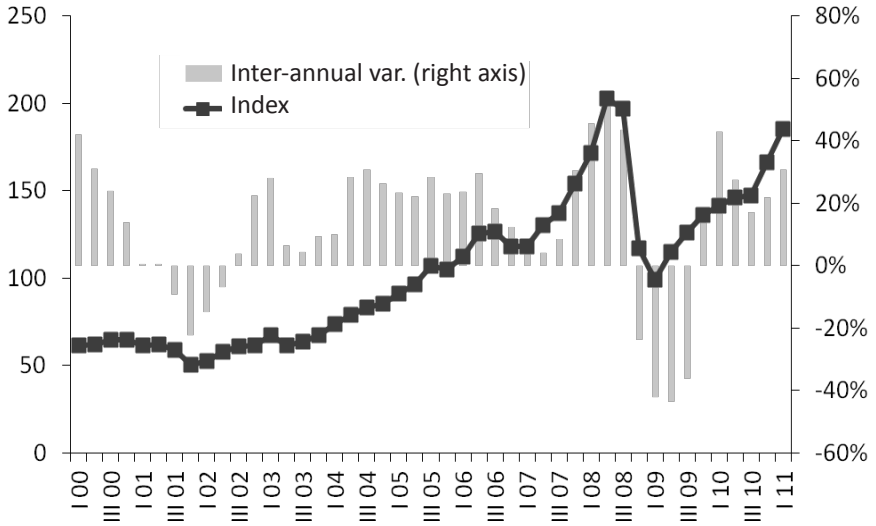
1. Introduction[1]

World prices for minerals, oil and foodstuffs increased sharply since late 2003. After a transitory setback from late-2008 to mid-2009, the upward trend became once again strong as from the fourth quarter of 2009 (Figure 1).

The upward trend of world commodity prices has been steeper and longer than in previous opportunities, such as for example, in the 1960s (Bello and Heresi, 2008). In spite of this however, it is still much too early in the process to know if we are in front of a cyclical 'bubble' which is due to melt away sometime shortly or if, instead, this is a stable new model for the world economy determined, among other things, by the recent entry and staggering expansion of China (Bello *et al*., 2010).

Demand and supply explains the increase in commodity prices. On the demand side we find the aforementioned entry of China in world markets for industrial commodities – steel, pulp and paper, minerals, soy bean oil and more. Inventory reductions and wars appear as supply side forces working in the same direction. Additional reasons include a weaker US dollar, low interest rates in DCs (Developed Countries), expanding demand for bio-fuels and the significant penetration of pension funds and hedge funds in future markets for several commodities.

Figure 1: Commodity World Prices (*), 2003-2011, Index 2005=100



(*) Includes foodstuff, oil, metals, energy and industrial raw materials.
Source: Based on data from the IMF.

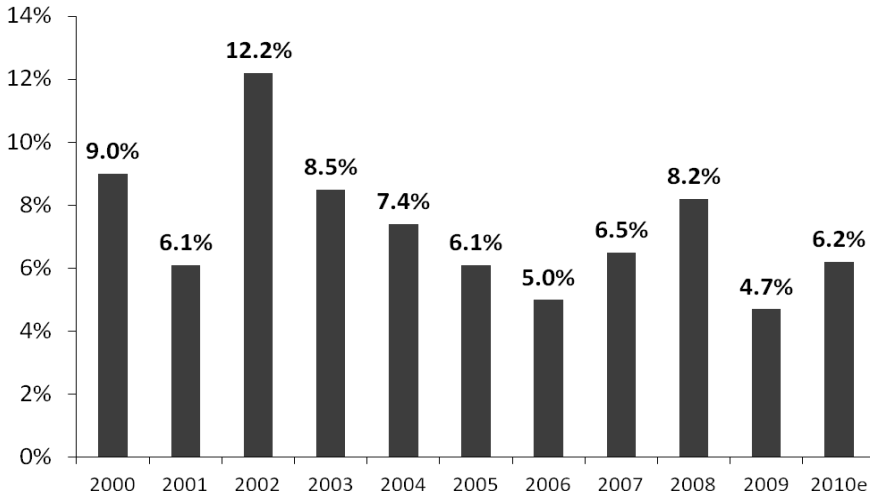
Concomitantly with the above, capital movements from DCs to LDCs (Less Developed Countries) became quite strong as from late 2004, pushing up the price of bonds and shares in the stock market of many LDCs. Such capital movements were induced by the much lower interest rate in DCs *vis à vis* LDCs and, also, by a number of financial innovations which induced portfolio diversification in search of higher financial yields (Ocampo, 2007).[2]

Both effects – higher world commodity prices and capital movements from the centre to the periphery – significantly affected the behaviour of the macro fundamentals of LDCs.[3] On the one hand, as from early 2007, world prices for foodstuffs increased sharply following the upward trend previously exhibited by oil, minerals and metals.

As a consequence of the above, the average rate of inflation increased in Latin America from 5 per cent in 2006 to 8.2 per cent in 2008 (Figure 2). After a short term downfall in 2009, the rate of inflation increased again in 2010.

On the other hand, Latin American terms of trade improved nearly 24 per cent between 2003 and 2010 as export prices grew faster than import prices (except for some of the Caribbean nations). Therefore, trade and current account balances became highly positive (Figure 3) until 2007. In the above setting, the gradual appreciation of local exchange rates resulted in falling price-competitiveness for most of the Latin American countries.

