Pro- and Anti-Market Reforms in Democratic Brazil [1]

Armando Castelar Pinheiro
Regis Bonelli
Samuel de Abreu Pessôa[2]

August, 2008

[1] This report is an extended version of our paper published in **Growing Pains in Latin America — An Economic Framework as Applied to Brazil, Colombia, Costa Rica, Mexico and Peru**, edited by Liliana Rojas-Suarez. Center for Global Development, Washington, D.C., 2009. We thank Liliana Rojas-Suarez, John Williamson, Jose de Gregorio and other participants of CGD's "Helping Reforms Deliver Growth in Latin America" workshop for helpful comments to an earlier version of this report.

[2] Respectively with: Gávea Investimentos and IE – Instituto de Economia / UFRJ – Universidade Federal do Rio de Janeiro; IBRE – Instituto Brasileiro de Economia / Fundação Getúlio Vargas and ECOSTRAT Consultores; and IBRE – Instituto Brasileiro de Economia / Fundação Getúlio Vargas, Rio de Janeiro.

1. Introduction

How to explain that, after implementing many reforms with expected positive impact on the foundations for growth, Brazil has fared so poorly in accelerating growth? The Center for Global Development's framework suggests two general possibilities (Rojas-Suarez and Johnson, 2006, *passim*). The first is that **reforms actually sought to generate growth and were well targeted, but faced obstacles**. Reforms may have failed because, although pro-growth, they were not properly implemented or remained incomplete, either due to problems of design (poor sequencing or lack of complementary reforms, for instance), or because they were sidetracked due to problems that were not initially foreseen or that emerged during, and sometimes even due to the reform process. This possibility fits well the Brazilian case, in which the process of market-oriented reform remains incomplete.

The other reason hinges on the selection of reforms. Reforms may have targeted the wrong foundations, that is, stressed foundations that were not binding growth. Or, reforms may have been selected to foster other goals that did not raise per capita income growth directly and immediately. In particular, reforms intended to directly improve living standards by improving the delivery of public services were not necessarily aimed at increasing measured per capita income. This also fits Brazil. Not so much because reforms targeted the wrong foundation — for macro instability and a lack of economic and political competition were indeed the most relevant foundations to target in the 1980s and 1990s — but because an important set of the reforms were more concerned with distributive goals than with fostering growth. Moreover, some reforms aimed at fostering growth, but were not market-oriented. More importantly, while pursuing other goals, these reforms **compromised the foundations for growth**.

Thus, while engaged in fighting inflation, opening the economy, discontinuing restrictions on business practices, and privatizing, governments were also actively pursuing what we call "anti-market reforms": **changes in norms, resource allocation and policies that discourage investment and productivity growth, thus seriously weakening the link between market-oriented reforms and growth**. At the end of the day, reforms led to a decline in the burden of regulation and more competition but, on the other hand enhanced the role of the state in directly allocating resources, by expanding public expenditures, and weakened property rights, frequently sacrificed in the pursuit of other goals.

There are several examples of this parallel reform agenda. The 1988 Constitution was concerned with enhancing political competition and equality of opportunities, but had clear nationalist and 'statist' provisions, establishing public monopolies in telecommunications, oil and the distribution of gas; setting up barriers to foreign ownership in mining and electricity; and reducing contract flexibility in labor markets. Different stabilization plans in the 1980s and 1990s relied on price freezes that breached financial and rent contracts. While opening the economy and enlarging the privatization program, President Collor's government launched a stabilization plan that, among other provisions, froze private financial assets at the Central Bank for an average of 24 months. More recently, a large primary fiscal surplus allowed for the stabilization of the public debt to GDP ratio, but coexisted with a huge expansion in current expenditures. Income transfer programs helped to spread the benefits of growth, but were structured in such a way that discouraged participation in the social security system. A more independent judiciary increased the protection against arbitrary government decisions, but by pursuing distributive goals, rather than imposing the rule of law, judges have often weakened contract and property rights.

We repute the expansion in public expenditures and the change in their composition — with a decline in public investment and a rise in current outlays — and the ensuing increase in the tax burden, to be the most important of the anti-market reforms, for its consequences on the quality of macro stability, with negative spillovers on capital accumulation and productivity growth. Four related problems are (i) the contractionist monetary policy needed to compensate the expansionist fiscal stance; (ii) the high public debt to GDP ratio, with the uncertainty it brings about the government's willingness to sustain the big primary surplus necessary to keep it under control; (iii) the rigidity of the main budget expenditure items, plagued with myriad earmarking provisions that allow the authorities very little discretion and make fiscal policy pro-cyclical; and (iv) the complexity of the tax structure, which imposes a further burden on economic agents.

The rise in public current spending stemmed mostly from new obligations enshrined in the 1988 constitution or created in the years after its enactment, which were perceived as due citizenship rights and key instruments to assure the stability of democratic institutions, as summarized in the goal of "governability". The Constitution ended 20 years of fiscal centralism, transferring a large share of tax revenues to sub-national governments, but without a corresponding reallocation of responsibilities. While state and municipal governments used revenue windfalls to hire more civil servants, the federal government contracted non-discretionary spending (i.e., investment) and attempted to decentralize responsibilities. The states resisted, leading to a disorderly process in which the federal government simply discontinued some activities to adjust its budget. Eventually, the federal government transferred most activities in health, education and public transportation to the states and municipalities, but remained responsible for financing some of them, notably in health.

The Constitution and other reforms also expanded social security expenditures. It created more generous retirement rules for civil servants and private sector workers, notably in the rural sector. Thus, rural workers were guaranteed pension benefits irrespective of whether or not they had contributed to the social security system in the past (usually not). Other income compensating transfers, such as LOAS [3] and the *Bolsa Família* program, were also established at the three levels of government, further contributing to bring public social spending to a threshold close to the OECD average.

[3] A list of acronyms is provided at the end of the paper.

This is the main reason why, for the future, we think that priority should be given to fiscal reform, which should aim at reducing current expenditures and the tax burden, while creating the fiscal space needed for an increase in public infrastructure investment. Tax and expenditure reform should create the conditions for a reduction in interest rates, unlocking a virtuous cycle of lower interest payments on the public debt and higher growth. In the short to medium term, the most promising way to implement this process of expenditure reduction and switching would be through social security (pension) reform. Yet, political opposition to the measures that should be taken is fierce. All else the same, we do not foresee much chance that this political deadlock will be broken. This brings to the fore the need to move forward with political reform, which forms with tax, judicial, regulatory, financial, and education reform our list of growth-augmenting reforms.

This paper is structured in five sections. Section 2 reviews the main stylized facts on Brazil's recent growth performance. Section 3 discusses the reforms adopted in the 1980s and 1990s and how they affected the foundations for growth, and examines the issues of reform selection and incompleteness. Section 4 takes a more forward-looking approach, to analyze the reforms with greatest promise of positively impacting the foundations for growth in Brazil. Section 5 concludes.

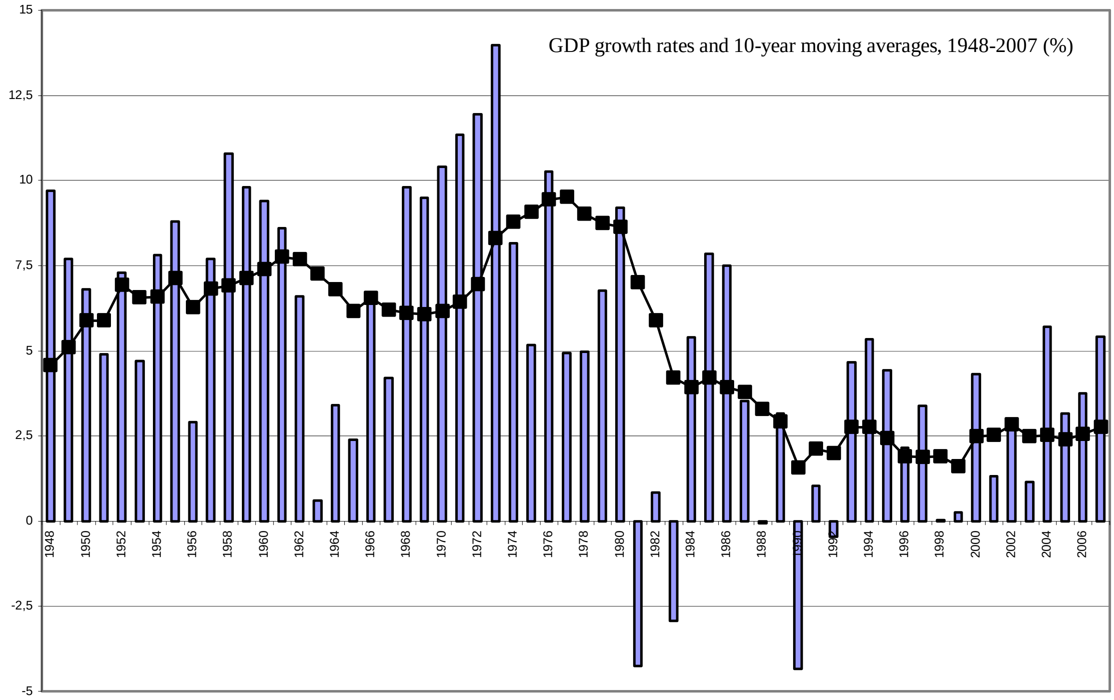
2. Stylized facts on growth in Brazil

2.1 Growth and Productivity Performance

Brazil's GDP growth rates plunged in the early 1980s, after five decades of especially good performance, failing to return to their previous levels in the following decades, with the exception of a few atypical years (Figure 2.1).[4] A ten-year moving average of GDP growth, represented in Figure 2.1 by the continuous line, indicates that long-term growth dropped significantly in the 1980s and has since then stayed around 2.5% p.a., roughly a third of its level in 1950-80, leaving just a little over 1% per year to per capita income growth. This mediocre record suggests that the structural reforms implemented in the 1990s, including price stabilization, have had only a limited impact on GDP growth, if at all, or that other factors have hampered their effect. A comparison with other Latin American countries (Table 2.1) shows that Brazil went from outperforming the rest of the region in 1951-80 to faring worse than average in both the lost decade (1981-94) and the post-stabilization period (1995-2006). In particular, it has been relatively inefficient in exploiting the exceptionally favorable external conditions that characterized the recent past — strong foreign demand for Brazilian exports and atypically high levels of international liquidity, which tend to boost short-term growth dynamics. Thus, in 1995-2006, of the countries in Table 2.1, Brazil only fared better than Uruguay, a country with low demographic growth.

[4] The poor performance is exemplified by the fact that in the past twenty years (1988-2007) GDP growth exceeded the 5% mark only three times (1994, 2004 and 2007). In about half the time it was below 2.5%, being negative three times. Between 1967 and 1977, in turn, average GDP growth reached 9.5% p.a.

Figure 2.1: GDP growth rates and 10-year moving average, 1948-2006 (%)



Source: National Accounts, elaborated by the authors (2006 and 2007 are based on quarterly GDP estimates)

The above discussion stressed the differences among three main periods in 1950-2006. The first, comprising the three decades extending from 1950 to 1980, was marked by exceptionally high output growth, with Brazil faring better than other countries in the region, which nonetheless also did well. The second, going from 1981 to 1994, combined a sharp deceleration in growth with poor macro indicators, particularly very high inflation. It was also a period marked by a less favorable external environment, which led to a contraction in growth throughout the region, with few exceptions. The last period contains the post-stabilization years, which were marked by low inflation and a more open and less regulated economy, not only in Brazil, but also in most other Latin American countries.

Table 2.1: Average GDP Growth Rates, Selected Periods and Latin American Countries (%)

	Argentina	Brazil	Chile	Colombia[a/]	Mexico	Peru	Uruguay	Venezuela[b/]	LA & Caribbean
1951-1980	3.3	7.1	3.2	3.1	6.6	5.0	2.3	5.0	5.2
1981-1994	1.6	1.9	4.6	3.7	2.4	0.9	2.2	1.7	2.2
1995-2006	2.6	2.6	4.8	2.9	2.9	4.2	1.9	2.8	3.0

Sources: IBGE, ECLAC, and IMF/WEO. a/ 1969-80 b/ 1958-80.

What hindered Brazil's growth in the last quarter century? Apparently, not a lack of demand. Indeed, every time economic activity accelerated, price pressures forced a deceleration in the following years, suggesting that the economy had been operating at levels close to full capacity and that **growth had been capacity-constrained**. Therefore, a first-level answer is that Brazil has been unable to grow more rapidly than it did until 1980 due to supply constraints. Which of these were most critical? We examine this issue using a supply-side, Solow-type decomposition of GDP growth in the three periods highlighted above. We assume a Cobb-Douglas function with a 'mincerian' formulation of human capital. Formally,

$$y_t = A_t k_t^{\alpha} H_t^{1-\alpha}$$

$$H_t = \exp[\phi(h_t)] = \exp\left[\frac{\eta}{1-\psi} h_t^{1-\psi}\right].$$

where y_t, k_t, A_t and h_t are, respectively GDP per worker, the capital-labor ratio, Total Factor Productivity (TFP) level and average labor force schooling at time *t.*[5]

Table 2.2 shows that the high GDP growth in 1951-80 resulted from a combination of rising employment and a substantial increase in labor productivity. In turn, roughly two-thirds of the latter were generated by a substantial increment in the economy's capital/labor ratio, with the remaining third stemming from TFP growth. Remarkably, the accumulation of human capital contributed with virtually nil for the expansion of output during this high-growth period. Most of the growth slowdown in the lost decade that followed resulted from the decline in labor productivity growth, which actually turned negative, with a minor part coming from lower employment growth. The contraction in GDP per worker, in turn, was the result of TFP growth going from positive to negative and the capital-labor ratio expanding at a much slower pace, effects which were partly compensated by the expansion in human capital. Finally, the rise in GDP growth rates in the post-stabilization period was due entirely to a faster expansion in labor productivity. This was fully explained by the recovery in TFP growth. Indeed, the acceleration in GDP growth was not larger because the ratio of capital per worker went from a mild expansion into a significant contraction in the post-stabilization period. The contribution of human capital accumulation declined marginally, rather than continuing to accelerate.

Table 2.2: GDP growth decomposition, 1951-2006 (%)

	1951-1980	1981-1994	1995-2006
GDP [a/]	7.1	1.9	2.6
Employment	3.0	2.1	2.1
GDP / worker	4.1	-0.2	0.5
Contributions to change in GDP/worker			
Capital / worker	2.6	0.5	-0.9
Human Capital	0.1	0.8	0.7
TFP	1.4	-1.5	0.7

Sources: IPEADATA and IBGE. a/ Obtained as the average log change in GDP, produces slightly lower growth rates than taking the geometric mean.

How does Brazil compare to other countries in this period? To answer that question we repeated the above decomposition exercise using international GDP, investment and labor

[5] We assume the capital share in total income to be 0.47 in all years — estimated from Brazil's 1995-2005 national accounts — and set $\eta = 0.32$ and $\psi = 0.58$, following Bils and Klenow (2000).

force data.[6] The growth decomposition was performed for country groups in order to benchmark the numbers for Brazil. For each group, we defined the average value of each variable as the unweighted geometric average of the value observed in each country. We divided the countries from our sample in six control groups: (i) English-speaking (England, Ireland, U.S.A., Australia, Canada, New Zealand and South Africa); (ii) Western European (Austria, Italy, Belgium, France, Holland, Germany, Sweden, Denmark, Norway, Switzerland and Iceland); (iii) Southern European (Portugal, Spain, Greece and Turkey); (iv) Asian Tigers; (v) Latin American; and (vi) the eight biggest countries of Latin America (Brazil, Argentina, Chile, Colombia, Venezuela, Mexico, Peru and Ecuador). We also considered separately the two most recent 'economic miracle' countries: China and India.

Consider, first, the high-growth period. In it, Brazil's labor productivity increased by an impressive 4.2% per year, roughly twice as much as the averages for India, Latin America and the English Language countries, and more than in Western Europe — but significantly less than the rate for the Asian tigers (Table 2.3). This highlights that Brazil's GDP growth rates in this period, comparatively high to international standards, also owed much to a very substantial rise in employment. The exercise produced, however, a different decomposition for the rate of change in GDP per worker (DY).[7] Thus, it indicates that in 1951-80 Brazil recorded the highest average TFP growth rates (DA) among all country groups, with TFP growth accounting for a large chunk of growth in GDP per worker. The contribution of capital was comparatively smaller, but commensurate with what was observed in other countries in the period, except for the Asian Tigers, which recorded a very expressive rate of capital accumulation. Finally, this decomposition confirms the insignificant contribution of human capital accumulation for the expansion in labor productivity in Brazil, contrasting with what happened in other countries, including most of those in Latin America.

The picture changed substantially after 1980, as mentioned. Concerning labor productivity, Brazil fared worse than all country groups in 1981-94 and in the following period, with the exception of Latin America in 1995-2003. Both labor productivity and TFP declined, on average, in both periods after 1980. The positive aspect was the more important contribution of human capital growth (DH). Controlling for changes in the quality of the labor force, we obtain that the decline in TFP over the last quarter century was even more pronounced than estimated above, accumulating a drop of 30%. Moreover, the TFP declined almost twice as much in Brazil as in Latin America as whole. Yet, the decline in TFP was less pronounced in 1995-2003 than in 1981-94.

[6] From the 6.2 version of the Penn World Tables (Heston *et al*, 2006). Schooling data are from Barro and Lee (2000).

[7] This stemmed from using both somewhat different data and a uniform capital share for all countries, which differed from the one obtained from Brazil's national accounts.

Table 2.3: Growth decomposition of GDP per worker -- Brazil and selected country groups

	1951/1980				1981/1994				1995/2003			
	DY	DK	DA	DH	DY	DK	DA	DH	DY	DK	DA	DH
English Language	0.020	0.009	0.009	0.002	0.010	0.005	0.001	0.004	0.027	0.009	0.015	0.002
% DY		44	47	10		56	6	38		35	56	9
Western Europe	0.033	0.013	0.017	0.003	0.009	0.006	-0.002	0.004	0.021	0.008	0.010	0.003
% DY		39	52	10		71	-19	48		38	48	15
Southern Europe	0.046	0.019	0.021	0.006	0.009	0.008	-0.005	0.006	0.023	0.011	0.007	0.005
% DY		42	45	13		90	-54	64		48	30	22
China					0.079	0.024	0.049	0.007	0.078	0.036	0.038	0.003
% DY						30	61	8		47	49	4
Índia	0.022	0.014	0.002	0.006	0.029	0.012	0.009	0.007	0.042	0.015	0.019	0.008
% DY		62	10	28		42	32	26		36	45	19
Asian Tigers	0.054	0.026	0.025	0.004	0.041	0.019	0.016	0.006	0.015	0.014	-0.003	0.004
% DY		48	46	8		46	40	14		93	-18	25
Total Latin Amer.	0.022	0.010	0.009	0.004	-0.008	0.000	-0.014	0.005	0.000	0.004	-0.008	0.004
% DY		43	39	18		0	163	-64		-1513	3108	-1495
Lat America (big)	0.024	0.007	0.012	0.005	-0.009	-0.002	-0.013	0.006	-0.004	0.003	-0.010	0.004
% DY		30	50	19		21	141	-62		-74	285	-111
Brazil	**0.042**	**0.013**	**0.028**	**0.001**	**-0.009**	**0.001**	**-0.019**	**0.008**	**0.000**	**0.003**	**-0.009**	**0.007**
% DY		**30**	**67**	**2**		**-15**	**201**	**-86**		**724**	**-2227**	**1603**

Source: See text

The decompositions reinforces the view that in Brazil the reforms had a positive impact on growth, but that this impact was unevenly concentrated on bringing TFP growth back from the negative rates observed in the long "lost decade", with comparatively lower gains regarding the rates of physical and human capital accumulation.