Figure 2: Consumer Prices in Latin America and the Caribbean. 2000-2010, Annual rate of Change (December to December) [4]



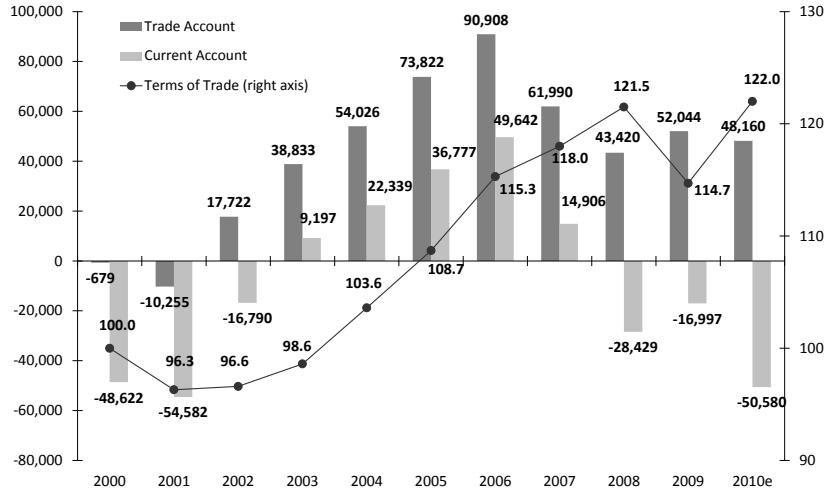
Source: Based on data from ECLAC.

Given the above scenario we examine here the specifics of the Argentine, Brazilian and Chilean evolution over the past decade. In Section 2, we look in further detail at the macroeconomic adjustment policy implemented by each one of the above mentioned countries in response to changes in the external environment.

In Section 3, we examine the impact differences in macroeconomic adjustment the regime had upon the structure of the economy, the behaviour of the external sector and labour productivity growth in different fields of economic activity. In Section 4, we look at the dynamics of adjustment in the

labour market and bring on board some various social indicators reflecting changes in poverty and income distribution.

Figure 3: Trade and Current Accounts and Terms of Trade in Latin America and the Caribbean, 2000-2010, in US$ million and Index 2000=100, respectively



Source: Based on data from ECLAC.

In looking at Chile and Brazil on the one hand and Argentina on the other, we intend to put into perspective the results attained in the former two economies, which adopted an inflation targeting regime, compared to the later one, which opted for an administrated floating exchange rate regime. From a theoretical point of view, this paper attempts to throw some light on the influence changes in macroeconomic management exert upon microeconomic functioning – i.e. the structure and behaviour of the economy – and upon the labour market and social indicators. Fanelli and Frenkel (1994) advanced the hypothesis that changes in macroeconomic policy affect (and are affected by) changes in the structure of the economy and by differences in sectoral adjustment behaviour.

From an empirical point of view, the present paper participates in the current discussion regarding the existence of episodes of 'Dutch disease' in Latin America. In this regard, some empirical evidence for Latin America and the Caribbean shows that several countries were affected by the 'Dutch disease' throughout their recent history: Bolivia, Brazil, Ecuador, Mexico, Peru and Venezuela (Mulder, 2006).

Particularly, this paper will provide evidence that is aligned with the occurrence of said disease, such as that boom phases in prices of natural

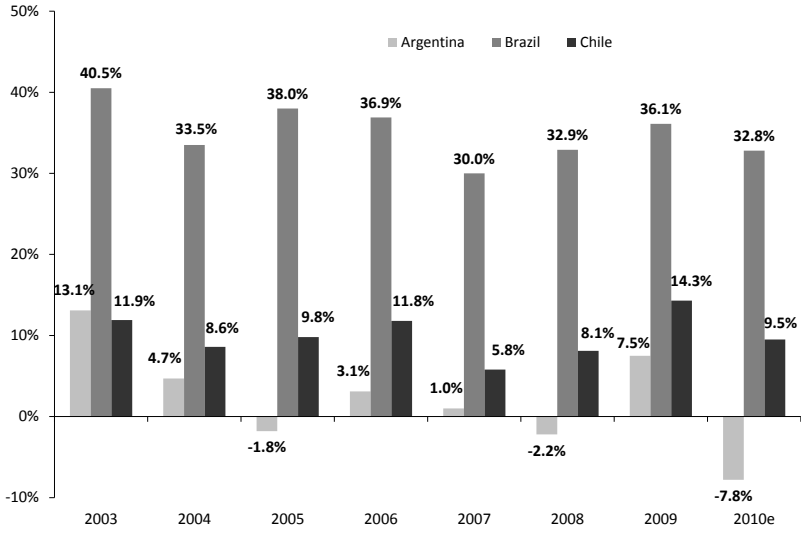
resources determine the appreciation of real exchange rates (see, for example, Spatafora and Warner, 1995; Magud and Sosa, 2010); and that the increase in exports related to natural resources decrease non-traditional exports (see for example, Harding and Venables, 2010).

2. Macroeconomic Policy Regimes in Argentina, Brazil and Chile

As far as macroeconomic policy is concerned, both Brazil and Chile opted during the past decade for inflation targeting regimes to which they were already committed in the 1990s. Chile was second to New Zealand in adopting such a policy, while in 1999 Brazil followed the Chilean example (Broto, 2008).

As a consequence of the above both nations adopted high interest rates policies to curb inflationary pressures derived from the evolution of international prices (Figure 4).

Figure 4: Real Interest Rates in Argentina, Brazil and Chile (deflated by domestic CPIs), 2003-2010, Annual Rates



Source: Based on data from ECLAC and private estimations (Argentina).

This policy regime acted upon inflation through two quite different channels. On the one hand, a higher interest rate negatively affected aggregate demand, lowering pressure upon domestic prices.