2.2 Did Growth Become More Inclusive?

The reform process in Brazil aimed not only at greater economic liberalization, but also at improving income distribution and reducing poverty, indicators for which Brazil historically compared poorly to developed and developing countries. Thus, an important question is whether, despite being slow, growth in the post-reform period was of a higher quality than in pre-reform years. In particular, we want to know whether reforms seem to have been instrumental in producing quality growth — i.e., one that reduces poverty, improves income distribution and includes historically marginalized groups.

The whole period before the reforms has been characterized as anti-poor (Barros and Mendonça, 1995). In 1960-90, while the share of income accruing to the richest 20% of the population increased 11%, the share going to the poorest 50% declined by 6%. These authors also established that 1.3 percentage point of the 2.5% annual rise in per capita household income was necessary just to compensate for the negative effect on poverty of the worsening in income distribution. The quality of growth in 1995-2005, however, has improved (Kakwani *et al.*, 2006), as growth in that decade was pro-poor: per capita household income growth adjusted for distributional changes reached 0.10% per year, compared to the -0,30% observed for the actual change in per capita household income. Figures for 2000-2005 reveal an improved picture: 4.81% and 0.44%, respectively. This provides evidence in favor of inclusive growth in both quinquennia, and that this process accelerated from the first to the second one.

The determinants of pro-poor growth have also been established. When labor income is isolated from that stemming from other sources, one finds that relative pro-poor growth associated to non-labor income was very strong throughout the whole period (6.53% per year, compared to a 2.80% mean growth rate of labor income). This highlights the importance of social programs and the significant real increases in the minimum wage (which impacts directly the value of benefits paid by social programs tied to it) on per capita household income. Their results for the social welfare function applied only to labor income indicate, in turn, that average growth increased between the first and second sub-periods: from -0.98% per year (compared to -1.13% for mean labor income) to 3.41% (against -0.22%).[8]

Despite recent improvements, it is well known that the Brazilian economy has been characterized by a very low elasticity of poverty with respect to income. The absolute value of the income elasticity of poverty in Brazil is 1.09 (Ferreira *et al.*, 2007). Since their data end in 2004, we performed a regression similar to theirs using data until 2006. We estimated:

$$\ln \frac{H_t}{H_{t-1}} = \beta_0 + \beta_1 \ln \frac{y_t}{y_{t-1}} + \beta_2 \ln \frac{G_t}{G_{t-1}} + \varepsilon_t, \qquad (1)$$

in which H_t is the share of poor, y_t is per capita family income and G_t is the Gini in year t.

Table 2.4 summarizes the main results. The constant term resulted null in all runs. β_1 is slightly lower than 1 in absolute terms, and β_2 is equal to 2. A dummy for the period 1994-2006 (that is multiplied by the term $\ln \frac{y_t}{y_{t-1}}$) resulted non significant, the interpretation of which being that, despite recent improvements, there is no apparent (or statistically significant) evidence of increase in the growth elasticity of poverty for the economy as a whole.

[8] The significant inclusiveness of growth in 2001-2005 occurred simultaneously with low per capita household income growth (only 2.5%, overall). Pro-poor growth was mainly an outcome of the improvement in income distribution, as revealed by the decline in the Gini coefficient, from 0.60 to 0.57. In the same period, the number of people below the poverty line fell from 64 to 60 millions (Barros *et al.*, 2007a, p. 343), despite overall annual population growth of 1.1%. Barros *et al.* (2007b) estimated the factors responsible for this drop in inequality. Using the Gini coefficient they obtained approximately equal weights for the importance of labor and non-labor income growth (48%). However, they conclude that the improvement in labor income distribution was a result of the fall in the rate of return to education, a result that may be partly attributable to low economic growth.

Table 2.4: Regression results estimates (see text)

	OLS			IV		
β_0	-0,005	0,005	0,003	-0,004	0,001	0,001
	0,009	**0,005**	**0,006**	**0,009**	**0,003**	**0,003**
β_1	-0,73	-0,94	-0,85	-0,85	-0,88	-0,86
	0,08	**0,04**	**0,04**	**0,15**	**0,05**	**0,06**
β_2		1,94	1,97		2,00	1,96
		0,04	**0,18**		**0,20**	**0,20**
Dummy 94/06			-0,03			-0,07
			0,07			**0,12**
R-squared	0,80	1,00	0,98	0,78	0,98	0,98
Adjusted R-squared	0,79	0,99	0,97	0,77	0,97	0,97
S.E. of regression	0,04	0,02	0,01	0,04	0,01	0,01

*Standard deviation bold type

As discussed above, when considering whether economic growth following reforms was inclusive — i.e., pro-poor — or not, two aspects should be jointly considered: impacts on income **and** on consumption distributions. In particular, the recent literature on pro-poor growth in Brazil does not deal adequately with this issue because the main source of information, the PNAD, does not focus on consumption expenditures, but on household income. And there is a strong suspicion that the standard inequality and economic growth measures underestimate the impact of the 1990s reforms on the wellbeing of different segments in the Brazilian population, due to problems in measuring the effect of price changes.

Using information from a household income and expenditure survey carried out by the IBGE — *Instituto Brasileiro de Geografia e Estatística*, Carvalho Filho and Chamon (2006) show that there was a large reduction in food expenditures in household budgets throughout the 1990s in Brazil. In addition, they show that the fall occurred in all deciles of the income distribution, and that it was larger than the fall predicted by price and household income movements. Their conclusion points to the fact that, if we assume that the share of food on total expenditures varies with household income according to Engel's Law, the increase in mean household income must have been much larger than recorded by the PNAD, as well as by Brazil's National Accounts. More specifically, they estimated that real household income expanded 4.7% per year, as compared to the 1.3% directly observed from the PNAD data considering the period from 1987-88 to 2002-03. The overstatement of consumer prices changes, as registered, is due, according to the authors, to the introduction of new products in the consumption basket and to the substitution effect stemming from relative price changes. Both effects must have been substantial in that period, one in which, we recall, was characterized by very high inflation.

In our view, this result was not unexpected. There seems to be little doubt that during the whole post-war years up to the early 1990s per capita GDP growth exceeded that in welfare. Reforms during the 1990s aimed at disassembling much of the policy apparatus inherited from the post-war era, one important feature of which was strong anti-poor bias. Thus it is not surprising that relative price changes, following the reforms in the 1990s, generated a quite different outcome: almost stagnant per capita GDP growth *cum* strong welfare gains. Given the evidence on strong welfare gains derived from the changes in (and lower) food shares in the budgets one would expect higher pro-poor growth.

The concern with the long-run sustainability of pro-poor growth is strengthened by the fact that the performance of the labor market did not help much through most of the post-1990 period. Only recently have labor market conditions become more benign in this regard. In 2005, for instance, the growth in pro-poor labor income reached 8.4%, which compares to an expansion of 5.3% in average labor income growth. It remains to be seen if this favorable labor market performance will play in the future the role performed in the past by the (presumably) once and for all change in relative prices and the creation and/or extension of social programs, which also present their own limits, to support pro-poor growth.

3. What has Worked, what hasn't and Why

3.1 Have Reforms Addressed the Foundations for Growth?

When Brazil started its reform process most of its foundations for market-based growth were compromised: it was not a democracy, inflation was high, the fiscal accounts were in shambles, human capital was very modest and highly concentrated, widespread discretionary state intervention meant that property rights were not secured against administrative expropriation and helped to ensure the appropriation of rents by elite groups, from civil servants to large industrial firms. In the last quarter century, innumerous reforms have tried and partly succeeded in putting these foundations right, although, as shown above, without generating a major boost to growth. Most of the attention was dedicated to reforms that fostered political and economic competition and macro stability. It is not difficult to explain why.

Since 1964 Brazil had been a military dictatorship, and a return to democracy had been in the agenda since the mid-1970s, a process accelerated with the enactment of the amnesty law in 1979. Most of the political reforms in the 1980s involved the transfer of power to civilians and the establishment of free elections. In 1982 there were free elections for state governorships, in 1985 Congress elected a civilian President, in 1986 a Constituent Assembly was elected, in 1988 it enacted a new Constitution, and in late 1989 a new president was elected by popular vote. Reforms in the rules governing the creation of political parties, the enactment of a new Constitution, changes in electoral rules and the strengthening of the judiciary were all critical to allow a fair and broad participation in political disputes. Measures against corruption and changes in administrative and fiscal and budgetary rules were also important, for they aimed at reducing the advantages of incumbent political groups *vis-à-vis* outside contenders.

Brazil entered the 1980s with very high inflation and serious disequilibria in its fiscal accounts, including a large public debt. Several reforms focused on curbing the expansion of public expenditures and liabilities, or on raising revenues. Financial reform was critical to limit the ability of sub-national governments to finance their expenses through their own banks, which later needed to be rescued by the National Treasury; pension reforms, both through the "*fator previdenciário*" and the establishment of a minimum retirement age for civil servants, sought to limit the expansion of pension expenditures; changes in fiscal and budgetary policies, such as the creation of the Secretary for the Control of State Enterprises and the National Treasury Secretary, the end of the "monetary budget", and the enactment of the Fiscal Responsibility Law, to name a few, were all measures that helped to increase the transparency and limit the expansion of public spending. In the financial sector, several reforms in the wake of the "bank crisis" of the second half of the 1990s — following the PROER, PROES and PROEF programs, aimed to deal with insolvent private, local state and federal banks — made the financial system more robust against macro shocks. Measures against corruption, such as the 1993 Procurement Law, avoided some of the worst cases of corruption with public funds, to what also contributed the creation of an independent system of public prosecutors ("*Ministério Público*"). Reforms in the tax system allowed for a major rise in tax revenues. Privatization proceeds were used to redeem public debt, while trade liberalization made aggregate supply more flexible, facilitating the administration of the business cycle and keeping the prices of tradable goods under check notably after the launching of the Real Plan (something which was made possible due to exchange rate appreciation).

The other three foundations for growth were less emphasized, although not forgotten. The importance of securing property rights for market-based growth to occur has been generally acknowledged, even if more rhetorically than in practice. The return to democracy and the independence of the judiciary enshrined in the Constitution (relatively well respected in practice) were aimed at protecting private agents against public expropriation. Measures against corruption and several changes in regulation, notably in infrastructure and the financial sector, aimed at protecting the rights of citizens, investors, creditors and shareholders against private and public expropriation.[9]

A greater emphasis on basic education, which increased coverage in primary education to 97% by 2002, was possibly the most important measure aimed at equaling opportunities. But other reforms were also important, including those in the health sector, with the establishment of the Unified Health System (SUS), which aims at providing free-of-charge health care to all Brazilians. Administrative reform fostered the adoption of public examinations as the main criterion for entry in public service. Financial reform stimulated micro-credit operations and some of the changes concerning the use of collateral in credit

[9] Interestingly, much less emphasis has been given to the reliance on securing property rights as a means to protecting the poor against expropriation by elite groups. As a rule, Brazilians perceive the strong protection of property rights as a set of rules that operates the other way around, being a means to protect elite groups from expropriation by the poor, as exemplified by the illegal occupation of property, rural and urban, and the theft of electricity.

operations eased the access of poorer consumers to credit. Minimum age requirements and the "*fator previdenciário*" made the requirements for eligibility to pensions more similar for poor and rich workers. Measures to curtail corruption also helped to equate opportunities. New legislation was passed criminalizing racism and some public universities started affirmative action programs favoring afro-descendents.

Income transfers through social assistance programs were the main instruments used to encourage a broader sharing of the benefits of growth with the poor. The 1988 Constitution created an unemployment insurance system and made rural workers eligible to pension benefits, even if they had contributed virtually nothing to social security. In the early 1990s, the *Lei Orgânica da Assistência Social* (LOAS) established an income transfer program to people aged 65 or more, or disabled, as long as they lived in households with per capita income below a fourth of the minimum monthly salary. Several other transfer programs were later created to benefit the poor, some of them attached to conditionalities referring to school attendance and health care, which were later grouped in the "*Bolsa Família*" program. The big boost in school enrollment in basic and higher education was also important, for it contributed to lower skill premia. Because macro stability, and in particular the lowering of inflation, benefited the poor disproportionately, several of the reforms also led indirectly to a broader sharing of the benefits of growth. Trade liberalization and pro-competition regulatory reforms also favored the poor more than proportionately, lowering the price of consumption goods and expanding product diversity, on the one hand, and moving terms of trade in favor of agriculture, which in turn led to a significant boost in agricultural output and a decline in food prices. Thus, the outcomes of these reforms were clearly pro-poor.

The above highlights that Brazil has pursued a number of reforms intended to strengthen the five foundations for growth, notably regarding macro stability, growth acceleration and greater economic and political competition. Further, market-oriented reforms were not ideologically driven, but were adopted because they were perceived as means to foster private investment and higher TFP growth, and thus as a way to revert the growth slowdown initiated in the early 1980s, in a situation in which the state lacked the fiscal resources to lead this process itself, as in 1950-80. Pinheiro, Bonelli and Schneider (2007) have labeled this "a pragmatic reform process". It was a broad but incoherent, uncoordinated process. Reforms were largely disconnected and pursued multiple, sometimes conflicting goals, so while some were market-oriented, others enhanced the role of the state and/or conspired to curb market-based growth. Pragmatism has proved to be a less consistent reform drive than ideology, with several reforms being abandoned midway when the problem they sought to solve left the priority list. The end result is that Brazil pursued many reforms but was left with an **insufficient improvement in the overall envelop of foundations**, for some reforms were only partially implemented, or were sidetracked into pursuing other objectives, or because while strengthening one foundation they weakened others.

3.2 Some Outcomes of the Anti-Market-Based Reforms

One of the main outcomes was the huge increase of public consumption, as noted. Table 3.1 highlights the almost doubling of these expenditures, from an average 10.9% of GDP in 1951-80 to 20.0% in 1995-2005, while both public savings and investment fell substantially. Investment by federal SOEs also dropped significantly, far and above what could be accounted for by privatization, and became more concentrated in the oil sector, leaving very little to infrastructure. Table 3.2 portraits a similar picture with somewhat different indicators, focusing on the federal government alone (including the pension system of private sector workers). It shows that in the last decade and a half primary expenses by the federal government rose by roughly 8% of GDP, more than 0.5% of GDP per year. Pension expenditures accounted for the bulk of this rise, jumping from 4% of GDP in 1991 to 9% of GDP in 2005. These expenditures also rose substantially for sub-national governments. In turn, capital outlays declined by half, reaching a mere 0.6% of GDP in 2006.

In the initial years after the enactment of the new Constitution, governments financed their growing current expenditures by letting inflation accelerate, counting on an inverse Tanzi effect (since revenues were better indexed to inflation than expenses) and augmented seignorage revenues. With that, inflation tax revenues averaged 1.5% of GDP in 1989-94, twice as much as in 1951-80 (Table 3.1). When inflation came down, the government relied instead on expanding the (net) public debt, which closed 2006 at 45% of GDP, after peaking at 52% of GDP in 2003, up from 31% of GDP a decade earlier.[10] High interest rates on government bonds have kept their attractiveness, but at a high cost in terms of GDP growth, for they set a high floor to all other interest rates in the economy. They also contribute to increase overall government's expenditures.

Table 3.1: Selected Macro Aggregates, 1951-2006 (% of GDP)[a/]

	1951-80	1981-88	1989-94	1995-2005	2006
GDP growth	7.4	2.2	1.7	2.6	3.7
Public consumption	10.9	10.9	17.6	20.0	19.9
Public Savings	3.0	-0.5	2.8	-0.3	n.a.
Public Investment	3.7	2.7	3.3	2.0	n.a.
Investment by Federal SOEs[b/]	2.4	3.5	1.9	1.1	n.a.
Tax burden	20.7	25.0	26.0	30.0	34.2
Inflation tax	0.7	0.9	1.5	0.1	n.a.

Source: IPEADATA and IBGE; a/ Figures for 1986-94 were estimated using GDP value corrected for reclassification of Cofins as part of GDP. b/ In next-to-last column, average of 2003-04.

When borrowing was no longer feasible, governments turned to raising taxes (Table 3.1). The federal government, in particular, boosted its tax proceeds by creating new taxes and raising rates on social contributions (a kind of tax that is not shared with sub national governments), with three important effects: (i) they counterbalanced decentralization

[10] The public debt rose despite part of it having been redeemed with the use of privatization proceeds.

promoted by the Constitution and, indeed, brought about some re-centralization; (ii) the quality of the tax system worsened; and (iii) as no compensating tax reduction occurred in states and municipalities, the total tax burden rose at peaks. So, the tax burden went from a relatively stable 25% of GDP in 1968-86 to 31% of GDP in 1995-2002, 33% of GDP in 2003-05, and 34.2% of GDP in 2006. The number of tributes increased as well. Some of them are applied cumulatively, some share the same tax base and others have rates that vary with time and region of the country. The final result is an exceedingly complex, unstable, costly and difficult to monitor tax system. Among other things, this high, unstable and complex tax burden has increased investment risk and fostered informality, with negative consequences for human capital investment and productivity growth. Moreover, it distorts relative prices, increases transaction costs, discourages financial intermediation, encourages rent seeking and tax planning, raises the risk of economic activity, and is based on mostly regressive taxes.

Table 3.2: Breakdown of General Government Primary Spending, 1991-2006 (%) [a/]

	1991	1994	1998	2002	2006
Total primary expenses	13.5	16.5	18.2	19.7	21.3
Transfers to states and municipalities	2.7	2.6	2.8	3.8	4.0
INSS (private sector social security)	3.4	4.9	5.4	5.9	7.1
Personnel	3.8	5.1	4.7	5.0	4.5
Of which pensions	0.9	2.0	2.2	2.3	2.0e
Other current and capital expenses	3.8	4.0	5.3	4.9	5.6
Of which investment	1.2	1.1	0.8	0.7	0.6e
Memo					
Expenditures with pension of civil servants in sub-national governments			1.7	1.7	

Sources: Giambiagi (2006a, 2006b), *apud* Pinheiro (2006). e = estimate a/ Figures in the table were changed to account for revisions in GDP values as released in the March 21, 2007, national accounts revision.

The surge in public consumption was so large that, notwithstanding the rise in debt and taxes, it could only be accommodated with a significant decline in public investment: summing the public administration and federal SOEs, it dropped from 7.9% of GDP in 1968-78 to 2.7% of GDP in 2003-05.[11] Infrastructure was especially hit, with public investment in this area (including SOEs) declining by about 4% of GDP between 1971-80 and 2001-03, a contraction that was not at all compensated by a rise in private outlays. One of the consequences has been the deterioration in infrastructure capital, with negative effects on productivity growth and income distribution. The cutting down of budgeted public investment has long been a tradition in Brazil, **as governments find it easier to sacrifice these expenditures than to cut consumption**. But the point we want to stress is that during most of the last two decades this occurred despite governments having a growing volume of resources at hand, financed by borrowing from and taxing the private sector.

[11] Reclassifications resulting from privatization account for about 1% of GDP.

Thus, Brazil's failure to attain a more substantial acceleration in growth resulted from a combination of reforms that did not go all the way, with others that went missing, and still others that compromised, rather than strengthened, the foundations for growth. In Table 3.3 we try to net up the positive and negative influences of these various reforms on the five foundations discussed above. Very briefly, we assess that:

- Democratization has fostered political competition, a broad sharing of the benefits of growth and more equal opportunities. But, compared to most of the 1951-80 period, it reduced the security of property rights, despite greater protection against administrative expropriation, and negatively affected macro stability. The former resulted from a mixture of more judicial activism, poorer legislation, more frequent normative changes, and greater tolerance with crimes against property. The latter resulted from the rise in current expenditures, which counted with great support from politicians and voters.