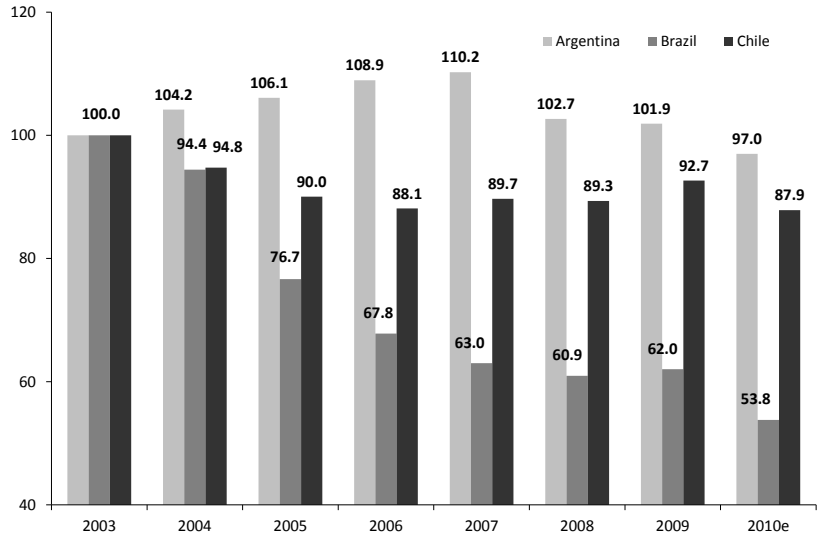
On the other hand, a high interest rate in the context of abundant international liquidity induced capital flows from DCs to LDCs, reducing the

domestic nominal exchange rate, expanding imports and further reducing the rate of domestic absorption of goods and services. It also increased the financial return to foreign investors.

In contrast to Brazil and Chile, Argentina opted for an administrated floating exchange regime aiming at minimising the appreciation of the local currency, which could be expected to result as a consequence of improvements in terms of trade and via the inflow of foreign capitals. In other words, Argentina opted – without much success, as it will be shown further down the paper – to control inflation by managing monetary aggregates, while simultaneously trying to stop the impact of rising world food prices on inflation by adopting a complex system of export duties and subsidies for grains, beef and other staples strongly represented in the local consumption basket. It also attempted to curb capital inflows by introducing various forms of control on the capital account.

As a result of the above, Argentina managed to keep its real exchange rate under control between 2003 and 2010 – although price competitiveness gradually eroded during the last part of that period – while Chile (and more so Brazil) experienced the appreciation of their exchange rates and the negative impact upon their external trade accounts (Figure 5).

Figure 5: Effective Real Exchange Rate for Argentina, Brazil and Chile, 2003-2010, Index: 2003=100



(*) The effective real exchange rate is calculated weighting the real bilateral exchange rate of each trade partner by the share of trade (exports plus imports) with each partner in total trade.
Source: Based on data from ECLAC and private estimations (Argentina).

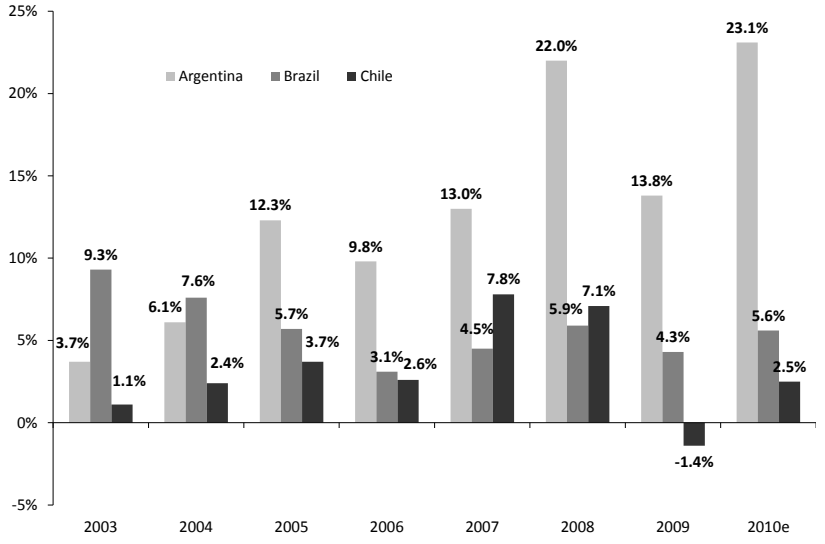
Differences in the rates of currency appreciation between Brazil and Chile can be explained by the different objectives both countries tried to attain through their intervention in the exchange market. In the case of Brazil, the exchange rate was subordinated to monetary policy (Prates *et al*., 2009). So, Brazilian authorities did not attempt to increase the real exchange rate, but opted instead for accumulating reserves and for reducing macro volatility, to reach the inflation target.

In contrast, the Chilean Central Bank intervened in the exchange market with the purpose of strengthening domestic liquidity in the context of volatile and unstable external conditions, a strategy that was also considered consistent with the idea that the real exchange rate was below its long term equilibrium (Kacef and López-Monti, 2010).

3. Impact of the Macro Policy Regime upon Inflation and the Structure of the Economy

As described above, 'inflation targeting' regimes aim at reducing the impact of international commodities' prices over domestic prices. In this regard, nations that implemented such a policy attained inflation rates that were below the regional average (Figure 6).

Figure 6: Consumer Prices in Argentina, Brazil and Chile, 2003-2010, Annual Growth Rate



Source: Based on data from ECLAC and private estimations (for Argentina).

Contrary to this trend, the inflation rate was comparatively high in Argentina between 2007 and 2010, as that country opted to preserve a high RER (real exchange rate) instead of controlling inflation. As a consequence, unlike Brazil and Chile, increases in tradable goods' prices were not attenuated by an appreciation of the nominal exchange rate in Argentina. Even more so, that policy further advanced the Argentine tradable sector, generating additional inflationary pressures.

On the other side, in both Brazil and Chile the appreciation of the nominal exchange rate, resulting from both the rise in terms of trade and the arrival of foreign capital attracted by high real interest rates, triggered 'Dutch Disease' episodes.[5]

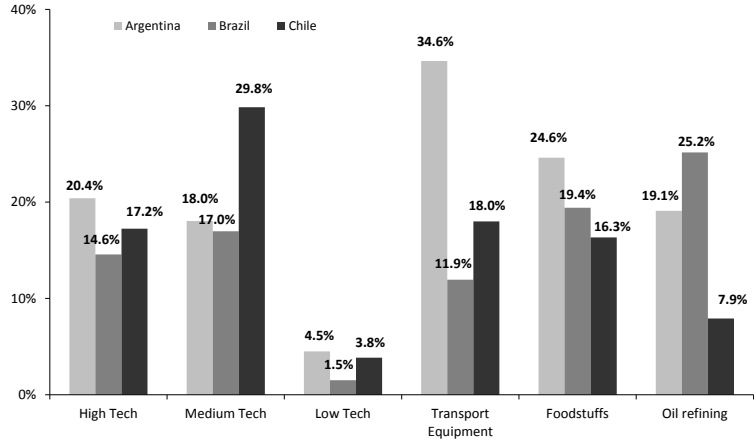
With the purpose of illustrating the above it is relevant to compare the production performance of the three economies in recent years. The positive effects of preserving the stability of the real exchange rate become self-evident when comparing the evolution of exports during the last decade in the three countries. The accumulated growth of exports – in volume – between 2003 and 2010 was notably higher for Argentina (59.4 per cent) than for Brazil (34.6 per cent) and Chile (25.4 per cent).We also notice that, in line with the *a priori* expectation of an increasing impact of the 'Dutch disease' effect, both Brazil and Chile showed negative export figures in 2007-2010 – 4.9 per cent and 5.8 per cent respectively – while Argentina maintained a high and positive 15.4 per cent growth rate over the same period. In terms of the composition of industrial exports Argentina showed an 'across the board' effect impacting most manufacturing activities with the exception of medium tech sectors and oil refining (Figure 7).

Examining the 'technological content' of exports it is interesting to notice that all three of these countries did better in industries of medium technological complexity than in low technology sectors, indicating that competing in areas where Chinese industries are entering at a rapid pace in world markets might be quite difficult, independent of the exchange rate policy regime each country follows. As a corollary of the above, we notice the Brazilian – to a lesser extent the Chilean – external sector deteriorating after 2007, in spite of the continuous growth in international commodity prices. Contrariwise, Argentina attained a significant trade account surplus over the same period (Figure 8).

The falling competitiveness of Brazilian and Chilean exports and the displacement of domestically-produced goods by imported substitutes affected the growth performance of industry. In effect, Argentine manufacturing posted an 8.1 per cent annual growth rate between 2004 and 2008, while the comparable figure for both Brazil and Chile was 3.8 per cent over the same period.[6]

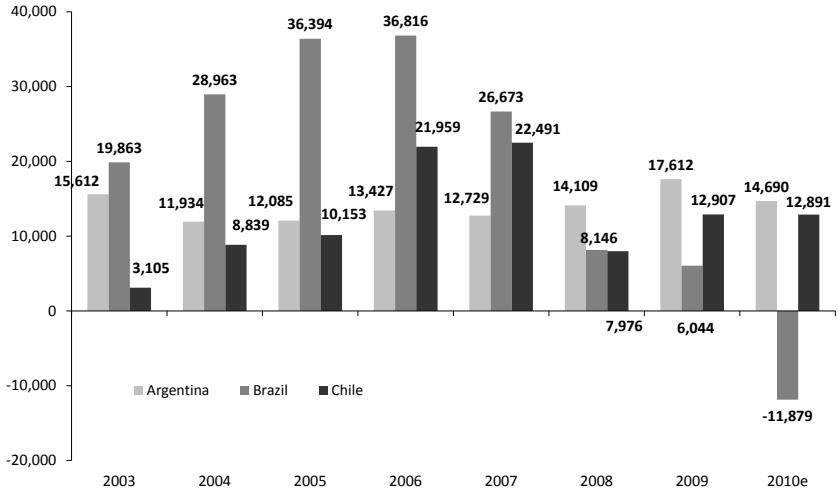
In addition to the above, we also notice that the expansion of manufacturing production appears as evenly distributed across industries in Argentina, while

Figure 7: Argentine, Brazilian and Chilean Industrial Exports, 2005-2007, Annual Rate of Growth



Source: Based on data from ECLAC.

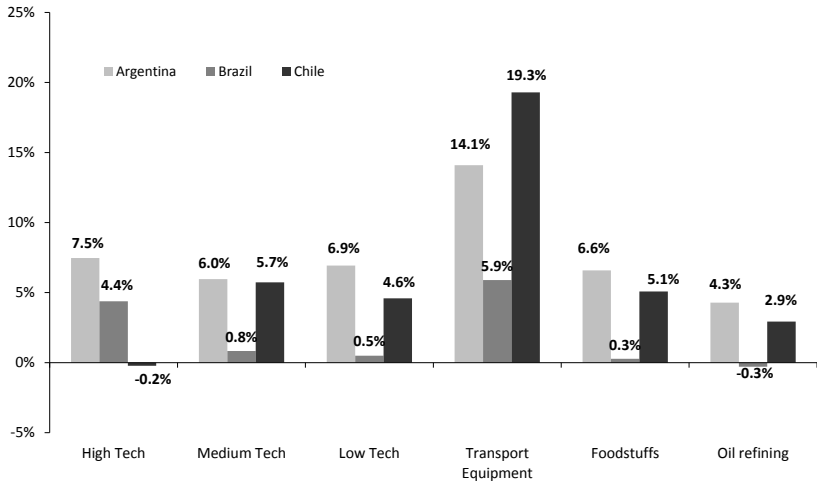
Figure 8: Argentine, Brazilian and Chilean Trade Account Balance, 2003-2010, in US$ million



(*) Imports are accounted at FOB prices.
Source: Based on data from ECLAC.

this was not the case for Brazil and Chile (Figure 9). Only high tech sectors and vehicle production managed to expand, while the rest of manufacturing production remained stagnant in the case of Brazil. Low tech sectors such as shoes and garments, previously quite significant in Brazilian exports, could not resist the simultaneous impact of the appreciation of the real exchange rate and the irruption of Chinese imports.