- Trade liberalization, privatization and regulatory reform contributed to strengthen competition and achieve greater macro stability. But because it remained incomplete, and even suffered some setbacks in recent years, regulatory reforms have not properly secured property rights.

- Decentralization and social assistance reform have contributed to level opportunities and broaden the sharing of growth benefits, for they gave more than proportional power / attention to poor states, municipalities and households. But this was achieved by expanding public current expenditures, rather than by diverting resources from the rich. Moreover, there was no concern to establish a clear link between the value and coverage of transfers and GDP performance, so the "sharing of benefits" has failed to strengthen the constituency in favor of pro-growth reforms.

- A similar argument can be made regarding pension reform. The changes enshrined in the Constitution have greatly expanded public spending and also benefited the rich disproportionately by providing more favorable retirement conditions to civil servants and formal workers. Although some of the later reforms went in the opposite direction, the net effect was negative.

- Fiscal / budgetary reforms, changes in the education and financial sectors and measures against corruption have had a prevailing positive effect on the foundations. In particular, they have made political competition fairer and contributed to give people a more equal opportunity, by focusing on the access of the poor to basic education and financial products (e.g., micro-credit).

- Judicial and electoral reforms have made political competition fairer and contributed to give people more equal opportunities, notably in politics. But neither has contributed much to strengthen the security of property rights and, in the case of electoral reform, the resulting party fragmentation has created collective action problems that favored the expansion and inefficiency of public expenditures.

- We see the changes in labor regulations introduced by the 1988 Constitution as mostly benefiting those formally employed, at the expenses of informal and unskilled workers. The Doing Business indicators reveal that labor laws in Brazil restrict contract flexibility and increase the cost of hiring and firing workers more than in most other countries, but this only benefits a minority of the workers, while making it more difficult for the majority to get a job or enter the formal sector.

- Tax reform, although a perennial theme in policy discussions in Brazil, has throughout favored a rise in revenues, rather than the pursuit of a more rational system that would encourage investment. This has created an uneven competition between formal and informal firms, lowering productivity growth. Moreover, much of the more recent rise in taxes has occurred through an expansion in indirect taxes, which harm the poor disproportionately.

Table 3.3: Actual impact of past reforms on the foundations for growth

Type or area of reform	Period	Secure property rights	Equal opportunities	Economic and political competition	Macro stability	Broad sharing of the benefits of growth
Democratization	1979-88	-	+	++	-	+
Trade liberalization	1987-93			+	+	+
Privatization	1981-00			+	+	
Regulatory reform	1991-01	-		+		
Decentralization	1988-95		+		--	+
Financial sector	1995-05	+	+		+	
Education	1995-00		+			+
Pension	1995-03				--	-
Social assistance	1988-05		+		-	+
Tax	1988-06	-		--	++	
Labor	1988		-	-		
Fiscal / budgetary	1979-01			+	+	
Judiciary	1988 / 2004-06	-	+	+		
Electoral	1988-2006	-	+	++	-	
Measures against corruption	1988-2002			+		
Administrative	1988-98				-	

Note: + (-) indicates that the reform positively (negatively) impacted the foundation, while ++ (--) indicates that this was a strong impact.

Thus, not only some reforms remained incomplete, but also some of them took a direction that made them anti-growth. This is the case, in particular, of the huge expansion in public consumption and transfers, as well as the means through which it was accommodated: rises in inflation, the public debt and the tax burden, as well as a contraction in public investment. In a sense, **the increase in the tax burden can be seen as a reform that took**

the economy away from the kind of market-based economic model aimed at when adopting privatization, trade and financial liberalization and de-regulation.

To gauge the impact of taxation increases and simultaneous infrastructure investment decreases on Brazil's long-term growth we performed a counterfactual exercise that simulated what would have happened to Brazil's long-term growth path had taxation and infrastructure investment stayed at levels similar to those observed before the new Constitution was enacted. We conclude that, in our base case, adoption of such policies led to a GDP level, in 2006, 18% smaller than in our counterfactual scenario.[12] Spread through nearly 20 years, such accumulated GDP reduction amounts to an annual average decrease of nearly 1 percentage point in the growth rate of GDP. This means that, if it were not for the anti-reform represented by tax burden increases, coupled with the decline in public infrastructure investment, average annual growth in 1989-2006 would have been on the order of 3.3%, instead of the actual 2.3%. Since we have not taken into account the effect of the increase in the tax burden on labor supply and informality, with negative impacts on productivity, our estimate gives a lower bound for the impact of fiscal anti-reforms on growth.

3.3. How have Politics Influenced Reform Selection and Incompleteness?

Reform incompleteness was a more or less natural outcome of the pragmatic approach to reform that prevailed in Brazil. In particular, a reason why market-oriented reforms went so far as they did was that they were perceived as instrumental in sustaining price stabilization, which was very popular. Once this link weakened, largely on account of the changes in macro policy in 1998-99, so did the drive for greater economic liberalization.

Although not stopping altogether, Brazil's market-reform process has greatly decelerated since 2000. The only noteworthy exceptions were the enactment of a new bankruptcy law, the introduction of more stringent rules for the retirement of civil servants, and the partial reform of the judicial system. And these were partly compensated by a partial reversal in previous regulatory reforms in infrastructure and an expansion in state business activities in finance and manufacturing activities. The public-private partnerships (PPP), heralded as a solution to overcome the lack of infrastructure investment, have not, predictability, taken-off so far. In the same vein, the new regulatory model for the electricity sector has so far failed to spur a sufficiently large rise in private investment in power generation.

Several factors contributed to the reduced speed of the reform process in this decade: a similar slowdown in the rest of the world, the low growth rates recorded in the post-reform period, and the opposition's victory in the 2002 presidential elections, itself a result of the unpopularity of the reform process. Moreover, the recent growth acceleration, while on the one hand not linked in the political debate to the reforms, for it came after the election of political leaders that historically opposed them, on the other hand has contributed to

[12] See the Appendix for a presentation of the model used to reach these results.

mitigate the urgency of reforms. The same is true with respect to the recovery in world economic growth and the ensuing rise in commodity prices, thanks to which Brazil has generated large current account surpluses and lowered its net external debt. Together with the abundance of international financial liquidity, this has reduced the clout of multilateral organizations and foreign investors in pushing reforms forward. Even though in Brazil the pendulum has not swung back towards state intervention as far as in some other South American countries, the enthusiasm for market-oriented reforms has clearly subsided.

As noted, the 1988 Constitution triggered many of the policy actions that deterred growth. For one, because it contained provisions geared at strengthening the state, at the expense of market-orientation. For another, because much of it was concerned with establishing legal rights that either led to an expansion in public expenditures or reduced the flexibility and, to some extent, the security of private contracts. Yet, by blaming the Constitution alone one misses the bigger picture. The Constitution has been amended several times over the years, and while some changes strengthened the foundations for growth, others went the other way. The same can be said of other infra-constitutional changes approved since 1988. Therefore, the Constitution should not be seen as a one-time, exogenous decision that went astray, but as the result of a political environment that has systematically produced a mix of market-oriented and anti-market reforms. That is, these policy options need to be treated as endogenous to social and political institutions, as choices made by different democratically elected politicians.

We attribute the problem of poor selection of reforms, from the point of view of accelerating GDP growth, to the interplay between democratization, — a reform in itself — and Brazil's highly unequal income distribution.[13] Whereas under dictatorship governments could overlook specific groups' political preferences and function with a relatively lean state, the return to democracy changed incentives and encouraged a rise in current spending, as occurred in Brazil since the mid-1980s. As the poor, and civilians in general, acquired voting rights and became more engaged in the electoral process — to which also contributed rising urbanization and schooling levels — the demand for income redistribution increased. Given the ability of extant beneficiaries to veto cuts in existing expenditures, and even to raise some of them, to which also contributed Brazil's fragmented party system, the end result was a rise in total expenses, rather than the redistribution of a constant total. This would account for the inconsistencies observed in the reform process, since growth and price stabilization would favor market reforms, whereas electoral incentives would cause politicians to be more concerned with changes that favored goals other than growth and with expanding current expenditures.

[13] The sequencing of reforms may also have contributed to this outcome. Countries that liberalize politics before liberalizing the economy will likely face more difficulties in negotiating a pro-growth selection of reforms (Giavazzi and Tabellini, 2005). If true, this would mean that performance should be better in countries that followed a path opposite to Brazil's, such as Chile, Russia and China.

A similar argument can be made regarding the protection of property rights. Whereas public sector transfers can change income distribution, property expropriation by the poor can redistribute wealth, which is also very unequally distributed in Brazil. This has been a critical factor boosting popular acceptance of trespassing in rural land by (supposedly) landless peasants and on urban land by (equally supposed) homeless families. Dwellings in "*favelas*" (shantytowns), in turn, consume a significant part of the electricity destined for non-commercial use in Brazilian cities, and usually do not pay for it; many of these households also access stolen cable TV services. Many laws forbidding these practices — as well as the different manifestations of informality, from street vending to the disregard of labor laws — are often overlooked for they are seen as means to attenuate income / wealth disparities. A similar argument inspires Brazilian judges to take biased decisions in contract enforcement, favoring the poorer party in disputes involving labor, rent, and credit contracts, for instance. Although the authorities may decide to turn a blind eye to these illegal practices only to favor the poor, problems of asymmetry of information prevent such fine-tuning, and the end result is an environment of weak legal enforcement.

To the extent that more public consumption and transfers, on the one hand, and the weak enforcement of laws and contracts, on the other, are perceived by many influential groups as means to redistribute income and wealth, it is plausible to argue that **inequality acts as an obstacle to the implementation of pro-growth reforms**.[14] Democratization, by giving voice, vote and power (e.g., for judges) to those who favor redistribution, even if at the expense of growth, has changed the balance of power vis-à-vis the situation prevailing during most of the high growth period. By coming soon after the debt crisis, this change in the political underpinnings of economic policy has helped to extend the growth slowdown initiated a few years earlier. Yet, the resulting growth constraints differ from those stemming from the external shocks of the early 1980s.

Thus, Brazil fits well the political economy argument that more income inequality tends to reduce growth because in unequal economies the median voter has a below-average income. If the political system is democratic, then election outcomes will favor policies that raise income and property tax revenues and redistribute the proceeds to the poor. The ensuing rise in the tax burden constrains growth by the usual mechanisms, such as a lower investment rate.

However, there is evidence that contradicts the positive correlations among high inequality and high tax burdens and redistribution implied by this political economy argument. Therefore, other explanations are necessary to reconcile the growth-inequality and redistribution-inequality nexuses. One missing element is risk. In an extended explanation the public sector plays a dual role. On the one hand, it acts as a big insurance company. On the other, it redistributes income to the poor. The more egalitarian the society, the more

[14] Income inequality is associated with higher policy volatility, weaker institutions, and shorter growth spells (Berg, Ostry, and Zettelmeyer, 2006). In addition, poverty may harm growth by creating barriers to human capital accumulation, and excluding large segments of society from financial markets (Perry et al, 2006).

predominant are insurance relative to distributive concerns. An egalitarian society is willing to accept high taxes. If that society is unequal, rich people are less willing to contribute to such insurance schemes. This will lead to a low tax burden, which will be smaller the more politically powerful are the rich: the result is an inverse relationship between inequality and growth. Thus, the relationship between inequality and the tax burden displays a U shape: in the descending branch, the relationship is dominated by the insurance aspect of public sector policies, while in the ascending branch the redistributive goals of the public sector role dominates. This explanation is consistent with the prediction that for a very high level of inequality there would be a positive relationship between inequality and the size of the tax burden, provided that the democratic system is working above a minimal threshold.[15]

In order to better assess the Brazilian case in this regard, we estimated a non-linear relationship between social security transfers and per capita income, the population share aged 65 or more and the Gini coefficient under different specifications, as shown in the next table.[16]

Table 3.4: Regression results — Dependent variable: social security expenditures (% of GDP)

	1	2	3	4	5
Constant	**-2.03**	**18.74**	**44.04**	**18.52**	**-3.54**
	(-2.09)	(2.20)	(4.47)	(2.20)	(-1.47)
Income per capita	**0.07**		**0.18**	**0.06**	**0.07**
	(1.57)		(3.52)	(1.50)	(1.44)
% pop 65 or more	0.94	1.00		0.91	1.02
	(8.63)	(7.68)		(6.39)	(7.00)
Gini		**-102.45**	**-167.32**	**-101.90**	
		(-2.70)	(-3.50)	(-2.72)	
Gini squared		**120.98**	**168.13**	**120.79**	**5.32**
		(2.78)	(2.99)	(2.81)	(0.72)
R-squared adjusted	0.72	0.73	0.54	0.74	0.71
N	60	56	56	56	56
Log likelihood	-154.30	-141.66	-156.91	-140.45	-144.24

t statistics under coefficients

Source: See text

First, we regressed social security expenditures on per capita income and on the population share aged 65 or more.[17] This simple econometric model predicts for Brazil only 3.5% of GDP in social security transfers, as opposed to the actual 12.7% of GDP, leaving a residual of 9.2% of GDP to be explained by other omitted variables. Next, we added both the Gini coefficient and its squared value as regressors. The results are displayed in column 4 of Table 3.4, which, incidentally, registers a very high adjusted R-squared for this kind of

[15] Bénabou (2006).
[16] Following Mello and Tiongson (2006).
[17] Data are from the World Bank database and refer to 2002. The sample has between 56 and 60 countries, depending on the variables included.

exercise (0.74). But the residual relative to Brazil is only reduced to 7.3%, still a very high value. Thus, the Brazilian case remains an atypical one, in the sense that the model predicts a social security expenditures-to-GDP ratio of 5.4%, and thus leaves a rather high residual. Only one other country showed a higher residual: Poland, which had transfers 8.0% of GDP above those predicted by the model.

We conclude that Brazil does not fit the normal pattern of social security expenditures predicted by the above equation, presenting ratios much higher than those characteristic of its income, demography and inequality. Thus, while the large rise in public transfers can be partly explained by the interplay between re-democratization and high inequality, in accordance with Bénabou's and earlier models, the Brazilian case is singular, for the volume of transfers is too high. This could possibly be explained by the Brazilian political institutions, a point to which we now turn.

Brazilian democracy is based on the proportional electoral rule. This rule produces a more fragmented Congress than observed in other systems, for it allows for a larger number of minority groups to be represented than in majority rule systems. This system also leads to a reduction in individual accountability, when compared to the majority system, and results in a larger number of veto players. The empirical evidence suggests that proportional systems tend to raise social expenditures in up to 3% of GDP when compared to other systems.[18]

3.4. Have Anti-Market Reforms been Inclusive?

Income distribution has improved since the late 1990s, when the tax burden accelerated its escalation towards current record levels, with a rising ratio between the median and mean incomes. Yet, the large rise in public current spending answered for only a limited share of this gain, and only more recently, when better targeted programs such as *Bolsa Escola*, latter re-labeled *Bolsa Família*, were implemented. One reason for that was that the new spending came on top of already existing programs, rather than as a substitute, so public subsidies to well-off families, notably through the social security system, were kept and, in some case, even beefed up. Although non-pension monetary transfers answer for a relevant share of the gross income of households in the first quintile of house hold income distribution, they account for a relatively small part of total monetary transfers. Compared to OECD countries, Brazil destines only a tiny portion of the social benefits to low income households. Thus, on the expenditure side, we observe that while between 1991 and 2007 social spending by the central government went from 6.4% to 12.9% of GDP, three-fourths of this rise went to finance larger pension expenditures (Giambiagi, 2007), which go disproportionately to households in the upper two quintiles of the income distribution.

The other main reason why this much larger state contributed relatively little to improve income distribution was that the rise in spending was financed largely by an increase in

[18] Persson and Tabellini (2003), chapters 6 and 9, mainly section 6.3.

indirect taxes, which are especially regressive (Table 3.5). Although all families were burdened by the significant rise in taxes, the poor were affected disproportionately. Thus, families with incomes of up to two minimum salaries faced an increase of 21% in their tax burden between 1996 and 2004, as opposed to 8% for families above thirty minimum salaries. Almost all of this increase stemmed from higher indirect taxes. Because these are mostly levied at the production stage, passed along in the distribution chain, and not explicitly acknowledged or indicated at the price charged to consumers, their size – or, for that matter, their increase between 1996 and 2004 – goes largely unnoticed. At the end of the day, the overall program of taxes and transfers does very little to change income distribution. Differently from what is observed in Europe, the Gini coefficient in Brazil is roughly the same before and after taxes and monetary transfers. But there is an important asymmetry between the visibility of benefits, such as the *Bolsa Familia* program, the object of constant government propaganda, and the financing of such programs through taxes. **And this, perhaps more than the results per se, makes this process of enlarging the state's size popular among voters.**

Table 3.5: Taxes as a percentage of family income by level of monthly income

Monthly Family Income (in minimum salaries)	Direct taxes		Indirect taxes		Total tax burden		Increment in tax burden
	1996	2004	1996	2004	1996	2004	
up to 2	1.7	3.1	26.5	45.8	28.2	48.9	20.7
2 to 3	2.6	3.5	20.0	34.5	22.6	38.0	15.4
3 to 5	3.1	3.7	16.3	30.2	19.4	33.9	14.5
5 to 6	4.0	4.1	14.0	27.9	18.0	32.0	14.0
6 to 8	4.2	5.2	13.8	28.5	18.0	33.7	15.7
8 to 10	4.1	5.9	12.0	25.7	16.1	31.6	15.5
10 to 15	4.6	6.8	10.5	23.7	15.1	30.5	15.4
15 to 20	5.5	6.9	9.4	21.6	14.9	28.5	13.6
20 to 30	5.7	8.6	9.1	20.1	14.8	28.7	13.9
more than 30	10.6	9.9	7.3	16.4	17.9	26.3	8.4

Source: M. H. Zockun, 2005, "Projeto Simplificando o Brasil", apud J. R. Afonso, "Tributação no Brasil: Reforma x Reestruturação", 2006, processed.

We conclude that the robust rise in 'social expenditures' that has taken place after re-democratization is related to one of the main characteristics of the Brazilian society — namely, its high inequality. In addition, it is also an outcome to be expected, given the system of democratic representation adopted since the 1988 Constitution was enacted. Yet, all taken together, it has not had the impact on distribution that may have motivated voters to support such a large rise in public spending.

4. The Way Forward: What to do to Accelerate Growth?

4.1 – The Critical Foundations

We identified **macroeconomic stability as the most critically missing foundation for growth,** due to its partial character and low quality. Several indicators attest to that: high real interest rates and volatile growth, interest and real exchange rates (although less so in 2003-07, thanks to very favorable external conditions). So, even after price stabilization and the floating of the exchange rate, Brazil has had an unbalanced macroeconomic policy mix, which overburdens monetary policy to compensate for: a lax fiscal policy; a large public debt; an oversized state; and a poor structure of public spending, greatly skewed towards current expenditures — especially transfers — at the expense of public investment.