Figure 9: Argentine, Brazilian and Chilean Industrial Production by Sectors, 2005-2007, Annual Rate of Growth



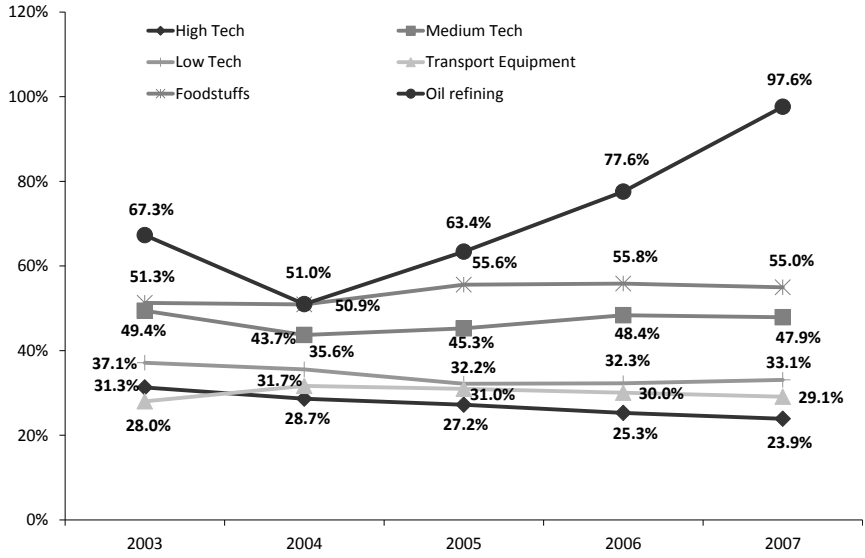
Source: Based on data from ECLAC.

Although the figures so far examined concerning exports and manufacturing growth reflect a better Argentine performance *vis à vis* Brazil and Chile, such a positive view disappears altogether when we look at labour productivity differentials *vis à vis* the international technological frontier. For the purpose of undertaking this comparison, we have chosen US labour productivity as a reference point with which to compare the local situation.Between 2003 and 2007, only Oil Refining, a few Foodstuffs Industries and Transport Equipment partially closed the gap with the international technological frontier – represented by United States' productivity – in Argentina (Figure 10a).

Contrariwise, low and high tech Argentine industries lost ground *vis à vis* the international technological frontier. In the first case, low tech industries, significant increases in productivity would have been necessary to compete

internationally with Asian firms which have the benefit of lower labour costs and higher scale economies. In the second case, high tech industries, the international technological frontier is much further away to start with, and expands faster, making Argentine firms insufficiently fit to compete internationally, even after the devaluation of the local exchange rate.

Figure 10a: Productivity Differential regarding US by Sector – Argentina, 2003-2007, Argentine Productivity Compared to US's Productivity

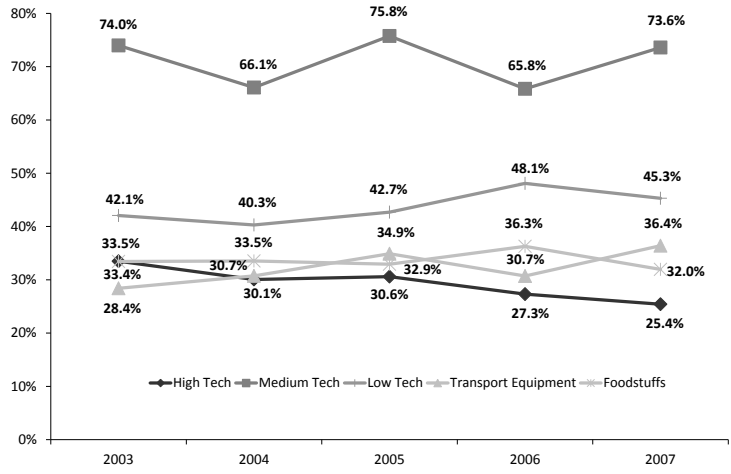


Source: Based on data from ECLAC.

The dynamics of the situation was similar – or even worse – in those cases in which the appreciation of the real exchange rates made competitiveness in world markets even a more difficult proposition. In Chile, convergence toward the international state of the art was observed for oil refining, transport equipment and low tech activities, while high tech sectors lagged further behind (Figure 10b).

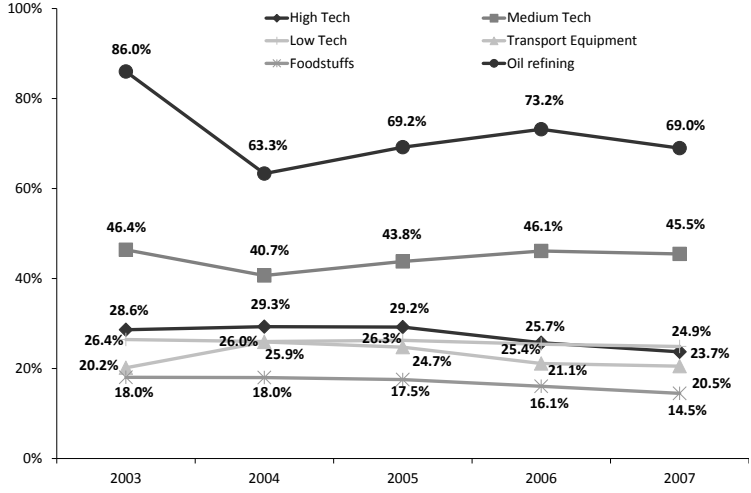
In Brazil, most sectors fell behind the international technological frontier with the exception of Transport Equipment (Figure 10c). High tech sectors lost relatively more *vis à vis* the international state of the art in the case of Brazil.

Figure 10b: Productivity Differential regarding US by Sector – Chile, 2003-2007, Chilean Productivity Compared to US's Productivity



Source: Based on data from ECLAC.

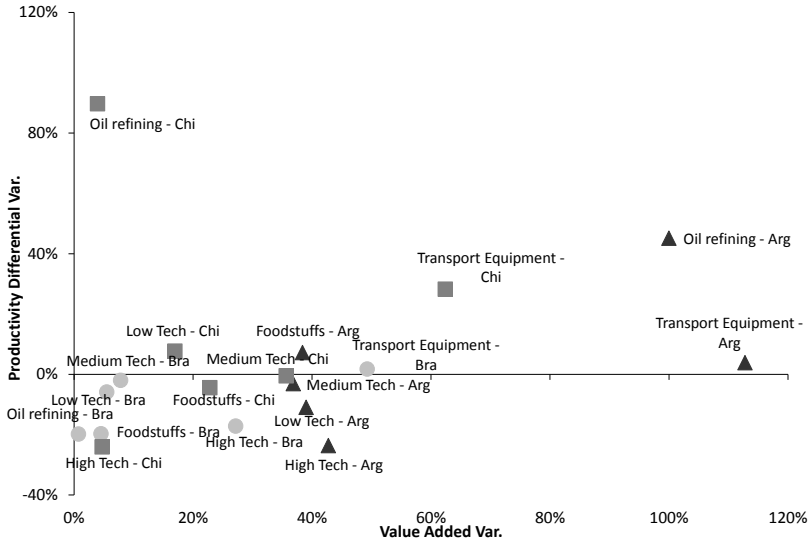
Figure 10c: Productivity Differential regarding US by Sector – Brazil, 2003-2007, Brazilian Productivity Compared to US's Productivity



Source: Based on data from ECLAC.

In conclusion, we can say that all three nations lost ground *vis à vis* the international technological frontier independent of the macroeconomic policy regime they all adopted. In relative terms the situation was even worse in high tech sectors which were further away from the international state of the art to start with, while small relative improvements can be uncovered in Foodstuffs, Oil Refining and Transport Equipment (Figure 11).Considering the case of Argentina we notice that a high RER does not constitute a sufficient condition to close the relative gap with the international technological frontier. On the other hand, the case of Brazil suggests that a significant appreciation of the real exchange rate affects industrial competitiveness 'across the board' negatively affecting all sectors in their quest for closing the productivity gap with the global state of the art**.**

Figure 11: Accumulated Variation in Productivity Differentials and Value Added by Sectors – Argentina, Brazil and Chile, 2003-2007



Source: Based on data from ECLAC
Note: Arg-Argentina, Bra-Brazil, Chi-Chile

4. Impact of the Macro Policy Regime upon the Labour Market and Social Indicators

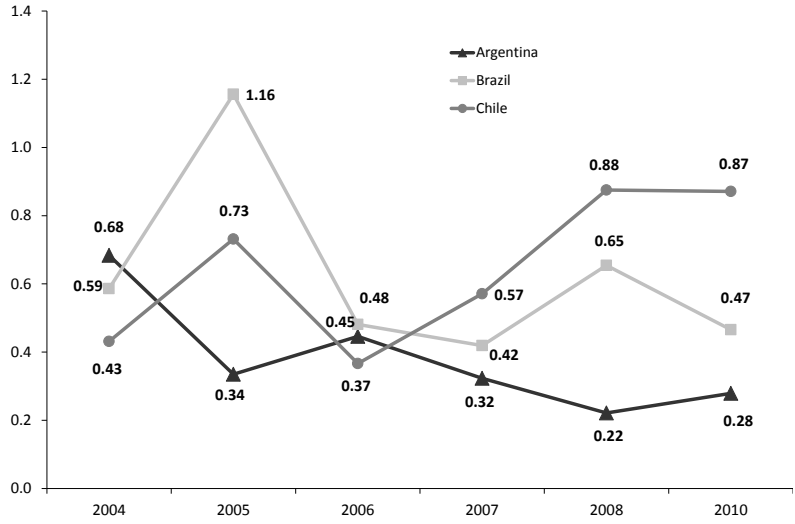
In contrast to the 1990s, a period in which a systematic destruction of jobs can be noticed throughout Latin America as a result of trade liberalisation policies,

the dynamics of sustained growth experienced by Argentina, Brazil and Chile brought continuous reductions in unemployment rates.

In fact, unemployment rates in the three economies dropped from two digits levels at the beginning of the last decade to rates between 7 per cent and 8 per cent in 2010. Argentina attained the biggest reduction in unemployment (approximately 10 percentage points) in this period, coming out of the severe macroeconomic crisis of 2001/2002.

It is interesting to observe that despite a significant appreciation of the real exchange rate observed in Brazil and Chile during more recent years, these countries still maintained relatively high employment/output elasticity (Figure 12). Contrariwise, Argentina in spite of preserving a high real exchange rate has lower employment/output elasticity and therefore did not create new jobs at the same rate as the former two cases.

Figure 12: Employment/Output Elasticity in Argentina, Brazil and Chile, 2004-2010



Source: Based on data from ECLAC, Argentine Ministry of Economy and Central Banks of Chile and Brazil.

Reflecting the dynamic expansion of the labour market and comparatively low inflation levels of Brazil and Chile, a reduction in the incidence of poverty and improvements in income distribution can be observed in all three countries. In parallel both Brazil and Argentina implemented active social policies during

the past decade. In fact, social public expenditure in both nations increased about 4/5 percentage points – measured in relation to GDP – in recent years, contrasting with the relative stagnation of social expenditure in the case of Chile.

The Brazilian '*Bolsa Familia*' programme, created in 2003 in the context of the '*Hambre Cero*' strategy is by far the more significant example of the new type of social policies recently implemented in these countries. The programme, currently involving some twelve million families, grants direct monetary transfers in *quid pro quo* for children to be sent to school and to be taken for systematic medical controls.

The Argentine and Chilean counterparts – *Asignación Universal por Hijo* in the case of Argentina and *Chile Solidario* in the case of Chile[7] – currently represent the more significant strategic actions implemented by these countries to reduce the incidence of poverty and indigence (CEPAL, 2010). These programmes aim at expanding consumption in the low income bracket of the distribution by means of monetary transfers – reducing poverty in the short term – while at the same time they intend to break the intergenerational reproduction of poverty, by preserving assistance to school and health control centres.