Thus, the much praised success in sustaining a high primary fiscal surplus, sufficient to stabilize the public debt to GDP ratio, has been accomplished through the simultaneous rise of current expenditures and the tax burden, which weakened the link between macro stability and growth and penalized other foundations. The high tax burden fostered informality, with negative effects on productivity and investment, and created an unleveled playing field for competition between formal firms, that pay taxes, and those informal, that do not. The constant change in tax rules to allow for rising revenues meant that investors faced a declining and uncertain claim on profits, while also diverting valuable resources to rent seeking and tax planning, rather than production, in a process similar to that observed in the high inflation period.[19] As already indicated, **the high tax burden is one of the main obstacles to growth acceleration.**

The large expansion in public current expenditures has required, also, that the Central Bank keeps a high base interest rate (SELIC) that, combined with the high taxes levied on financial intermediation, has prevented a further deepening of the financial sector, thus further weakening the link between this foundation and growth. In addition, the central role played by the state in mobilizing and allocating savings dampens the impact of financial intermediation on capital productivity.

Considering both its potential contribution to growth and the situation Brazil is presently in, the **security of property rights** ranks second among the most critical foundations to streamline. This foundation received less attention in the reform process of the last quarter century, despite its rising importance, as market-friendly reforms (e.g., privatization) and the financial link between macro stability and growth depend on it to work well. Reforms aimed at strengthening property rights moved slowly (e.g., judicial reform and a new bankruptcy law) and were often only partly implemented (e.g., in the regulation of public utilities). There is yet much to do: for instance, in protecting investors against administrative expropriation, titling property, and strengthening the value of collateral in credit operations, notably in the housing sector.

Moreover, the greater independence afforded to the judiciary has often translated into weaker, rather than stronger properties rights, as judges rule according to their political

[19] Per se, the frequent change in tax rules has been a form of expropriation, which led to thousands of judicial processes, a significant share of which won by taxpayers.

views and to pursue “social justice” through decisions aimed at redistributing wealth to debtors, tenants, employees etc. Trespassing on private rural and urban property has been frequent since the enactment of the 1988 Constitution, and it is often hard, slow and costly to evict trespassers. A significant rise in crime rates is an additional factor weakening property rights. Combined with the poor quality and insufficient depth of the macro stability foundation, the weak protection of property rights has been a major disincentive to capacity-augmenting investment.

This general view is supported by the World Bank’s World Governance Indicators, which reveal that the dimensions of governance related to the rule of law and regulatory quality clearly worsened in Brazil in recent years. This is especially the case of Government Effectiveness (after 2003), Regulatory Quality (after 2000), Rule of Law and Control of Corruption (after 2000) dimensions. This is worrisome, considering that these variables rank among the most important determinants of long-term growth.

We see the broad **sharing of the benefits from growth** as a third critical foundation in need of strengthening. Since the early 1990s, income-compensating transfers and other types of public social spending have increased substantially, with a large rise in the real value of the minimum wage and an expansion in the coverage of social programs, so that they currently play an important role in reducing poverty. However, transfers disproportionately benefit the elder citizens, for which the rate of poverty is roughly half the national average and a third of that observed for children, and are weakly tied to conditionalities that could potentially create more equal opportunities, such as school attendance and pre-natal and early childhood care.

Moreover, **transfers are only loosely associated with market-based growth, and thus do not help to create a constituency in favor of pro-growth reforms**. Thus, in the way they are structured, these transfer systems weaken the link between broad sharing and growth, for they foster lobbies in favor of greater public spending and discourage participation in the labor force—for this would make households ineligible to some of the benefits. A contradictory important aspect emerges, then: although the sharing of benefits has broadened, this has weakened, rather than strengthened the constituency in favor of pro-market-based reforms. Had this sharing taken place via the labor market, rather than through national treasury transfers, the link with growth would possibly have been strengthened. As discussed below, this goal can be best achieved by lowering pension expenditures, so as to create a fiscal space for more effective conditional cash transfers such as the *Bolsa Família* program.

There is also much to do to **level the playing field among Brazilians**. Two critical areas in which reforms are necessary with that regard are **education** and **urban infrastructure**, notably sanitation. Coverage in basic education expanded substantially, but at the expense of quality, so that there is relatively little learning going on, despite high repetition rates. This means that only a fraction of those children entering primary education conclude high school. Greater investment in early childhood development and reforms to increase the amount of hours of effective class would likely go a long way towards that end. Resources for that could possibly come, at least in part, from ending the free-for-all regime adopted by public universities, through which a large share of the public subsidies in education are channeled to households in the top two quintiles of the income distribution. Sanitation is a critical area to reduce disease incidence and mortality rates. This requires a boost in supply, which would likely demand both a better protection of investors' rights (regulatory reform) and more public investment. Garbage collection and cheaper, faster and more accessible public transportation in poor neighborhoods are other examples of public services that need to be improved if there is to be greater equality of opportunities.

Although recognizing that reforms could further enhance economic and political competition, we do not see this as a foundation constraining growth at present. The political system has given proof that it is relatively open, with high contestability in the executive and legislative branches of government, as witnessed by the election of President Lula and the significant turnarounds observed in the Senate and the Chamber of Deputies. In the same vein, while more could be done to open the economy, fight cartels, and discontinue direct credit regulations, we do not see these as priority areas for reform in a growth agenda for Brazil at present.

Overall, reforms aimed at **bettering macro policy**, **reducing the size of the state** (which in itself would improve macro policy) and **making it more functional** should occupy the stage center. Given the crucial role we attribute to **inducing higher investment levels**, we consider reforms that create greater fiscal space for capital spending, a reduction in tax burden and a lowering of the public debt to be on top of the reform priority list.

Table 4.1 helps us to go from the critical foundations to the priority reforms. It lists reforms currently under discussion and relates them to the five foundations for growth, indicating the strength of their expected impact: one mark indicates a positive impact, two marks a strong positive impact and no marks little or no impact. Based on it, we have chosen five reform areas as the most important ones:

(a) **Fiscal reform** should combine a reduction in public consumption, especially through **pension/social security reform** and an increase in public investment (in infrastructure), plus **tax reform**. Fiscal, pension and tax reform affect more than one foundation, but their main impact is on the quality of macro stability.

(b) **Judicial reform** and measures to deal with juridical insecurity, a reform that most directly affects the foundation "property rights".

(c) **Financial sector reform** impacts three foundations: first, and more importantly, macro stability. But it also affects the economic and political competition and the equal opportunities foundations.

(d) **Regulatory** reform should have strong impacts on securing property rights and economic and political competition.

(e) **Education reform** impacts the "equal opportunities' foundation and, in the long run, the macro foundation as well.

(f) **Political reform** should result in improved conditions for other reforms to be approved by increasing economic and political competition, as well as fighting corruption.

Table 4.1: New Reforms and their Expected Impact on the Foundations for Growth

Type or area of reform	(1) Secure property rights	(2) Equal opportunities	(3) Economic and political competition	(4) Macro stability	(5) Broad sharing of the benefits of growth
Trade liberalization			√	√	√
Privatization			√		
Regulatory reform	√√		√√		
Decentralization					
Financial sector		√√	√	√	
Education		√√		√	
Pension		√		√√	
Tax			√	√√	√
Fiscal / budgetary				√√	
Judiciary	√√				
Political / electoral			√		
Measures against corruption	√	√	√	√	
Administrative				√	√√
Labor		√	√		√

Note: √ indicates that the reform was expected to positively impact the foundation, while √√ indicates that it would have a strong impact.

4.2 – Fiscal, pension and tax reform

Fiscal reform includes measures aiming at (i) reducing current expenditures, so as to expand public savings and investment, and (ii) simultaneously lower the burden and improve the quality of the tax system. Cross-country comparisons and the huge increase in primary fiscal expenditures over the past 15 years warrant the emphasis we place on cutting current expenditure. In particular, efforts should be aimed at cutting social security expenditures, which have reached nearly 12% of GDP, a figure only found in developed economies with older populations.

Although we rank the social security system as the most critical area of reform, if the objective is to bring current expenditures down as proportion of GDP, it is important to note that it is not the only one. Other reform areas include the public sector's payroll and procurement practices. Different proposals have been made to cap total expenditures with government personnel, including a recent one (by the Executive itself) to limit the progression of such expenditures in tandem with past consumer inflation plus a minor percent (1.5%, as stated in the PAC — *Programa de Aceleração Econômica*) to allow for specific public sector classes of employees readjustments. Moreover, at sub-national level there is a significant scope to save on education and health expenditures by outsourcing the operation of facilities to the private sector. Mention should also be made to the crucial need to improve managerial practices and implement more efficient procedures in another round of administrative reform, proceeding with the (largely abandoned) reforms that took place just after Pres. Cardoso was empowered in early 1994 under Min. Bresser Pereira. This issue is beyond the scope of the present report, though, despite its importance in contemporary Brazil.

Social Security Reform

The Brazilian social security system is well known for its generosity in granting retirement benefits and pensions and has become even more so with the advent of the 1988 Constitution. Two major reforms, in 1998 and 2003, helped to mitigate the problem, but stayed short of changing the system's long-term dynamics. Moreover, they constrain other social expenditures, especially in health and education. Social security reform is also a needed complement to a labor market reform (not yet seriously admitted as a viable reform area) that could attack the important problem of informality. Thus, the social security system still ranks among the main factors pushing public expenditures upwards.

The main issue concerns the rules that grant the access to benefits, both for their impact on total expenditures and the fact that they award large subsidies to specific social groups. There is no minimum retirement age for private sector workers, so quite a large proportion of these retire quite young for international (mostly OECD) standards. Moreover, under present rules women can retire five years earlier than men. In some professions, such as teachers, workers can retire five years earlier than regular workers, a provision that is cumulative with the gender rule. Since 1993, with the enactment of the LOAS, low-income workers have been given access to social security like benefits after reaching 65 years, even if they have never contributed to the system, thus discouraging them to participate, lowering social security revenues and fostering informality. The other main issue is the generous policy adopted to adjust the value of benefits, which for most retirees has simply increased *pari passu* with the minimum wage, which is also reviewed annually (a practice inherited from the high inflation phase), and which has more than doubled, after correcting for consumer price inflation, since price stabilization (1994).

The system's generous rules have combined with a major demographic transition to generate a bleak outlook to its finances. Thus, since the 1980s fertility rates have come down substantially, making for higher dependency rates, and life expectancy has increased substantially, due to improved health conditions, so retirees and pensioners receive benefits for longer periods. Thus, projections show that in 2030 40.5 million Brazilians will be older than 60 years, representing nearly 17% of the population, against 9% in 2005. In the last quarter century these trends were compounded by relatively low GDP growth, which limited employment and income growth, while fostering high informality rates, which restricted social security revenues.

These factors caused the social security deficit to expand in the last two decades, a trend that can be counteracted either by expenditure cuts or collecting additional revenues. Brazil has traditionally favored the latter, which partly explains its high tax burden and informality rate. But the social security reform proposals discussed next focus on curbing expenditure growth along two main areas. The first concerns the rules for the periodical adjustment of the minimum value of benefits; the second deals with changes in the rules that govern access to benefits, especially retirement benefits. We advocate in favor of both alternatives. We intentionally left out increases in individual contributions, which would be a mean to lower subsidies and close the financial gap, for we believe that the social security's main problem is its large size, more than the deficit per se. Indeed, although common in the 1980s, few recent changes in the system have focused on increasing contributions. The exception was the levying of contributions to already retired public employees, enacted in 2003. Contrary to what would be the case with raising contributions from currently active workers, this increase had no effect on labor costs, thus it did not affect employment or informality levels.

More specifically, we propose that the backbone of a new round of social security reform should consist of five measures:[20]

(i) <u>De-link the periodic minimum wage adjustments from the indexing of the value of pensions and retirements</u>. The Brazilian Constitution states that no social security benefit can fall below the national minimum wage, which, then, "pulls" the INSS — *Instituto Nacional da Seguridade Social* benefits and some social assistance expenses when it goes up. Generous rules for the annual minimum wage increases — which more than doubled in real terms in 1994-2006 — are the norm. The result has been strong and continuous rises in social security expenditures, over and above what could be explained by inflation and demographic trends. Our proposal is to eliminate the link between the minimum wage and the lower bound for pensions and social assistance benefits. Pensions and income transfers would be indexed to inflation, so as to keep constant the real value of benefits, but not undergo real increases. In this way, they will more closely reflect the actual contribution made by retired workers to the system, while freeing the minimum wage to incorporate contemporaneous increases in productivity.

(ii) <u>Fix minimum retirement age for access to INSS benefits, which should increase over time</u>. On a par with the rules already in place for public servants, workers in the private sector would not be able to retire until 60 and 55 years of age, for men and women,

[20] See Pinheiro and Giambiagi (2006), Giambiagi (2006b) and Tafner and Giambiagi (2007) for a more detailed discussion of these proposals.

respectively. As average life expectancy increased, these lower bounds would also rise, according to a pre-established rule. This change would reduce the ratio between the number of beneficiaries and that of contributors. And this measure would reduce the subsidies given to workers who retire relatively young.

(iii) Move towards a single set of rules governing access to pensions for men and women. Concerning the minimum requirements for retirement, the present five-year difference should be reduced to two or even eliminated over a reasonable time period. As women's life expectation surpasses that of men, this would still provide them a disproportional benefit, since they would receive retirement benefits for longer periods. The argument often raised to justify the differences, women's "double work shift" (at home and on the job), is fraught with problems, from cultural changes to lack of economic sense. In particular, the social security system is the wrong locus for working out a compensation for such a difference in workload, if it is still significant, for its consequences are totally contained within the household.[21] In addition, with increased female participation in the labor force, this subsidy has become substantial, and has to be partly covered by taxpayers, through a regressive tax system.

(iv) Abolish the special retirement regime for teachers. The Constitutional Amendment approved in 2003 imposed minimum retirement ages for men (60) and women (55) in the public service, but kept the bonus teachers had of retiring five years earlier than other workers — in the public sector, male teachers can retire at 55 and female teachers, which comprise the vast majority of teachers in Brazil, at 50. This has no equivalent anywhere in the world, as far as we know, and is a rule that greatly burdens the fiscal accounts of state and municipal governments, while at the same time limiting the possibility of better pay for those actually teaching, with negative repercussions on the quality of education. The solution is to expand the active life of teachers of both sexes, postponing their retirement, by applying to them the same rules adopted in the case of other workers, in the public and private sectors.

(v) Change rules of access to LOAS benefits to old age workers. The income transfers to old age people instituted by the LOAS, in the amount of one minimum wage, needs to be re-structured. The LOAS substituted for the "*Renda Mensal Vitalícia*" (permanent monthly income) program, created in the 1970s to guarantee the survival of 70+ year-olds with very low incomes, provided they had contributed to the social security system for at least one year. Presently the benefit is granted to 65+ year olds with no conditionalities, a much more benevolent scheme, although people currently live much longer than when the RMV was adopted. These rules stimulate informality, for workers who earn incomes near the minimum wage have no incentive to join the social security system, since they will earn the same benefit whether they contribute or not. Thus, our proposal is a return to the original

[21] Thus, the present regime leads to transfers from men in a given family to women in a family that not their own. In particular, why should a single woman receive a subsidy from a single man with whom she maintains no relationship?

spirit of the RMV, conditioning future concession of benefits for old age to an age floor of 70 years, provided previous contributions to the social security system have been made for some time (to be established).

Although we rank social security reform among the most important for Brazil to adopt, given its potential to curb the rise in current expenditures, we assess it has low political viability, as revealed by opinion polls and interviews with politicians. To some extent, this stems from a general opposition to reforms that, like pension reform, seek to reduce public expenditures. There is no understanding of the link between cutting public spending and growth acceleration, so there are strong constituencies against them and only very weak support.

In the case of social security reform, opposition comes mainly from those who benefit from present rules, such as teachers, formal workers, pensioners and women in general, who gain from having the taxpayer subsidize their retirement. For those retired, in particular, the likely benefit of reform, in the form of an acceleration in output and employment growth, will be relatively small. The main losers from the present stance, in turn, are the younger generations (and those not yet born), who don't yet vote nor participate in the political process. It is an unfair game, clearly. The upcoming rise in the proportion of the population aged sixty or more will only complicate the political inequality.

At present, political opposition to any of the measures listed above is probably insurmountable, despite the importance we attribute to them. The situation is made worse by the fact that the federal government, the major agent of change, is not convinced that this reform should be pursued As repeatedly stated by the authorities, their belief rests on the hypothesis that formal employment increases will solve the fiscal aspect of social security expenditures in due time. Besides that, social security expenditures — encompassing all varieties — are also believed to be part and parcel of social expenditures, a sensitive area to be reformed according to the present government's scale of political values ad practices.

Yet, the prospect for rising expenditures and deficits in the future are such that cumulated unbalances are bound to induce some reaction from the authorities, perhaps even during the present administration. The alternative to advance with social security reform is, thus, to pursue a piecewise and gradual strategy. Some measures, such as establishing a minimum retirement age for private sector workers, count with greater support and could be implemented separately. Approving this rule should be facilitated politically by the fact that it already applies to civil servants (not the sliding lower bound, though). Although it is unlikely that Congress will approve a measure to allow the minimum wage to rise more than the minimum value of pensions and retirement benefits, it is feasible to pass legislation capping the rise in the real value of the minimum wage. In both cases, political feasibility will be greatly enhanced in case of an economic crisis, notably a balance of payments crisis, so having a proposal ready can facilitate approval.

The other measures proposed above are even more unpopular, but they may be politically feasible if approved only for those who have not yet entered the labor force – this would apply, in particular, to the special regimes benefiting female workers and teachers. As with the remaining changes discussed above, and this applies to market reforms in general, political feasibility also hinges, in addition to gradualism and piecewise change, on a publicity effort, so as to increase public awareness about the reasons for reform. This proved critical in the reform of the social security system for civil servants. Last but not least, two complementary reforms could enhance the political chances of social security reform: tax reform and political reform.

Tax reform

The improvement in Brazil's fiscal accounts can be gauged by the maintenance of a primary surplus large enough to stabilize the public debt / GDP ratio. But after eight years consistently meeting the primary surplus targets, Brazil's adjustment process is far from complete. For one, because the public debt is still very high. In countries graded by S&P in the same risk level as Brazil, the mean net public debt to GDP ratio for the general government is 34%, against 49% in Brazil.[22] For another, because the real interest rate paid by the government remains very high, demanding a large primary surplus in order for the debt/GDP ratio not to enter into an explosive path. This introduces a high political risk into any medium-term scenario for the economy: the primary surplus is generated yearly based on the micro-management of different demands for higher spending, a task that can only be performed with continuous backing form the President. The fiscal adjustment will not be completed until the debt/GDP ratio falls to a level around 30% of GDP. This would allow for a substantial decline in interest rates.

The poor quality of the fiscal adjustment hinges on its dependence on a rising tax burden, from a relatively stable 25% of GDP in 1968-93 to over 37 percent of GDP in 2005, and more in 2006 and 2007.[23] Another problem is the pro-cyclical nature of fiscal policy, due to the earmarking of revenues to specific expenditure items, notably health and education.

The increase in the tax burden exceeded by far the necessary to meet the primary surplus target of 4.25% of GDP. Thus, it also financed a major expansion in public primary spending, which rose continuously as a proportion of GDP in the last fifteen years, by almost 10 percent of GDP from 1991 to 2006. This higher spending did not fall, though, on the kind of items that boost growth, being mostly explained by the 6% of GDP rise in pension payments. Indeed, public sector investment has fallen almost continuously in this period, with negative consequences for the quality of Brazil's infrastructure. Considering the three levels of government, public investment fell some 0.8% of GDP between the

[22] Countries classified as BBB, the minimum required to be investment grade, have a ratio of 27%.
[23] At present levels, Brazil's tax burden is similar to that of Germany and the UK, surpasses that of the US and Japan, which hover around 30 percent of GDP, and is well above those of Chile and Korea, which are around 20 percent of GDP.

1990s and the 2000-04 period; compared to the 1970s, the contraction scales up to 1.7% of GDP. This decline in public investment also compromised GDP growth.

Tax reform should have four main goals: (a) reduce the tax burden; (b) reduce earmarking of revenues (“*vinculação das receitas*”); and (c) simplify the present tax structure and reduce its administrative complexity. We devise two alternative sets of measures, the first relying on a more radical approach, which we foresee to be less politically palatable; the other being more incremental and focusing more on existing tax brackets and the merge of taxes, rather than on devising a whole new regime. In particular, this second approach would preserve the mix between indirect and direct taxes, so as to reduce uncertainty on future revenues.

In the **more radical alternative,** the reform should (i) substitute a host of indirect taxes (ICMS, IPI, PIS/PASEP, Cofins, CIDE, Taxa das Teles, ISS, Sistema S, and *Salário Educação*), which presently generate revenues of nearly 16% of GDP, by a single value added tax (IVA), the proceeds of which would be shared among the federal, state and municipal governments; and (ii) merge the CSLL (*Contribuição Social sobre o Lucro Líquido*) and the IRPJ (*Imposto de Renda de Pessoa Jurídica*) into a single tax. The resulting tax brackets would be necessarily high, but this would make explicit the high tax burden and hopefully create a constituency in favor of reducing public sector expenditures. Other features of this tax reform proposal include: (iii) national rates, but with state bands to allow for some discretion by state governments (+ or – 20%); (iv) taxation at point of consumption (principle of destination), with compensatory tax in the origin; and (v) auditing at the state level. It is likely that, due to its complexity, the reform would need to be executed in successive phases, the sequence of which should reflect the interaction of technical and political hurdles.

An **alternative, less radical reform** would include the following changes:[24]

(i) Reduce the tax burden, giving priority to taxes earmarked to expenditures that can be more easily discontinued, or transferred to the private sector, or that penalize growth foundations more directly. Natural candidates are: reductions in the FGTS, in the contributions to the SESI, SENAI and SEBRAE (or even their complete extinction; the activities these taxes finance can be paid out by the private sector) and, partially the PIS/PASEP. Direct and indirect taxes on investment expenditures and import duties should be drastically curtailed in the medium term.

(ii) Modify the system of tax sharing so as to encompass all taxes and “contributions”, instead of only three (Income Tax, IPI and CIDE), but without altering the total value of transfers to states and municipalities.

[24] Some of which follow Afonso and Varsano (2004). See also Tafner and Giambiagi (2007b).

(iii) Unify the COFINS and the PIS-PASEP in a single "contribution" (the CONFINS, for instance) and do the same with Income Tax on Firms (IRPJ) and the *Contribuição Social sobre o Lucro Líquido* (CSLL).

(iv) Unify and simplify the ICMS legislation and tax brackets, which should then be the same in all regions, while adopting the principle of charging this tribute where goods are consumed, rather than where they are produced.

(v) Transform the IPI into a tax on specific goods (tobacco, alcoholic beverages and passenger cars), while eliminating this tribute on all other items.

(vi) Enlarge the DRU (*Desvinculação de Receitas da União*)[25] so as to gradually discontinue the majority of existing provisions earmarking revenues to specific expenditure items ("*vinculações*").

This is the reform most soundly under way. As of December 2007, the CPMF was discontinued. The record level of tax revenues in January 2008 indicates that high economic growth and greater formalization in the labor market have offset the loss of revenue with the CPMF. In February 2008 the government began to disseminate a project with constitutional amendments to reform the tax system that contemplates several of the above mentioned initiatives. In particular, it includes a significant simplification of the indirect tax system, with the substitution of the current 27 state laws on value added taxes (ICMS) for a single law, with standard rates for all states, and the creation of a federal VAT that will bring together the PIS, Cofins and Cide. In addition, the project replaces the object of VAT taxation, from production to consumption — a measure that favors the less industrialized, poorer states — and proposes to lower payroll taxes paid by employers over a six-year period, from 20% to 14%.

Changes in the tax system are rarely neutral, from a distributive viewpoint, and there is much uncertainty as to how each party will fare, which tends to strengthen the constituency against almost any measure. Since the states and municipalities are most likely to lose with these reforms, the federal government should be prepared to provide the needed compensation. The very existence of state debts (owed to the federal government) may provide the means to compensate losers as well as offer them alternative mechanisms, that not tax incentives, for promoting regional development policies. Another alternative is to create an equalization fund for revenues (substituting the FPEM) capable of guaranteeing a lower bound for per capita minimum revenues at the state level. The difference between each state's revenue capacity ("*capacidade arrecadatória*") and the respective minimum per capita tax revenue would be paid out of the fund. In particular, a means to weaken the opposition of the main opponents of the reform project announced by the federal government, the more industrialized states, as well as those with larger inter-state exports

[25] The DRU is a constitutional mechanism through which the federal government is forced to transfer part of tax receipts to sates and municipalities to finance certain kinds of expenditures (education, for instance).

— mainly the states of São Paulo and Amazonas — is to compensate their losses by lowering the service on their debts with the federal government.

4.3 – Judicial Reform

Most analysts concur that the Brazilian judiciary is an institution with serious problems, the most visible of which is its lack of agility and predictability, which worsened after the 1988 Constitution. The freedom that individual judges, even those at the lowest level, have to reach very different decisions on similar cases and the power granted to them to paralyze government policies have encouraged society to seek in the judiciary the solution to its social and political conflicts. This has led to both the "judicialization of politics", increasing the load of cases to be tried by courts, and to the "politicization of the Judiciary", which compromises its capacity to be impartial. The demands on the judiciary have also increased as a result of democratization and the economic reforms of the nineties, such as the enactment of a new consumer protection law, with the courts being asked to solve more and more complex cases.

Judicial activism is a leading feature of the way the Brazilian judiciary operates, and also a reason why Brazil records relatively low indicators for the rule of law. Some analysts argue that the Brazilian judiciary has molded itself to these historical roots, so that its slowness and heavily bureaucratic character have in practice the permanence of a cultural trait. A consequence of the almost fatalist acceptance of this alleged cultural trait by many judges and other judicial operators is the excessive recourse to procedural arguments, at the expense of substantive decisions that would go into the merit of the issues brought to the judiciary — a tendency that reinforces the skepticism of a large part of society on the possibility of solving conflicts through the judiciary.

Although these problems have been partly addressed by recent reforms, the changes have only been incremental. Judicial activism remains an important feature of court decisions and, as illustrated in Table 4.2, the number of procedures one has to undertake to enforce a contract remains too large, even by Latin American standards. It is not surprising, thus, that the **security of property rights** ranks second among the most critical foundations to streamline. The presently low protection of rights reflects a number of factors—judicial activism, high volatility of tax rules, contract breaches by the government, and the slow enforcement of laws and regulations—, including an overall bias against financial investors in the Executive, Legislative and Judicial branches of government. Judicial reform ranks among those most strongly affecting the property rights agenda (the other, regulatory reform, critical to attract private investors to infrastructure, is discussed below).

Table 4.2: Enforcing Contracts

	Procedures (number)	Duration (days)	Cost (% of claim)
OECD	31.3	443.3	17.7
Latin America & Caribbean	39.3	699.9	30.7
Brazil	45	616	16.5
Chile	36	480	28.6
Mexico	38	415	32.0

Source: World Bank, Doing Business reports.

Measures to make the judiciary more functional are usually divided into three groups: legal, managerial and cultural. Until not so long ago, the traditional reaction to this state of affairs had been almost only to expand the volume of public resources allocated to the judiciary, notably by increasing the number of judges. Nonetheless, the large rise in these expenditures, notably in the last two decades, has not improved matters, for the demand for judicial services has also grown quite rapidly.[26] Other, more innovative measures have sought to improve efficiency by lowering the cost of service provision, as exemplified by the creation of the Special Courts (Juizados Especiais), which lead with small claims and adopted a simplified procedure, but although successful these have not had a sufficiently large impact to change the overall situation, to some extent, because they too caused a boost in demand.

This situation has encouraged legislators to adopt more significant changes and, in 1992, a major overhauling of some norms began to be discussed in congressional committees especially constituted for that end. The theme remained in the congressional agenda for years, and only bear fruit in December 2004, with the enactment of constitutional amendment 45, which established among other things that the Supreme Court could make some of their decisions binding for lower courts and the Public Administration, through the so-called "*súmula vinculante*", as well as requiring from the party appealing to it that the decision will have "general repercussion". A somewhat weaker provision allowed the STJ (Superior Justice Tribunal) to refuse hearing cases it thought sufficiently pacified. Other, infra-constitutional changes also limited the possibilities of appeal in cases with well-established jurisprudence.

Amendment 45 also created the National Councils of Justice and Public Persecution (*Conselhos Nacionais de Justiça e do Ministério Público*), which have had an active role in curbing the most visible excesses in state courts. There were also changes in the rules of entry into the judiciary, with lawyers now required to have a minimum of three years of practice before taking exams to become judges. In early 2005 a package of 26 law projects were submitted to Congressional approval, most of which have already been made into law.

[26] On the surge in public expenditures with the judiciary see A. C. Pinheiro, "A Reforma do Judiciário: Uma Visão Econômica", in L. C. Bresser Pereira, J. Wilheim, and L. Sola (orgs.), Sociedade e Estado em Transformação, Editora Unesp, 2001.

These infra-constitutional reforms have greatly simplified the Civil and Procedural Codes, including provisions regarding labor contracts, eliminating a number of loopholes lawyers used to delay a judicial decision, while also making first-degree judges more influential and at the same time more accountable, although there is much ground yet to cover in this regard. These measures also fostered the use of alternative dispute resolution mechanisms, reinforcing a trend started with the enactment of the Arbitration Law in 1997.

The area in which progress has been slower and more difficult concerns the change of attitudes towards contract enforcement. Judicial decisions are often "politicized", in that they reflect the judge's political views or its intention to use the bench to redistribute income in favor of the less well off. The system has few controls to mitigate the impact of these politically motivated decisions on property and contract rights, other than allowing universal appeals to the higher courts, which are often abused and a cause of the increasing volume of litigation observed in Brazil. Moreover, erratic judicial decisions bread a fertile ground for corruption, for it becomes harder to identify cases in which other factors that not law enforcement or ideology are at play.

The measures adopted so far have been important to streamline the judiciary, notably to reduce its slowness, which has been their main focus. But slowness is only the most evident and less controversial problem of Brazilian judiciary: the security of property rights is also compromised by other problems in the judicial system, and indeed also in other areas. Thus, further changes are needed. Concerning management practices, there is still a need to improve information systems and case flow; to transfer part of the administrative responsibilities to professional managers, avoiding the bi-annual changes in goals and practices that usually take place with the rotation in the tribunal's presidency; and to improve case management - for example, grouping similar cases and judging them all together, rather than by order of arrival. Better management practices will speed up the judiciary and free the judges to dedicate more time to ponder about each case.

But the more challenging reform is to change the culture of law operators — lawyers, prosecutors, and judges — so that they value more the agility, predictability and impartiality of judicial sentences, which should be independent from the identity or social status of the parties. In special, the respect to contracts, the law and property rights should become a central tenet, which is not the case currently among a significant number of those in the profession. A mean to stimulate this change of culture is to adopt performance indicators as a criterion for the promotion of judges, in substitution for the simple counting of the time in the position. The use of indicators to assess performance would reveal the relative situation of different judges and tribunals and through voice and yardstick competition would hopefully encourage them to become more efficient. The National Council of Justice could play a central role in this initiative, developing, calculating, disseminating and stimulating the use of such indicators. An indicator that could be used to foster celerity is the time elapsed between the entrance and final ruling of each case, appropriately grouped by type of process. The predictability or security with which a certain judge operates could be assessed by the ratio of his or her decisions that are confirmed in appeal. Most judges agree that the use of these indicators as criteria for promotion can help to make the judiciary more agile and predictable.

Regarding legal reform, there is room to continue with the effort of procedural simplification, including the speedier notification of the parties, the continuity of the process when a party shows up after its initiation, a reduction in formalism, and a change in the tendency of judges to decide based on procedure details, rather than on the merit of the dispute. A greater reliance on verbal procedures and small claim courts would contribute to those goals.

There is a consensus that judicial deficiencies result from deeply rooted causes — that is, from a historically established institutional and administrative profile. And also that the problems stemming from this historical matrix are augmented by the instability of the country's juridical foundations, by the archaism and excessive formalism of the procedural codes and by the poor training of a significant share of the magistracy and of all those who, more widely, could be called "judicial operators": public persecutors, lawyers and administrative staff of the different institutions that form the judicial system. Yet, the insecurity of property rights does not stem from poor judicial performance alone, but also reflects gaps in the quality of legislative output and the opportunistic and ideological stance of the executive, problems partly encompassed by the idea of jurisdictional uncertainty, (Arida, Bacha and Lara-Resende, 2005). Examples include the freezing of financial assets, the purging of price indices to lower monetary correction and the non-enforcement of dollar indexed leasing contracts.

Thus, measures to strengthen property rights in Brazil would have to go beyond improving judicial performance to also encompass the environment in which this institution operates. More specifically, we propose the following core set of measures:

- The executive branch should exercise greater discipline in both changing the norms under its jurisdiction and appealing to the judiciary with the purpose of postponing the enforcement of judicial decisions, notably in the case of disputes with pacified jurisprudence. Governments in Brazil often change the law to solve immediate problems with little concern to the investment made by others counting on the continuity of the existing norm. This is a recurrent problem in tax law, but also applies to regulation and other economic and non-economic areas of law. Putting this recommendation into effect would require a change in culture and the discontinuing of the Provisional Measures, a legal instrument through which the government heavily influences the legislative agenda and which has the power of law immediately upon being enacted, even before going through legislative debate. The executive -- at federal, state and municipal level, and including state-owned enterprises -- is by far the leading contender in judicial processes in Brazil. And, even more frequently than the private sector, it resorts to the intricacies of Brazil's procedural codes to extend the duration of judicial processes, even when it knows it will eventually lose. The reason this occurs is that this discourages some plaintiffs, delays expenditure outlays and reflects incentives applying to public sector lawyers and managers. In recent years this posture has changed somewhat, but a more drastic move would be necessary to both reduce case load in judicial courts and encourage judges to be less lenient on private parties that follow the same strategy.

- An effort to improve the quality of the legislation produced by the legislative. One of the consequences of party fragmentation and weak party discipline is that Congress has a hard time squaring out political dissension, for it is easy for a minority to block the approval of legislation. Thus, it is commonly the case that the laws are written ambiguously and in very general form, so that they are palatable for the different contending groups. In this way, the political conflict is transferred to the courts, who have to clear the law's ambiguity. While this process is being filtered through the various courts and instances, different interpretations prevail, encouraging "court shopping" and generating juridical insecurity. Unless the Supreme Court enacts a *Súmula Vinculante* on the matter, this insecurity may partly prevail even after the higher courts establish a jurisprudence on the matter. Although this reform is within the purview of the legislative, and under the scope of political reform, it has direct implications for the security of property rights.

- Adoption of the Selic to index judicial obligations and debts, including the public sector's ("*precatórios*"), so as to reduce the financial incentive to delay a final court ruling. One reason to spend resources postponing a final judicial ruling, even when one knows he or she will eventually lose, is to secure a high return keeping the resources that will have to transfer to the other party in financial applications. By raising the interest rate applied on contested debts this incentive is weakened, facilitating the speedier conclusion of judicial disputes.

- Reverse the burden of proof in the judicial analysis of decisions taken by the board of regulatory agencies and the competition tribunal (CADE), which would continue to hold until a final ruling about the demand is defined in the judiciary. Currently, a firm hurt by a decision taken by one of those agencies – say, a firm that had its acquisition of a competitor blocked by CADE – can appeal to a first degree judge, get an injunction and move ahead with the process of merging the two companies. By delaying a final judicial ruling for sufficient time, it can create a fait accompli that greatly limits the scope for an unfavorable decision by the judiciary. If the agency decision holds while the judiciary decides, the firm will have no incentive to delay a final ruling.

- Extend and strengthen the training that new judges have to undergo before they occupy the bench. Although recent reform have advanced in this matter by requiring lawyers who want to become judges to have at least three years of practice, we still feel that more training on the specificities of the job would help improving the quality and predictability of judicial rulings.

- Revise the syllabus of law schools to extend the study of economics and emphasize the importance of Justice for the proper functioning of a market economy.

Experience suggests that the political disputes around judicial reform tend to be restricted to law operators. This, per se, is a negative, for it leaves out users of the judicial system, which have the most to gain from an improved performance. Increasing popular awareness for the problems that harm judicial performance, building on public discontent about the quality of judicial services, notably the speed with which decisions are rendered, seems to be the best way to change this. This process would have to be led by business, academia and the media, groups that have shown increasing interest on this subject. A crucial element in this endeavor is shedding light on performance indicators and the consequences of poor judicial performance to economic developing and social fairness. The debate needs to focus on numbers, studies, and specific proposals, or it will die naturally.

Within the legal operators' universe, lawyers and their guild tend to be the fiercest opponents to reforms that streamline the judiciary, for these would reduce the need and the job opportunities for lawyers. Lower court judges also tend to oppose reform, because they tend to be more ideologically committed and fear losing the freedom to decide as they please, even if most judges tend to voluntarily abide to the jurisprudence established by higher courts. The Supreme Court justices, on the other hand, tend to be keener on pushing for reform, because they feel both more accountable for the overall performance of the judiciary and spending too much time deciding on matters that should been solved in lower instances. The justices' main ally in pushing constitutional amendment 45 and the infra-constitutional changes forward was the Ministry of Justice, in which operates a Secretary of Reform of the Judiciary. In particular, the minister of Justice was able to use the government's influence with Congress to favor the judicial reform agenda. Yet, this was very much the result of the personalities involved.

It is important to stress the inter-connections among several of these measures, not only to explore complementarities, but also because this would increase their political feasibility. For instance, it will be easier to institute more restrictive barriers for appeal to higher courts if lower courts become less politicized and make a point of following the jurisprudence established by the higher courts, especially in widely pacified, repetitive disputes.

Compared to legal and cultural reforms, changes in management practices are more politically palatable, although they also face obstacles. One of them is the resistance of judges to yield some of their authority to professional managers. The agent of change, in this case, could be the National Council of Justice, which has the ability to collect the necessary information, give adequate publicity to best practice cases and demand improvements in courts that lag most behind. Also in this case, transparency about performance, including data about absenteeism and the workload and productivity of individual judges, would be a critical catalyst.

4.4 – Financial Sector Reform

Although counting with a well-developed financial infrastructure inherited from the high inflation period, Brazil has relatively shallow credit and capital markets, which have historically contributed modestly to spur long-term growth (Pinheiro and Bonelli, 2007). Not only is finance scarce, notably for small firms and households, but especially expensive. Moreover, the incentives faced by financial institutions to best select and monitor projects are distorted by norms, institutional weaknesses and high taxes. More specifically, the diagnosis that informed our reform proposals has ten main elements:

- A large part of total savings, comprising the so-called directed credit, is intermediated according to non-market principles. Public banks, largely funded by quasi-tax revenues -- the most important being the FAT — Fundo de Amparo ao Trabalhador, FGTS — Fundo de Garantia do tempo de Serviço, and the Regional Development Funds – are subject to political influence and partly aim at non-economic goals. Private and public banks alike have to allocate certain proportions of their lending to specific sectors, notably agriculture, housing and micro-credit, according to different regulations.