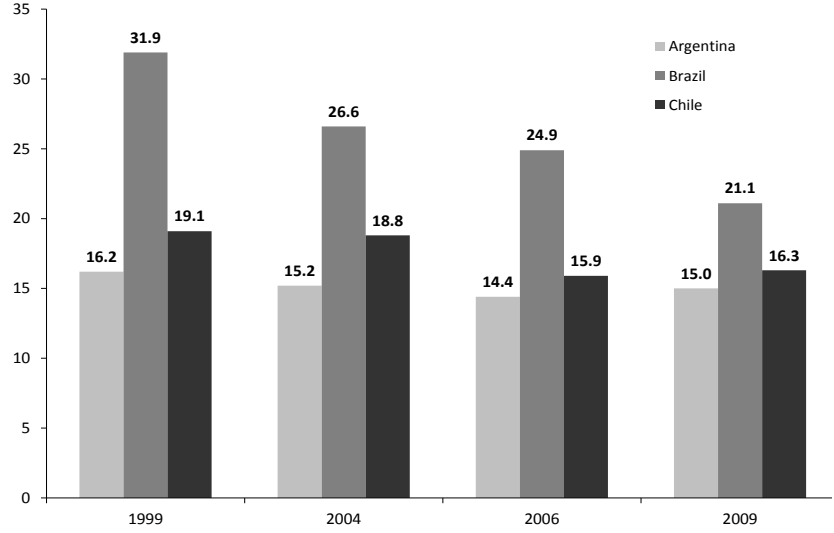
Naturally, the effects of conditioned transfer programmes on poverty and income inequality, depend on their focus and coverage and on the amount of the subsidy. In this respect, the Brazilian programme has greater scope, as it addresses 26.4 per cent of total population (84.6 per cent of those under the poverty line), against 8.3 per cent (46.4 per cent) in the case of the Argentine *Asignación Universal por Hijo* and 6.8 per cent (51.7 per cent) in the case of *Chile Solidario*. Besides, the *Bolsa Familia* transfers absorb 0.47 per cent of Brazilian GDP, while the Argentine and Chilean programs involve a smaller percentage, 0.2 per cent and 0.11 per cent respectively.

Macroeconomic policy aiming at curbing inflation and the above mentioned social policies, contributed to a clear reduction in inequality. The impact was higher in Brazil and less significant (but still important) in the case of Chile. Contrariwise, in spite of the social policies implemented in Argentina the negative impact of inflation militated against the continuous reduction of inequality. After a significant reduction in the index it has remained stagnant in the latter years of the period under consideration (Figure 13)**.**

These results can be replicated with the use of Gini coefficients. Brazil shows the best performance, followed by Chile[8] and then by Argentina. For Brazil, the reduction in the Gini index of the last decade should be contrasted with the continuous increase in income inequality that obtained since the 1960s. In fact, the recent evolution of this index suggests a complete reversal of the situation prevailing in previous decades.

The participation of the middle class in Brazil's total population increased systematically, rising from 37.6 per cent in 2003 to 50.4 per cent in 2009. The

Figure 13: Quotient between Incomes of the Last Decile and the First Four Deciles in Argentina, Brazil and Chile, 1999-2009



Source: Based on data from ECLAC.

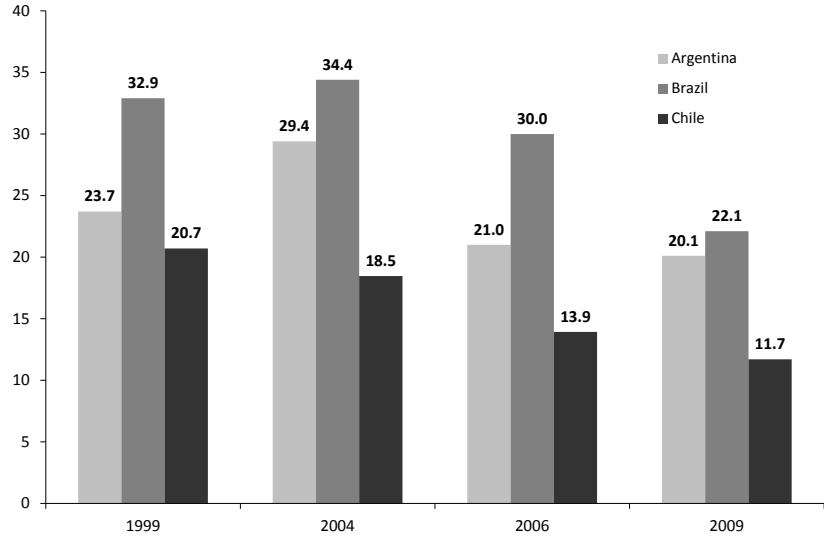
latter figure implies that approximately 29 million Brazilians have joined the middle class since 2003.

We can conclude that economic growth and the improvement in income distribution, in a context of low inflation, has contributed to a reduction in poverty, which was largest in Brazil and somewhat less significant in Chile. Improvements in income distribution explain more than 50 per cent of poverty reduction in both nations (CEPAL, 2010: 2).On the other hand, poverty only decreased markedly in Argentina between 2003 and 2006. After that, the high rate of inflation constituted one of the main factors explaining why the fight for poverty reduction stagnated since 2007 (Figure 14).

In synthesis, it can be said that growth resulted in the reduction of unemployment in all three countries. It is to be noted that the Argentine policy aiming at the preservation of the real exchange rate did not result in a higher rate of job creation. On the contrary, in spite of the appreciation of the real exchange rate, the employment/output elasticity remained higher in Brazil and in Chile.

As far as social indicators are concerned all three countries attained a positive performance, although of differing magnitude. In the first place, a low inflation rate and a high rate of social expenditure allowed Brazil to attain better social indicators, completely reversing the unduly high Gini coefficient

Figure 14: Poverty in Argentina, Brazil and Chile, 1999-2009, as a % of population



Source: Based on data from ECLAC and Universidad Católica Argentina.

of previous decades and 'creating' a 'new' middle class of more recent vintage. In the case of Chile the dynamics of the process is in the same direction, but the attained results are somewhat inferior as a consequence of its smaller commitment to social policies.

Finally, in spite of rapid GDP growth, of strong employment generation rates and of social policies being implemented throughout this period Argentina only attained small improvements in income distribution and in poverty reduction due to the negative impact of a high rate of inflation.