- Another large part of the savings pool is intermediated by pension funds and insurance companies. These institutions are in principle well placed to provide long-term and illiquid finance, since their liabilities are also long-term and predictable, but in practice a large share of their assets is invested in Treasury bonds. Only closed pension funds invest significantly in stocks, but these institutions are mostly pension funds linked to SOEs, in which political interference is common, hampering their incentives to exert corporate control and improve the allocation of resources. Thus, the contribution of these institutions in improving resource allocation through the screening and monitoring of investment projects is compromised by the attractiveness of public debt securities and governance problems.

- Private banks intermediate a large part of the voluntary savings, which are in sight and time deposits or invested in mutual funds. Like other institutional investors, mutual funds concentrate their assets on Treasury bonds, playing an equally limited role in raising the economy's capital productivity. Part of the savings mobilized by banks as sight and time deposits not compulsorily used to finance housing, rural and micro-credit activities is sterilized by the Brazilian Central Bank (BCB) as reserve requirements.

- The remainder is left for banks to allocated as they wish. Together with part of the banks' own capital—the other part is largely invested in Treasury bonds—and funds borrowed abroad by banks, these resources are used to fund the so-called 'freely allocated loans' ("*empréstimos com recursos livres*"). It is through these freely allocated loans that banks could in principle contribute more directly to improve resource allocation and monitor managers. But, in practice, they are geared mostly to finance household consumption and firms' working capital. In particular, banks charge very high interest rates on these loans, owing both to a high borrowing cost and a large interest rate spread.

- The large spreads pay, in grossly similar shares, for the high taxes levied on financial intermediation,[27] delinquency losses, overhead and profits. The actual breakdown differs somewhat between public and private banks: the former incurring into higher administrative costs and delinquency losses, the latter generating higher profits.

- High profits and low productivity are a signal of insufficient bank competition. Two tentative complementary explanations for the market power of financial institutions are a noncompetitive conduct (e.g., a tacit cartel), (tacitly) led public banks, whose costs are particularly high and lack a profit maximizing orientation; and the segmentation of credit markets, that creates monopolistic banking relationships between the banks and part of the borrowers. The problem is further composed by the lack of a clear mandate to the BCB and anti-trust agencies to foster competition in the sector. Competition is also weakened by financial regulations that raise the cost of migration from one bank to another.

- Capital markets have traditionally played a limited role in investment finance: companies issued an average 1.4% of GDP in stocks and bonds in 1999-2003, and not all of these reached the market. Moreover, only a small number of relatively large companies have access to these markets at reasonable terms. In 2006-07 capital markets gained a much larger role, both through stocks and fixed income instruments, but they still intermediate a relatively small fraction of total savings, even though the market capitalization of the São Paulo stock exchange has risen dramatically in 2003-08.

- High taxes, not necessarily on financial intermediation, compromise financial intermediation by fostering informality and encouraging companies not to go public in order to keep murky accounts and in this way 'lower' their tax burden—public companies have to abide to more stringent rules of disclosure. This happens in spite of the lower cost of capital faced by public companies. The impact of tax evasion on the quality of accounting information is particularly serious in the case of informal firms, whose access to financial markets is expensive and very limited. In particular non-transparent accounts makes much of the relevant information on borrowers private to the bank with which companies keep a relationship, making borrowers

[27] The problems caused by high taxes on financial operations are compounded by the frequent change in tax rules, which raises risk substantially. This instability stems partly from a "cat and mouse" game between financial intermediaries and the tax authority: given the high tax burden, the former are especially motivated to find and explore loopholes, while the latter follows behind closing them. Constant changes in taxation contribute to shorten maturities and increase the preference for liquid assets.

‘informationally’ captured and allowing banks to extract monopoly rents. For small and medium companies, in particular, the opportunity cost of more transparent accounts seems a critical obstacle in the way of using external funds to finance investment, and most do not pass basic due diligence processes.

- In 2007 the average default rate on (freely-allocated) loans to individuals was 7.1%, almost the triple of that for firms (2.5%). These high delinquency rates are a result of high interest rates (a circular effect), the poor quality of information available to select borrowers, and weak creditor rights. The main complaint of creditors in Brazil is not the lack of legal protection, but its improper enforcement by the courts. The slowness of the judiciary is perceived to be the main problem not only for credit operations but also for the workings of justice in general. Furthermore, judicial decisions on credit disputes are perceived to be pro-debtor. Judges themselves acknowledge that fact. This pro-debtor attitude is often the reflex of a certain degree of judicial activism that causes jurisprudence and patterns of judicial behaviour to play a role as or more important than the law itself in regulating credit disputes.

- The poor quality of the information available to creditors and minority shareholders also discourages financial intermediation. Brazil has a large and well-established credit bureau industry, with private and public CIRs. These keep mostly black information on borrowers, which is used when deciding about small loans, usually to individuals or small businesses. They also function as enforcement mechanisms, since borrowers included in black lists are usually denied credit. But their use in larger and longer-term operations is much more limited, in which case creditors suffer with the poor quality of accounting and disclosure rules, which also affect minority shareholders. The poor quality of information disclosed to investors is also the result of the inadequate enforcement of disclosure norms, with a large proportion of listed companies failing to send the required information to CVM — *Comissão de Valores Mobiliários*. (Brazil’s securities and exchange commission).

Several reforms in recent years, from price stabilization to the enactment of a new bankruptcy law,[28] passing by lower entry barriers for foreign institutions and bank privatization, improved matters — but not by much. Thus, the World Bank’s Investment Climate Survey reveals that Brazilian firms find the high cost and reduced access to finance to be the second and seventh main impediments to their expansion, respectively, out of 21 problems included in the survey. The main barriers to financial deepening are the distortions caused by the poor situation of the fiscal accounts and state interventions in mobilizing, draining and allocating savings. A large part of the financial wealth in Brazil is

[28] In 2005 a new bankruptcy law was approved, establishing, among several important changes, a higher seniority for collateralized credit and a reorganization procedure in the spirit of the U.S Chapter 11, giving creditors a more important say in the restructuring process. Also, an extrajudicial process has been created, which can speed up the recovery or close down process.

held in short-term, highly liquid and well-remunerated public bonds, which crowd out private bonds and stocks. The high tax burden induces firms to become informal and mask their accounts and increases interest rate spreads, while at the same time making tax rules volatile and uncertain. Macroeconomic instability is also a hindrance to stretching maturities due to high market risk, as reflected in the high volatility of the stock market.

As indicated in Table 4.1, financial sector reform could improve and strengthen three growth foundations: equal opportunities, economic and political competition, and macro stability. Our reform proposals include measures under five main headings:

- Improve the quality of information available to lenders and shareholders, so that they can better evaluate the risks associated to finance operations. This implies revamping accounting practices, better registration of assets, and more stringent disclosure rules. It would also be important to enlarge credit information registries, which have a relatively large coverage in Brazil, to also include positive information, and not only the black information they currently carry. In the capital market, BOVESPA's Novo Mercado, a set of self-imposed regulations that better protect minority shareholders, has shown very positive results, but many companies listed in the stock exchange have not adhered to it. Better auditing, a strengthening of the Central Bank's and CVM's supervision, and more stringent and faster sanctions for those who fail to comply would also be important. This will possibly require changes in privacy laws and "negotiations" with judges so that they uphold these changes.

- Strengthen the rights of creditors and minority shareholders. Currently, few types of guarantees operate well, in the sense of allowing for a quick and low cost recovery of the loan. For loans extended with these as collateral, interest rate spreads are well below the average, which shows the potential of measures in this direction to lower the cost and enlarge the access to credit, in particular for small firms and poor families. Also in this case, cooperation of the judiciary is central, particularly so that collateral offered by the poor may actually be accepted as such by financial institutions.

- Reduce taxes on financial operations (the so-called "*cunha fiscal*") and avoid changing them frequently. Attempts at reducing taxes—as suggested by the dispute leading to the discontinuity of the CPMF — will likely be resisted by the Executive, as the proceeds are deemed crucial to finance rising current expenditures.[29] In particular, taxes on financial transactions are easy to collect and supervise, and this make them popular with the tax authorities.

- Foster competition among financial institutions and between these and the capital market, not the least because the current consolidation of the banking sector through concentration in the largest banks is likely to reduce even further the rivalry among banks,

[29] In December 2007 the government did not succeed in approving an extension of the CPMF for the next years because of fierce opposition in Congress. To compensate for the loss of revenue, it increased other taxes, like the IOF, a tax on financial operations.

which also hold a dominant position in capital markets. The CADE — *Conselho Administrativo de Defesa Econômica* and the Central Bank should receive a clear mandate to improve competition in the banking sector. This includes a more rigorous analysis of mergers and acquisitions in the banking segment (and, more generally, in the financial sector as a whole) and pro-active policies of information dissemination and strengthening of guarantees. Another measure is to facilitate migration of bank clients across institutions, lowering taxes and facilitating access of banks to information on potential clients.

- Reduce and restructure the role of public banks and directed credit in the financial system. Public banks are still responsible for a large share of finance, but depend on public subsidies to remain competitive and do things that private institutions could do well. Directed credit, on the other hand, operates as a means to cross-subsidize certain borrowers, but at the cost of enhancing interest rate spreads. Overall, both instruments have become inefficient and largely unnecessary with the sophistication of private financial institutions, the opening of the capital account and the expansion in capital markets.

The major agent of change for this particular reform area is the central government, particularly the Central Bank. Actually, although much remains to be done, financial sector reform has prospered in recent years, as mentioned. Political opposition— as well as benefits — is diffuse and varies depending on the specific reform area concerned. Thus, for instance, tax reductions on financial operations face strong opposition from the Internal Revenue Service (*Secretaria da Receita Federal*) and the Finance Ministry. Lack of competition among financial institutions faces a more subtle opposition from the potentially affected agents themselves, and should be thought of as a gradual process in the medium to long terms. Reduction of the role of public banks would run counter present central government directives, as the major agents (BNDES — *Banco Nacional de Desenvolvimento Econômico e Social*, CEF — *Caixa Econômica Federal* and BB — *Banco do Brasil*) have been assigned important tasks in carrying out development and housing loans, and targeted loans to specific sectors (agriculture, for instance, in the case of Banco do Brasil). Beneficiaries of public subsidies intermediated by public banks or as result of directed credit, mostly large firms and farmers, are also expected to close ranks with those who oppose reducing the role of public banks or the subsidies embedded in their loans.

Financial sector reform comprises several politically sensitive measures, but most of them fall more properly in the realm of other reform areas. This is the case of strengthening contract enforcement, critical to foster long term credit in housing and infrastructure, but in which the financial sector is just part of a larger effort to improve juridical security and regulation. Likewise, high taxes account for a significant part of bank spreads and financial risk, but changes in this area would be dealt more properly as part of tax reform. Other areas of reform, such as capital market regulation, access to information in credit bureaus and better mechanisms to foreclose on collateral in case of default can be implemented with relatively less political resistance, as exemplified by the experience in recent years. The challenge in this case is to detail the legal changes and secure them a priority position in over-crowded legislative agenda.

The area of greater resistance will be in reforming the financial subsidy mechanisms embedded in direct credit regulations and the workings of public banks. Recipients of subsidies, like large farmers and industrial companies, public bank employees and politicians able to influence them will be the main opponents to reform in this area. The financial system will support some reforms and oppose others. In this context, the most promising strategy seems to be to concentrate on demanding transparency and accountability in the application of such subsidies, asking that those that do not play any social or distributive role be discontinued. This would reduce the opposition of public bank employees and some politicians, while attracting the support of the media and society in general.

4.5 – Regulatory Reform

The 1992-2001 decade saw significant ownership changes in Brazil’s infrastructure, with rising private participation in telecom, electricity, railways, ports, roads, and water and sanitation. Together with privatization, these six sectors experienced substantial regulatory reforms, with the dismantling of an institutional framework that in some cases had been in place for half a century. Although the reform process evolved independently in the various sectors, with differences in timing and emphasis, the diagnosis that motivated it and the principles underscoring the new regulatory model were essentially the same. In all sectors reform was motivated by the perception that the state-led model in place since the mid XX century had exhausted its usefulness. In particular, after the investment slump of the 1980s, infrastructure sectors badly needed an expansion in output capacity, which was beyond the reach of the public sector, on account of the fiscal crisis, which not only reduced capital transfers to SOEs, but also retrained their ability to invest, even when they would have been able to raise funds in the market.

Bringing private investors in was the solution to raise investment without sacrificing fiscal discipline, but for that the regulatory framework needed to be revamped. Traditionally, regulation and supervision had been entrusted to departments in the sector ministries that controlled the corresponding SOEs. The departments lacked independence from government, were captured by SOEs, and did not control tariffs, which were set by the Ministry of Finance in accordance with macroeconomic objectives. Tariff structures carried a number of cross-subsidies, across consumer groups and companies, leading to allocative and technical inefficiency. Lack of proper regulation also meant that SOEs were left unaccountable regarding the quality of services offered to consumers, not the least because they faced no competition.

Infrastructure regulation started to change in the early nineties, but the first critical steps were given in 1995, when the Concessions Law was approved and the constitution amended to end public monopolies in telecom and pipeline gas distribution and discontinue the restrictions to foreign entry in some key sectors, in particular electricity generation. Following international practice, infrastructure regulatory reform involved the separation of commercial, regulatory and policy activities. SOEs continued to respond for commercial activities, but were restructured, often through privatization. As the new regulatory model stressed the introduction of competition, privatization was often accompanied by the vertical and/or horizontal breakup of SOEs and the end of barriers to new private entry. To reduce the risk of expropriation, new regulatory agencies, with relative financial and administrative independence from the government, were entrusted with the responsibility of fixing tariffs -- subject to rules set out in the concession contracts and the general principle of “financial and economic equilibrium” established in the Concessions Law. Policy responsibilities were ascribed to sector ministries.

Whereas the evidence suggests that regulatory reform (privatization included) has succeed in fostering productivity growth and improving the fiscal accounts, much less has been accomplished by way of raising investment levels. In particular, whereas the new private owners invested in rehabilitation and modernization, not much was invested in *greenfield* projects, so the expansion in output capacity was rather limited. The telecom sector is apparently the only exception to this rule, in the sense that not only output capacity increased significantly, but also that this was achieved while the state successfully transferred all commercial activities to the private sector.

All the steps and the sequencing adopted in telecom were important to make regulatory reform a success. Three of those steps seem, though, to have been the most critical to allow the boom of investment that has followed the decision to reform. First, the adoption of tariffs aligned with international standards and high enough to give an attractive return to investors. Second, the adoption of clear regulatory rules and, in particular, the establishment of ANATEL prior to privatization and in time to participate in the definition of the sector’s regulatory framework. Indeed, telecom companies signed concession contracts, in which the new regulatory environment was embedded, while they were still state owned, so that the new owners knew exactly what rules would be in force after privatization.

A third critical component was the emphasis on competition and its use as an incentive to foster investment. Incumbents used their brief monopoly to expand their clientele before their markets were open to competition. Also, by meeting their targets before the scheduled time, firms were free to enter the markets of future competitors. These incentives led firms to make large investments to protect and possibly expand their market shares, causing a rapid aggregate expansion in the telecom infrastructure. It is rather telling, in this regard, that in most cases the targets established prior to privatization were met two years before the deadline set in the concession contracts.

The **regulatory reform** agenda detailed below draws on the successful case of telecom and was built based on five part diagnosis:

1. Regulatory autonomy, notably the independence of regulatory agencies, remains a charged political issue in Brazil. The current government has made clear that it favors the subordination of the agencies to sector ministries, so that regulation directly reflects policy options. Other important social groups are also suspicious of transferring regulatory power to non-elected officials, for various reasons: fear of capture by service providers, inability to change course in case of poor performance or simply a lack of understanding about the importance of regulatory autonomy to reduce risk premiums and foster investment.

2. The adoption of a regulatory framework that relies on private investment and the autonomy of regulatory agencies when neither is fully supported by leading social and political groups has caused instability and left gaps in sector regulation.

3. The judiciary does not protect agencies against political interference and frequently goes against their decisions, which then become just an initial stage in litigation process. This introduces another layer of instability and risk.

4. Infrastructure projects usually have more significant environmental repercussions than other types of investment, for it affects larger areas of soil, water etc. Thus, they are also much more sensitive to the quality of environmental regulation.

5. Unstable, incomplete and politically charged regulation has increased investment risk and make it more difficult to secure adequate finance for private infrastructure projects.

6. Although these problems refer to regulatory agencies in infrastructure, they are also present in other similar institutions. In particular, anti-trust agencies also need strengthening, with a change in legislation to make mergers conditional ex-ante on their approval. The Central Bank needs to have formal autonomy, with fixed mandates for its directors.

The key problem, then, is that while the state continues to lack resources to undertake infrastructure investment by itself, it has also failed to establish a regulatory framework that allows private investors to operate at a reasonable level of risk. Our proposals, detailed next, are aimed at completing this transition; they are followed by some suggestions on how to overcome the political obstacles to their implementation. More specifically, we propose the following measures to improve the regulatory framework, some of which endorse proposals currently under debate in the Federal Senate:[30]

(i) Expand the number of board members in regulatory agencies to seven and their mandates to seven years (every year the President would indicate one member, to be

[30] Note that some of these measures coincide with those under discussion in the *Assessoria Econômica, Gabinete do Semador Tasso Jereissati*. Projeto que institui as agências reguladoras. *Diretrizes, Versão 4,* April 20, 2007.

empowered the next year): the present rule, five members for five years each seems insufficient to insulate decision making at the agencies from the political cycle. Board members would continue to be appointed by the Executive and approved by the Legislative. The law should also establish provisions for substitution in case of vacancy, so that vacancies would not last for indeterminate periods in the case of conflict between the Executive and the Legislative, as has happened repeatedly in the recent past, in practice leaving the agencies with a number of board members below the necessary to reach formal decisions.

(ii) A performance contract should be signed between the agency and the ministry directly in charge if the area under concern, fixing performance targets and instruments of control and follow-up. This requires the objectives of the agencies to be clearly stated. The performance contract would respect agencies' autonomy to decide on regulatory matters, while obliging them to abide to transparency and administrative norms common to other public institutions.

(iii) Give fixed mandates for Central Bank directors, not coincident with that of the President of the Republic.

(iv) Change the law to make mergers conditional on ex-ante approval by CADE.

(v) Complete the regulatory framework in the areas of transportation (for example: ports), electricity and, especially, sanitation. Conflicts of interest and the overlapping of responsibilities should be carefully disentangled so as to expand the net operated by private investors. In water and sanitation, solve the conflict between states and municipalities with respect to the power to award concessions.

(vi) In the electricity sector, move towards privatization as a long-term strategy, while in the medium run foster competition and improve the quality of SOE management and the mechanisms for their supervision and control, limiting political interference and strengthening the commercial ethos of SOEs.

(vii) Streamline the operations of environmental protection agencies, speeding up the concession (or refusal) of licenses. Strengthen cooperation between environmental protection agencies and judges and the Ministério Público, so as to reduce juridical insecurity and risk over environmental licenses. Improve coordination among federal, state and municipal environmental protection agencies.

(viii) Strengthen the coordination among the regulatory agencies, especially among those dealing with the energy sector (ANEEL, ANP and ANA; respectively, electrical energy, oil and water). Similarly, foster the cooperation between regulatory agencies and consumer protection and anti-trust institutions.

(vi) Develop financial instruments and secondary markets capable of supplying more resources and liquidity to the infrastructure sector, as well as new instruments to administer risks and facilitate the financing of projects in infrastructure.