5. Conclusion

Argentina, Brazil and Chile attained high growth rates during the past decade interrupted only by the 2009 international financial crisis. That dynamics of the growth process was fuelled by favourable international circumstances, but it was administered in different ways in all three countries. They attained different growth trajectories with somewhat different consequences both for the production sectors in the economy and for the functioning of labour markets and income distribution.

Concerning the structure of production, the administered exchange rate policy implemented by Argentina brought about higher growth rates of production and exports across the industrial matrix. Those results, together with the continuous increase in the terms of trade, allowed Argentina to achieve a substantial commercial surplus between 2003 and 2010.On the contrary, the incentive of a high real exchange rate proved insufficient to induce industries to close up the productivity gap with the international technological frontier. The Argentine case suggests that a high real exchange rate probably constitutes a necessary – but not a sufficient – condition to achieve productivity convergence to the international frontier. Probably a high RER needs to be supplemented by sector specific industrial policies as different industries find themselves at different distances from the international state of the art.

The cases of Brazil and Chile suggest that the preservation of the real exchange rate not only does not provide incentives for the closing of the gap with the international technological frontier but might even attain the inverse, i.e. it deteriorates the sustainability of the growth process and the rate of diversification of the production structure.

The appreciation of the real exchange rate can have a negative impact upon the production structure as well as upon international competitiveness if it is maintained for a rather long time discouraging investment in new plants and innovation. More so, the damage can be irreversible if entrepreneurial and human capital are lost by a long lasting episode of 'Dutch disease'.

On the other hand, and considering now the labour market and social indicators, the recent Latin American growth process shows a reduction in both unemployment and poverty and an improvement in income distribution for all the countries under examination. Nevertheless, we notice the outcome to be quite different when we examine the details of each case.

In Argentina, the preservation of a high real exchange rate did not result – contrary to what was expected – in a higher capacity to create jobs, as the employment/output elasticity is quite low, in fact lower than in Brazil and Chile. On the other hand, the high inflation rate observed since 2007 determined the stagnation of the social indicators hereby examined.

The process of improvement of income distribution acquired more significance in Brazil and, to a lesser extent, in Chile. Having similar macroeconomic policies, the main difference between both countries consisted in the heterogeneous scope of their social policies, which is appreciated when comparing the magnitude of the *Bolsa Familia* programme with *Chile Solidario*. The dynamics of the Brazilian and Chilean cases suggests that an inflation targeting programme needs to be supplemented by focused social policies if income distribution and poverty reduction are to be obtained.

In terms of macro-to-micro interactions the present research provides an interesting lesson. The current international cycle of high commodity prices forces Latin American nations to consider the trade-off between applying an anti-inflation policy and trying to maintain a high real exchange rate. In the first case, anti-inflation policy, both Brazil and Chile succeeded in maintaining a low inflation rate and this contributed to the long term improvement of their social indicators even if they could not avoid the appreciation of the real exchange rate and a weaker performance of labour intensive activities. In the second case, a policy oriented to sustaining the real exchange rate, a better across the board performance of the production sectors in the economy could be attained, but the improvement of social indicators became much smaller due to the negative impact of a high rate of inflation.

The trade-off between low inflation and a high real exchange rate takes different values in different Latin American economies. In fact, the rate of diversification the production structure had to start with, and the larger or smaller gap different industries exhibit *vis à vis* the international technological frontier, play a key role when examining the above mentioned trade-off.

In nations which have a rather concentrated production structure – mostly primary and only marginally involving manufacturing activities – the costs of adopting an 'inflation targeting' regime might be considerably less significant as the likely appreciation of the real exchange rate would only affect a small segment of non-traditional activities.

Contrariwise, countries that exhibit a diversified production structure demand a high and stable real exchange rate as a necessary, although not sufficient macro price to prevent irreversible losses of competitiveness in world markets as well as the 'destruction' of the local human capital and entrepreneurial tissue.

The present paper suggests that whether one or the other macroeconomic policy regimes is selected it needs to be supplemented with pro-active industrial and social policies if international competitiveness and the reduction of poverty are to be attained. As the case of Argentina indicates, the high real exchange rate policy was not sufficient for the country to close the gap with the international technological frontier. An explicit industrial policy designed for such a purpose was lacking. On the other hand, as the case of Brazil indicates, focused social transfers of a large dimension have been required to reduce poverty and improve on income distribution even if a low rate of inflation has been secured by inflation targeting.

Notes:

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[2] Some of the forces that induced commodity prices upwards – such as a weak US dollar, a low real interest rate and the expansion of international liquidity – also favoured capital flows from DCs to the developing world (Bastourre *et al*., 2007).

[3] We are not going to deal in this paper with the fiscal impact of higher world commodity prices.

[4] The high figure of 2002 (12.2 per cent) was explained basically by Argentina's inflation, which in turn was associated with the partial passing on of the increase in the nominal exchange rate.

[5] The term 'Dutch disease' originated in the sixties, when the discovery of wide fields of gas in that country – and the consequent increase in exports of the aforementioned product – determined the appreciation of the real exchange rate, therefore diminishing price-competitiveness of traditional activities. Nowadays, that term is applied to any scenario in which exports of part of the economy – usually associated with basic products – grow substantially, implying a fall in the real exchange rate and a reassignment of productive factors in favour of the more dynamic tradable sectors and services and against the rest of the tradable sector.

[6] The year 2003 was not included in the analysis as the Argentinean figure in that year was associated with the recovery from the crisis of 2001/2002. Besides, the period 2009/2010 shows a contraction and later recovery for all countries, in line with the impact of the deepening of the global financial crisis.

[7] In the case of Chile, it is not a transference programme in the strict sense, but a means of facilitating amongst poor families, the usage of a wide net of support initiatives (CEPAL, 2010).

[8] The shorter scope of *Chile Solidario* implies that its effect on the Gini index amounts to only 0.001 points, while the impact of *Bolsa Familia* reaches 0.027 (Soares *et al.*, 2007). In the case of Argentina, the recent implementation of the *Asignación Universal* forbids the visualisation of its effects over shown indicators.

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