As suggested above, the main obstacles to regulatory reform are neither technical nor political, but ideological. Some of proposals above require refining, as the suggestions concerning financial instruments and the design of performance contracts, but the complexities are few. The politics of reform will also be complicated regarding the privatization of electricity companies and establishing a compromise between state and municipal governments with respect to the authority to give concessions in water and sanitation, but these are not insurmountable. In particular, a number of electricity companies were privatized in the past, so the same model could be used for future sales. The main obstacle, in this case, would be to convince political parties that appoint their representatives to management positions in these companies, but this has been done before.

The key challenge will be to tilt the balance between pragmatism and ideology to favor the former. This may happen as infrastructure bottlenecks become more critical. Brazil almost experienced a power shortage in 2008, which would have been the second in less than a decade, and stressing that risk may convince many to support a private led model. In particular, as economic conditions improve and the cost of capital continues to decline, private operators will be willing to charge lower usage fees, weakening one of the areas of resistance. This was observed in the privatization of federal highways in 2007, also an example of pragmatism overcoming ideological resistance. The alternative is to change people's perceptions about the autonomy of regulatory agencies, which will have to be a more long-term process, or depend on the chancy election of a more liberal government.

4.6 – Reforms to improve human capital (education)

Brazil stands out in cross-country comparisons for two features of its labor market: high salary inequality and workers with low average levels of schooling, even when compared to countries at a similar development stage. The two problems are interconnected, and solving them requires expanding the coverage and improving the quality of basic education, which would also have positive spillovers on other areas, such as primary health and crime prevention. Average schooling of the population aged 15+ has improved since the 1980s, from 3.1 to 4.9 years of study, after remaining nearly unchanged in the preceding twenty years (as witnessed by the 2.9 years mark achieved in 1960). Still, similar countries such as Argentina and Chile made even greater progress. Therefore, the gap between Brazil and these countries has widened, rather than narrowed. In recent years, especially during Pres. Cardoso's administrations (1995-2002), several changes were adopted to accelerate the rise in average education. Past reforms have yielded significant gains, but the school system still faces important challenges, in particular the need to raise equity and efficiency and improve student learning. The quality of schooling varies considerably across Brazil. Children attending some public schools lack the basic educational opportunities that are available in other parts of the country or even in better-endowed schools within their own jurisdictions. In addition, almost everywhere, repetition and dropout rates remain exceedingly high, leading to a high degree of age-grade distortion, low completion rates and a significant delay in the conclusion of the 1^{st} to 4^{th} and 5^{th} to 8^{th} segments; only 54 percent of the students conclude the eight years of "Ensino Fundamental" (EF) and those who conclude, require, on average, ten years to do so. In the North and Northeast regions, these figures are even more daunting, with less than 39% of the students concluding EF and taking eleven years to do it.

Furthermore, Brazilian schools are still not educating well most of their students. SAEB test indicates that performance appears to have reached a plateau at a relatively low level, with no significant gains since the test was introduced in 1995. For example, the 2001 SAEB results showed that less than half of 4^{th} grade students in Brazil perform at level 3 on a 10-level mathematics proficiency scale, and this percentage has not increased since SAEB's 1995 edition. In this context, the recent shift in the focus of education policies, from basic to higher education, after almost a decade in which the emphasis had been unwaveringly on the former, is an unwelcome development. Even before that, the structure of education expenditures in Brazil was already too much skewed towards higher education, as revealed by a comparison to other countries at a similar development stage, with the exception of Costa Rica and South Africa (Table 4.3).

Table 4.3: Public Education Expenditures as a Percentage of per capita Income according to Education Level, Selected Countries in 2001 (%)

Countries	Primary	Secondary	University	Total Expenditures (% GDP)
Argentina	14.0	16.8	16.2	4.8
Brazil	11.2	11.1	50.7	4.2
Costa Rica	16.2	22.9	50.6	5.1
Colombia	16.6	18.7	38.8	4.5
Japan	22.2	21.6	17.1	3.6
México	13.8	18.4	35.0	5.2
South Africa	14.3	17.7	53.2	5.4
South Korea	16.4	23.7	5.0	4.2
Uruguay	11.0	10.9	23.1	3.2
USA	21.7	25.0	26.0	5.7

Source: Unesco (2005); data for Costa Rica and South Korea refer to 2002. From Ferreira and Veloso (2006)

Our proposals for education reform follow from the diagnostics briefly summarized above. Their main thrust is to enhance the coverage and quality of basic education, while reducing subsidies to higher education, by shifting from free-for-all public universities, to a system that combines tuitions and student loans:

(a) Reach universal coverage of basic education (pre-school to upper-secondary). To induce that result, the government should (i) fully implement the FUNDEB, to encourage the supply of early and secondary education; and include young students, aged 16-19, among the recipients of the *Bolsa Família*, with increasing monetary benefits as a function of age, so as to compensate for the opportunity cost of staying out of the labor market.

We stress, in particular, the need to enlarge the coverage and improve the quality of early childhood care, involving pre-school education per se and in coordination with other initiatives directed at young children, given its potential to improve the efficiency of fundamental education and the quality of learning at this level. Evidence shows that investments in early childhood lead to a healthy cognitive and emotional development in the early years, which translates into tangible economic returns. In particular, it yields positive impacts on overall educational attainment (and hence the quality of the labor force), the internal efficiency of the formal education system (reduced repetition and drop-out), and physical and mental health. All of these influences translate into people becoming more responsible citizens and better parents as adults and may produce externalities through role modeling for siblings, peers, and other adults.

(b) Improve the quality of primary education (*ensino fundamental*). Specific proposals to achieve this aim include a careful periodical evaluation of schools and teachers, possibly with the introduction of an accreditation system; and increase competition among schools. Quasi-markets, from concessions schools to vouchers, should be introduced at states and municipalities with better governance structures. So far, the public sector has relied relatively little on these mechanisms, mostly resorting to private providers of specific services, but the experience with the health sector, in which new institutional arrangements have allowed for the successful concession of public hospitals and primary care units to private providers, indicates that this is a promising way to raise the efficiency and improve the quality of education in Brazil.

(c) Increase efficiency and equity in third degree education level (university). This would require: creation of mechanisms to increase competition among universities; using more intensively the available equipment (for example: increasing enrollment in night courses); charging tuition and fees in public universities; expanding the federal program of scholarships; and especially, expanding the program of scholarships to poor students.

The main advantage of proposal (a) above is also its main weakness: because it involves mostly allocating more resources to the sector, none of the main interest groups opposes it; on the other hand, for its implementation would require that more budgetary funds are made available, and this would demand the transfer of funds from other activities, it would require fighting an uphill battle with mayors and governors, who in general argue that too much of their resources are already allocated to education. Yet, if the economy keeps growing at 4 to 5% per annum, the rise in tax revenues, the existing provisions earmarking part of these revenues to education and the projected decline in enrollment in primary education should in the medium term allow for universalization at least of pre-school education. This, in turn, should raise somewhat the efficiency of primary schools, fostering the universalization of secondary education. There are indications that the very high dropout rates observed in secondary education owe less to the opportunity cost of staying out of the labor market and more to learning difficulties, as well as lack of motivation owing to large age-grade distortion.

Thus, raising the coverage of secondary education would require confronting the thorny problem of the low quality of basic education, discussed in (b) above. The big problem is that there are indications that this low quality results mainly from managerial problems, so that expanding the volume of resources allocated to primary and secondary education is unlikely by itself to produce a significant rise in quality (Menezes, 2007). Partly for this, the agenda outlined in (b) is strongly opposed by teacher unions in the public school system. These share a culture of victimization that portrays the low quality of education as due primarily to teachers being paid low wages and working in poor conditions. Although teacher salaries in the public sector are not very high, they are higher than the average salaries paid by the private sector and are not low by international standards, if measured as a proportion of per capita GDP.

Furthermore, the culture of characterizing the teacher as a victim caused management to be geared to the needs of the teacher and not focused on the student. Thus, there is wide tolerance to significant rates of teacher absenteeism (in Sao Paulo’s state network 13% of the teachers miss work daily), ample flexibility for them to move between workplaces, even in the middle of the school year, and so on, impeding any rational management of the network. The good news, then, is that there is ample room for improvement. The public school system is highly decentralized — each state and municipality has its own school network — in sharp contrasts with the Mexican case. This reduces the power of teacher unions, facilitates the support from the federal government, and creates the scope for piecewise, incremental change, which can then be disseminated to help creating a constituency for reform in other jurisdictions. Likewise, there is also legal room for resorting to alternative management practices, including public-private partnerships and the hiring of private firms to provide part or all of the education services.

The main ally of reform will be civil society and, with it, governors and mayors will come along. Although society has not yet awakened to the fact that the problem is much more complex than simply a lack of resources, there are strong signs that this process has begun. The main strategy in this regard is to make more information on the management problems in the education sector more transparent and understandable to parents and society at large; in particular, it is necessary to change the culture of seeing teachers, rather than the children deprived of good education, as victims. For this it would be critical to enlist the media as an ally.

Finally, with respect to paragraph (c) above we are still far from a public confrontation on this issue: there is no popular support to charging fees at public universities. However, we believe that, in the event of a rise in coverage and an improvement in the quality of primary and secondary education, the demand for higher education will expand exponentially, making the dispute for a place in a public university even more intense, while at the same time raising the number of those excluded. This will raise public awareness about the privileges awarded to those who enter public universities and force a discussion about the gratuity in attending those institutions. It does not seem possible to at the same time have strong barriers to entry into public universities and the continuation of the tuition-free system. When greater proportions of the youth from middle and lower social strata begin to conclude high school, either there will be a move to charge fees and reduce demand, or entry barriers will be lowered, with a strong reduction in the teacher-student ratio, as has occurred, for example, in Argentina's public universities.

4.7 – Political reform

As postulated by the political economy and the political science literatures, the political system's institutional design influences the choice of public policies actually implemented. In the case of Brazil, in particular, party and electoral legislation have favored the fast rise in current public spending observed since the return to democracy. Thus, to strengthen the foundations for growth, and in particular improve the quality of macroeconomic policy, one of the priorities should be changing these institutions. This section discusses very broad fundamentals for such a political reform in Brazil. It starts by examining theoretical and empirical issues with a bearing on Brazil's political system, with a focus on two of its main defining features -- the reliance on proportional representation (PR) and open lists (OL), as an alternative to, respectively, plurality rule (*voto majoritário*) and closed lists – and subsequently looks at reform proposals in each of these areas. It also briefly touches on a related issue, the relationship between the design of such political institutions and corruption.

The literature presents robust results on the interplay between public expenditures and political institutions. Democracies that rely on the PR rule tend to have public expenditures to GDP ratios typically 5% higher than those that do not follow this rule (Persson and Tabellini, 2003). In addition, social security expenditures are 3% higher. One possible explanation for this finding could be that proportional representation, which gives less weight to local issues (as opposed to the majoritarian rule), would cause public policy to more intensely reflect society's preferences for increasing public spending. But rather than a general implication of PR rules per se, higher public spending is a consequence of the greater party fragmentation induced by proportional representation.

The "proportional vote" leads to "consensual democracy" (Liphart, 1999). If the Executive is elected without a strong congressional majority, this will lead to a search for legislative support that is likely to involve a coalition of political parties. The more fragmented this support is, the grater will be the difficulties in bargaining for support to approve measures that interest the Executive. Consequently, the greater public expenditures will be, under a relationship mediated by Congee fragmentation. This means that there is no direct relationship between the system of government (presidential or parliamentary) and the electoral rule (majoritarian or proportional) and the level of public expenditures, once controlling for the degree of fragmentation at the lower house of the Legislative.

Besides fiscal impacts, a second aspect to be considered in Brazil's political reform is its impact on corruption. Three issues should be considered: *first*, that the majoritarian uni-nominal vote (plurality rule) should be associated to higher corruption levels, for it entails stronger entry barriers;[31] *second*, that the number of district seats determines the capacity of voters to control their representatives. The larger the district, the more diffuse this process will be and, consequently, the less corruption there will be. For that reason, the majoritarian uni-nominal system should be associated to lower. It follows that the electoral system minimizes corruption when people vote on individuals, not on parties, and when the electoral district is large.

Thus, the best electoral system is the open-list proportional system with large electoral districts. Under this system people vote for candidates and entry barriers are small, especially if there is great flexibility in terms of creating political parties. Yet, this is exactly the Brazilian case, as well as the Italian case before the 1994 reform, when this system was considered among the most corrupt in the developed world (after controlling for per capita income).

The association of these three factors — entry barriers, accountability, and intra-party competition — does not result in a too clear pattern for the choice of the best political institutions, as far as the minimization of corruption is concerned. suggests examining this issue from a different viewpoint. The effect of the institutional arrangements on corruption depends on their effect on the system's capacity to clearly establish the responsibility of public policies (clarity of responsibility). Thus, single-party governments would present the highest level of clarity of responsibility, followed by coalition governments.

From the viewpoint of reducing public expenditures and corruption, and focusing now on the case of Brazil, reform should aim at lowering party fragmentation, particularly the number of those represented in Congress, so that governments can form their support base with fewer parties. A parameter that is particularly important in determining the degree of party fragmentation is the size of the electoral district. Brazil is a Federative Republic in which the number of seats allotted to each state in the Lower House of the Legislative (*Câmara dos Deputados*) is proportional to its population. But this number is truncated from below and above, with a minimum of eight chairs guaranteed to the smallest states and a maximum of seventy seats allowed for São Paulo (the most populous state). Therefore, there is a large variation in the size of the electoral districts — i.e., the number of chairs allocated to each state. Moreover, considering that the ratio of populations between São Paulo and the smallest states is higher than 8.75 (=70/8), there are also sizable cross-state differences in the number of votes necessary to secure a seat in the *Câmara*.

The performance of open-list systems is not unfavorable in sufficiently small districts. The smallest states in Brazil, which correspond to the smallest electoral districts, have eight representatives. Thus, given the above, we propose that a simple alternative would be to

[31] The lack of competition generated by the electoral system would stimulate corruption.

keep the remaining institutions as they presently are and divide the states with more than nine representatives into smaller districts (with a minimum of five representatives each). This would reduce the degree of party fragmentation substantially and have beneficial impacts on public spending. Additionally, the reduction in the number of seats per district in the larger states would reduce intra-party competition without increasing entry barriers too much. All indications are that under this scenario corruption would be reduced as well.

5. Final Remarks

Brazil has implemented many market reforms since the 1980s, without, however, improving its growth record as much as expected. Supply-side growth decomposition indicates that the main reason for this frustrating outcome was the failure to spur higher investment levels. Thus, whereas reforms seem to have had a positive impact on TFP growth, which recovered from the negative rates observed in the “lost decade”, the rate of capital accumulation actually slowed down in the post-reform years. Reforms also failed to raise the contribution of human capital to growth, which had increased in 1981-94, vis-à-vis the 1951-80 high growth years, but remained constant in the post-reform period. A comparison with a host of country groups confirms the relevance of these patterns as explanations for the country’s poor growth performance since the 1990s: Brazil had a comparatively significant rise in TFP growth, but recorded a lackluster pace of human capital accumulation, despite the low level of education of its labor force, and lagged way behind regarding physical investment.

Growth in the reform years and in their aftermath was, though, clearly inclusive, as opposed to what happened in the previous decades, encompassing both the high growth period extending to the late 1970s and the “lost decade”. Two sub-periods can be distinguished in the post-reform years: in the first, inclusive growth can be credited to reforms, notably trade liberalization, that lowered the relative prices of items that weigh in the consumption basket of the poor; in the second, despite the poor aggregate performance of the labor market, social policies and changes in the returns to education were capable of improving the income of the poor and reducing income inequality. A thriving labor market has played a more important role in making growth pro-poor in recent years.

Several hypotheses have been put forward to explain why growth has accelerated so little after the implementation of reforms, from their insufficient depth and breadth to the unfavorable external environment, that only in recent years begun to favor large commodity producers like Brazil. Our analysis suggests it was not a problem of picking the wrong problems. When Brazil started its reform process, in the early 1980s, most of its foundations for market-based growth were compromised: it was not a democracy, inflation was high, the fiscal accounts were in shambles, human capital was very modest and highly concentrated, widespread discretionary state intervention meant that property rights were not secured against administrative expropriation and helped to ensure the appropriation of rents by elite groups, from civil servants to large industrial firms. Reforms focused on the most critical of those foundations: macro stability and political and economic competition.

Reforms aimed at strengthening these foundations included, among others, democratization, privatization, trade and financial liberalization, de-regulation, and judicial reform.

Yet, although most of the “right” reforms were pursued, the notable exception being labor reform, several of them were only partially implemented, or were sidetracked into pursuing other objectives, or while strengthening one growth foundation they weakened others. Equally or even more important, while pursuing market-oriented reforms Brazil also engaged in what we termed anti-market reforms: changes in norms, resource allocation and policies that discourage investment and productivity growth and weaken the link between market-oriented reforms and growth. In fact, while some reforms led to a decline in regulation and more competition, others enhanced the role of the state in directly allocating resources, with a large expansion in taxes and public expenditures, and weakened property rights. Anti-market reforms severely hampered the impact of pro-market reforms.

We repute the expansion in public expenditures and the change in their composition — with a decline in public investment and a rise in current outlays — to have been the most important of these anti-market reforms. Rising public expenditures were initially financed by rising inflation, then by public sector borrowing and more recently by expanding tax revenues, in all cases with adverse consequences for the quality of macro stability and with negative spillovers on capital accumulation and productivity growth. A good part of this problem dates back to the 1988 Constitution, the provisions of which reflected a political environment that has produced a mix of market-oriented and anti-market reforms. Yet, the policies embedded in the Constitution did not constitute an isolate event, but the most noteworthy of a series of policy initiatives, which extended through the following two decades, that have led to an almost continuous rise in public sector’s current spending.

Thus, these policy options need to be examined as endogenous to social and political institutions. In particular, we attribute the problem of poor selection of reforms, from the point of view of accelerating GDP growth, to the interplay between democratization, a reform in itself, and Brazil’s highly unequal income distribution. In such context, we see democratization as a reform that has allowed voters to express their preference for a large, protective state. We also noted that the reiterated decision to expand public current expenditures, notably transfers, is consistent with a key feature of Brazil’s political system: high political party fragmentation, notably in the government’s congressional support base.

In the past two decades the social protection network was reinforced with the creation of a universal public health system, almost universal coverage of fundamental education, and a wide system of compensating income transfers. Yet, the impact of this fiscal policy stance on income distribution has not been proportional to the rise in fiscal expenditures. Two main factors account for this. Firstly, that part of the public transfers is not directed to the poorest segments in the population, but to the better off. Thus the bulk of social expenditures pay for retirement and pension benefits, which mirror the inequality observed in the labor market. Some other types of social spending, such as expenditures with the free public university, also go disproportionately to households in the top quintiles. Secondly, that the increased reliance on indirect taxes has made the tax system rather regressive. Thus, the combined effect of public expenditures and taxes on the Gini coefficient is rather small, notably when compared to other countries that also favor a large state, such as those in Europe.

Thus, problems of information asymmetry partly explain the preference for a large state, as characterized by the fact that the regressive nature of the tax system is less transparent than the progressive character of the more advertised social programs. Voters can assess relatively well how public funds are spent, but find it more difficult to recognize the legal incidence of indirect taxes. The profusion of taxes and contributions levied on the same basis, value added, makes it virtually impossible for voters to assess the cost of financing the public sector.

Looking forward, we see macroeconomic stability as the most critically missing foundation for growth. The weakness of this pillar results from an unbalanced policy mix, which overburdens monetary policy and requires a rising tax burden and a low rate of public investment to guarantee the solvency of the public debt. In particular, we believe that there is a need to increase public savings. Accordingly, we argued that the most critical reforms to allow for an acceleration of growth lie in the fiscal area and should have as their main objective to reduce current expenditures. This would allow interest rates to fall, unlocking a virtuous cycle of lower interest payments on the public debt and more space to lower taxes and raise public infrastructure investment. We also presented a detailed proposal of tax reform that, in addition to lowering the tax burden, argues in favor of a simplification of the tax system and a reduction of earmarking of revenues.

A pension reform focused on lowering the growth of social security benefits is the most promising way to curb public expenditures. The key measures would be to establish a minimum retirement age for workers in the private sector, fix similar minimum retirement ages for men and women and for teachers and other workers, and sever the automatic link between the minimum wage and the minimum benefit paid by the social security. Yet, although an economic must, social security reform is utterly unpopular in Brazil, and possibly unfeasible to pursue in the medium term. The only minimally politically feasible strategy is to apply the new rules only to workers entering the labor force in the future, which would greatly postpone the fiscal impact of the reform, and the adoption of a minimum retirement age for private sector workers, for there is already an exiting one in place for civil servants.

More significant curbs on public current spending will likely have to wait for a change in political institutions, not only to make pension reform more viable, but also for their direct impact on fiscal policy. Thus, while the large rise in public transfers can be partly explained by the interplay between re-democratization and high inequality, the Brazilian case is singular, for the volume of transfers is too high. In particular, Brazil presents much higher ratios of social security to GDP than predicted by its income, demography or inequality.

This highlights the social security system as a locus in which political incentives and decisions on public spending interact. More specifically, political institutions, especially party and electoral legislation, also favored the fast rise in current public spending observed since the return to democracy.

Thus, we believe that to improve the foundations for growth in Brazil one of the priorities should be changing political institutions. The paper discusses broad fundamentals for such a reform, stressing the role of two defining features of the current system — the reliance on proportional representation and open lists, in lieu of, respectively plurality rule (*voto majoritário*) and closed lists. It concludes that political reform in Brazil should aim at reducing both party fragmentation in congress and campaign costs, with the main instrument to achieve that goal being a reduction in electoral district size. More specifically, we propose that electoral districts be redesigned so that each is represented by around ten congressmen in the House of Deputies. Although critical, the reform should be implemented incrementally, for changes generate uncertainty and it is difficult to evaluate how society would react to the functioning of the new institutions.

The insecurity of property rights comes second in out list of weakest foundations. The problem, in this case, stems from a combination of the poor quality of the laws produced by the legislative; an executive branch of government that exploits judicial slowness as a fiscal policy instrument, while underestimating the importance of a stable legal norm; and a judiciary that suffers with a procedural code that, despite recent progress, remains cumbersome, and from judicial activism and inefficiencies in its administrative practices. More broadly, we identified a national culture that favors sacrificing juridical security in favor of pursuing social justice. In practice, the low protection of rights is reflected in the high volatility of tax rules, contract breaches by the government, and the slow and biased enforcement of laws and regulations — including an overall bias against owners and financial investors in the Executive, Legislative and Judicial branches of government.

A set of our policy recommendations focuses on judicial reform. Measures to make the judiciary more functional are usually divided into three groups: legal, managerial and cultural. A specific set of proposals to address legal measures was presented, among which procedural simplification, including the speedier notification of the parties, the continuity of the process when a party shows up after its initiation, a reduction in formalism, and a change in the tendency of judges to decide based on procedure details, rather than on the merit of the dispute. Further measures to strengthen property rights would include: (i) greater discipline by the executive branch in changing the norm and using dilatory schemes, including the appeal to higher courts in disputes with pacified jurisprudence; (ii) an effort to improve the quality of the legislation produced by the legislative, which is also dependent on reducing the fragmentation of parties represented in Congress; and (iii) incentives to reduce judicial activism.

Also under the wide umbrella of securing property rights, we made a set of policy recommendations concerning regulatory reform, comprising: (i) expand the number of board members in regulatory agencies, with fix mandates, not coincident with that of the President of the Republic, a provision that should also cover the Central Bank; (ii) establish performance contracts between regulatory agencies and the respective ministry; (iii) assure administrative (budgetary autonomy) autonomy to regulatory agencies; (iv) induce a closer cooperation among agencies and between these and consumer protection and anti-trust agencies; (v) complete sector regulatory framework; (vi) streamline the operations of environmental protection agencies, speeding up the concession (or refusal) of licenses; and (vii) develop financial instruments to foster greater private participation in the finance of infrastructure.

Financial sector reform comes next in our list of recommendations. Some specific policy suggestions in this area are measures to: (i) improve the quality of information available to lenders and shareholders; (ii) strengthen the rights of creditors and minority shareholders; (iii) reduce taxes on financial operations and avoid changing them frequently; (iv) foster competition among financial institutions and between these and the capital market; and (v) rethink the role of public banks and directed credit in the financial system.

Financial sector reform depends largely on measures that are part of other reforms, such as a reduction in taxes levied on financial intermediation, a reduction in judicial activism and better regulation in infrastructure, so investors feel confident to finance projects in this area. Of the remaining measures, some are less politically contentious and are currently in the authorities' agenda (e.g., strengthen CIRs), whereas other are politically unfeasible, as is the case of reducing the volume of subsidies channeled by public banks. Reforms in this area will have to be incremental, by way of fostering academic work in this area, such that, with the support of the media, greater political pressure is generated to make these subsidies more transparent (who receives them?) and accountable (what have they brought in return?).

Although the opposition to diminishing the size of subsidies channeled trough directed credit and public banks arises in part from interested groups, it also has an ideological flavor, which reflects a deep social divide concerning the roles of the state and the market in fostering economic development. This issue permeated the discussion of different policies and is likely to continue being a major influence on the selection and nature of reforms going forward. This is the case of the reform of infrastructure regulation. The measures we proposed above, as well as the diagnosis that informs then, are reasonably known in Brazil and what stops them from being implemented is not so much the opposition of groups that may lose with their implementation, although this is also present, but the ideological opposition of a large part of society, including the political coalition currently in power. Thus, these measures have little political feasibility without a major shift in the overall direction of policy, as observed in the 1990s. In the absence of this, we see room only for scattered, uncoordinated action, such as the privatization of certain companies.

Last, but not least, we stressed the need to reform the education sector, so as to accelerate the accumulation of human capital and reduce income inequality, by itself a change that with time could unleash other reforms. Policy recommendations to improve education comprised initiatives aiming at: (i) reaching universal coverage of basic education (pre-school to upper-secondary); (ii) improving the quality of primary education; (iii) increasing efficiency and equity in third degree education. Measures that raise the priority and volume of resources ascribed to education should encounter support from stakeholders and could perhaps be used to facilitate unpopular initiatives, such as the end of retirement privileges for teachers. Yet, the core of the measures proposed above focus on improving the efficiency and equity with which resources are used in the education sector, and should face greater opposition from insiders, notably teacher unions. The key to overcoming this opposition is to change the way problems in the sector are seen, notably by showing that although not a wonder, salaries and working conditions for teachers are reasonable for a country at Brazil's income level, notably considering the many perks they are entitled to. That is, society should stop seeing teachers as victims and focus on demanding that the education system operates efficiently. The fact that teacher unions are organized at state or municipal level may facilitate this, while increasing the importance of the federal government participating in this effort.

From the set of reforms discussed above, three should be prioritized, considering both their economic impact and political feasibility. The first is political reform. The whole process of reform selection and implementation, as well as the quality of policy per se, will improve if the incentives and election rules faced by Congressmen change in the right way. Our key proposal is to change rules so as to reduce party fragmentation in the National Congress. The most important reform in this regard is to change the number of seats in the House of Deputies ascribed to each electoral district.

A second reform in our priority list is tax reform, which would raise growth due to efficiency gains, higher returns to investment and lower economic risks. From a political viewpoint, advances in this area have been hampered by the high complexity of the tax system, especially that of indirect taxes, and the fact that Brazil is a federation, with different reform designs affecting the federal, state and municipal governments differently, features that greatly complicate the process of social and political choice. Thus, we believe that a tax reform that simplifies the system of indirect taxes, with the creation of a unified VAT, the revenues of which would be shared by the three levels of government, in addition to reducing compliance costs and stimulating formalization and investment, would have a sizable impact on the quality of political choice and the demand for public sector accountability. Opposition to reform could be overcome through compensation schemes coordinated by the federal government, which would not be too hard to establish given rapidly rising tax revenues.

Finally, we believe it is necessary and feasible to tackle the serious problem of the low quality of public education that is, alone, the most critical barrier to growth in the long run.

The good news is that there are clear indications that the main problem is not lack of resources, but the inefficiency with which these are used. The bad news is that there is no public support for measures that would allow for a more efficient use of those funds. For that it will be necessary to convince the public that the standard argument of the teachers' union, which insists that the problem resides on low wages and poor working conditions, is at best a half-truth. Our assessment is that society is far from assimilating the correct diagnosis of what causes the poor quality of public education. Changing this situation will require, first and foremost, convincing society at large of the seriousness and causes of the problem. More academic research and support from the media will be critical in this regard.

To conclude, we would like to stress a few lessons about the challenge of advancing with growth enhancing but unpopular market-oriented reforms, while at the same time preventing or even undoing popular anti-market reforms. First, it is necessary to be pragmatic and avoid laying all one’s chips on a politically unfeasible reform, such as one that completely revamps the social security system, no matter how sensible it may be from an economic standpoint. Likewise, it makes more sense to pursue piecewise, seemingly uncoordinated reforms than to get stuck on an all-encompassing but unfeasible reform package. The recommendation then is to stress less politically sensitive reforms – such as tax and political reform – or that allow losers to be at least partly compensated or protected through transition or grandfather clauses – as when new rules for pension reform apply only to workers entering the labor market after the reform. Nonetheless, it is important to have and follow a general master plan to help assure consistency.

Second, although the skewed income distribution is a leading explanation of voters’ preferences for big government, so is the fact that voters’ have an imperfect perception of the consequences of their policy choices. This was exemplified by both the small distributive impact of fiscal policy and the barriers to education reform. So, by increasing transparency about the diagnosis that informs the reform proposals, one can likely build a constituency for at least some reforms, without having to wait for income distribution to improve. This highlights the importance of further academic work and a close link with the media, so as to change perceptions about how the majority of voters are affected by current policy choices.

Third, in the past, moments when Brazil faced severe crises, notably foreign exchange crises, unpopular reforms were approved as necessary evils that helped achieving a greater good. To seize these opportunities, supposing they arrive in the future, it is crucial to have well-developed reform projects, well known to the political leadership, which can be rapidly approved. Likewise, some market-oriented reforms discussed herein, such as regulatory reform, face a kind of ideological opposition that may wane significantly in the event of a political transition such as the election of a more liberal president. In this case, too, it would help to have well-developed reform projects that could be brought swiftly to the consideration of legislators.

List of Acronyms: [32]

ANA — Agência Nacional de Águas (Regulator of Water Supplies)
ANEEL — Agência Nacional de Energia Elétrica (Regulator of Electrical Energy Businesses)
ANP — Agência Nacional de Petróleo (Regulator of Oil and Derivatives)
BB — Banco do Brasil (Brazil's main state-owned commercial bank)
BOVESPA — Bolsa de Valores do Estado de São Paulo (Brazil's main stock exchange).
BNDES — Banco Nacional de Desenvolvimento Econômico (National Economic Development Bank)
CADE — Conselho Administrativo de Defesa Econômica (Anti-trust Council)
CEF — Caixa Econômica Federal (Federal Savings Bank)
CIDE — Contribuição sobre Intervenção no Domínio Econômico (Contribution on Intervention within the Economic Domain)
COFINS — Contribuição para o Financiamento da Seguridade Social (Contribution to Finance Social Security)
CONFAZ — Conselho Nacional de Política Fazendária (National Council on Fiscal Policy)
CPMF — Contribuição Provisória sobre Movimentação Financeira (Provisional Contribution on Financial Transfers)
CSLL — Contribuição Social sobre Lucro Líquido (Social Contribution on Net Income)
CVM — Comissão de Valores Mobiliários. (Brazil's Securities and Exchange Commission)
DRU — Desvinculação das Receitas da União (Disengagement of Central Government Revenues)
FAT — Fundo de Amparo ao Trabalhador (Worker's Support Fund)
FGTS — Fundo de Garantia por Tempo de Serviço (Length of Service Indemnity Fund)
FGV — Fundação Getúlio Vargas Getúlio Vargas Foundation
FINSOCIAL — Fundo de Investimento (Social Social Investment Fund)
FPE — Fundo de Participação dos Estados (State Allocation Fund)
FPM — Fundo de Participação dos Municípios (Municipal Allocation Fund)
FUST — Fundo de Universalização dos Serviços de Telecomunicação (Fund for Universal Access to Telecom Services)
IBGE — Instituto Brasileiro de Geografia e Estatística (Brazilian Institute of Geography and Statistics)
IBRE — Instituto Brasileiro de Economia (FGV)
ICM — Imposto sobre Circulação de Mercadorias (Value Added Tax on Goods)
ICMS — Imposto sobre Circulação de Mercadorias e Serviços (Value Added Tax on Goods and Services)
II — Imposto de Importação (Import Duty)
INSS — Instituto Nacional de Seguridade Social (National Institute of Social Security)
IOF — Imposto sobre Operações Financeiras (Tax on Financial Operations)
IPEA — Instituto de Pesquisa Econômica Aplicada (Institute of Applied Economic Research)
IPEADATA — Database organized and maintained by IPEA
IPI — Imposto sobre Produtos Industrializados (Excise Tax on Manufactured Products)

[32] Adapted from Afonso and Barroso (2007) and enlarged.

IPMF — Imposto Provisório sobre Movimentação Financeira (Provisional Tax on Financial Transfers via the Banking System)
IPTU — Imposto Predial e Territorial Urbano (Municipal Real Estate Tax)
IPVA — Imposto sobre Propriedade de Veículos Automotores (Vehicle Tax; state level)
IR — Imposto de Renda (Income Tax)
IRPF — Imposto de Renda da Pessoa Física (Income Tax on Private Individuals)
IRPJ — Imposto de Renda da Pessoa Jurídica (Income Tax on Legal Entities; Corporate Income Tax)
IRRF — Imposto de Renda Retido na Fonte (Income Tax Deducted at Source; Withholding Tax)
ISS — Imposto sobre Serviços (Tax on Services)
ITR — Imposto Territorial Rural (Rural Real Estate Tax)
IVA — Imposto sobre Valor Agregado (Value Added Tax)
LOAS — Lei Orgânica da Assistência Social
LRF — Lei de Responsabilidade Fiscal (Law of Fiscal Responsibility)
PAC — Programa de Aceleração Econômica (Program to Accelerate Growth)
PASEP — Programa de Formação do Patrimônio do Servidor Público (Public Service Employee Savings Program)
PNAD — Pesquisa Nacional por Amostra de Domicílios (National Household Survey)
POF — Pesquisa de Orçamentos Familiares (Family Budget and Expenditure Survey)
PROEF — Programa de Fortalecimento das Instituições Financeiras Federais
PROER — Programa de Estímulo à Reestruturação do Sistema Financeiro Nacional
PROES — Programa de Incentivo à Redução do Setor Público Estadual na Atividade Bancária
RGPS — Regime Geral de Previdência Social (General Social Security Regime)
RPPS — Regime Próprio de Previdência Social (Specific Social Security Regime)
SELIC — Sistema Especial de Liquidação e de Custódia (Basic interest rate in the economy, it is a referential rate fixed by the Committee on Monetary Policy / Central Bank)
SISTEMA S — Contributions (quasi-taxes) that finance entities (SESC, SENAI, SESI, SEBRAE) administered by unions of firms and that aim at providing training, recreational and other services for employees in Commerce (SESC – Serviço Social do Comércio), Industry (SENAI – Serviço Nacional da Aprendizagem Industrial; and SESI – Serviço Social da Indústria) and to the creation and support of small and medium firms (SEBRAE - Serviço de Apoio às Micro e Pequenas Empresas).
SNA — System of National Accounts (Department of IBGE)
SRF — Secretaria da Receita Federal (Internal Revenue Service Department)
STN — Secretaria do Tesouro Nacional (National Treasury Department)
SUS — Sistema Único de Saúde (Unified Health System)
TEC — Tarifa Externa Comum (Common External Tariff – Mercosur)
UFRJ — Universidade Federal do Rio de Janeiro (Federal University of Rio de Janeiro)

REFERENCES

Afonso, J. R. and R. Varsano, 2004, “Reforma tributária: sonhos e frustrações”; in Giambiagi, Fabio; Reis, José Guilherme e Urani, André, **Reformas no Brasil: Balanço e Agenda**, Editora Nova Fronteira, Rio de Janeiro, RJ.

Arida, P., E. Bacha and A. L. Resende, 2004, “Credit, interest, and jurisdictional uncertainty: conjectures on the case of Brazil”, in: F. Giavazzi and I. Goldfajn (Eds.), **Inflation Targeting and Debt: the Case of Brazil.** MIT Press, Cambridge, MA.

Barro, R. and Lee, Joang-Wha, 2000, “International Data on Educational Attainment: Updates and Implications,” Center for International Development Working Paper No. 42 (http://www.ksg.harvard.edu/CID/cidwp/042.pdf).

Barros, R. P. de and Mendonça, R., 1995. “A evolução do bem-estar, pobreza e desigualdade no Brasil ao longo das últimas três décadas – 1960/199,” Pesquisa e Planejamento Econômico, 25(1): 115-163.

Barros, R. P. de; de Carvalho, M.; Franco, S. and Mendonça, R. 2007a. “Importância da queda recente da desigualdade para a pobreza,” Chapter 10, volume 1, in Ricardo Paes de Barros, Miguel Nathan Foguel and Gabriel Ulyssea (eds**.)** **Desigualdade de renda no Brasil: uma análise da queda recente** Ipea (http://www.ipea.gov.br/082/08201004.jsp?ttCD_CHAVE=2783).

Barros, R. P. de; de Carvalho, M.; Franco, S. and Mendonça, R., 2007b. “Determinantes imediatos da queda da desigualdade de renda brasileira,” chapter 12, volume 1, in Ricardo Paes de Barros, Miguel Nathan Foguel and Gabriel Ulyssea (eds.) **Desigualdade de renda no Brasil: uma análise da queda recente.** Ipea (http://www.ipea.gov.br/082/08201004.jsp?ttCD_CHAVE=2783).

Bénabou, R., 2000, “Unequal Societies: Income Distribution and the Social Contract,” The American Economic Review, 90(1): 96-129

Bénabou, R., 2006, “Inequality, Technology and the Social Contract,” in P. Aghion and S. Durlauf (editors) **Handbook of Economic Growth**, North-Holland, chapter 25: 1595-1638.

Berg, A., Ostry, J. and Zettelmeyer, J., 2006, “What Makes Growth Sustained?” (unpublished; Washington: International Monetary Fund).

Bils, M. and Klenow, P. J., 2000, “Does Schooling Cause Growth?,” American Economic Review 90 (5): 1160-1183.

Carvalho Filho, I. and Chamon, M., 2006, “The Myth of Post-Reform Income Stagnation in Brazil” *IMF Working Paper* 06/275. International Monetary Fund, Western Hemisphere and Research Departments. December.

Ferreira, S. and Veloso, F., 2006, “A Reforma da Educação”, in A. C. Pinheiro and F. Giambiagi, 2006, **Rompendo o Marasmo: A Retomada do Desenvolvimento no Brasil**, Ed. Campus / Elsevier.

Ferreira, F., Leite, P. and Ravallion, M., 2007, "Poverty Reduction without Economic Growth? Explaining Brazil's Poverty Dynamics, 1985-2004," *Policy Research Working Paper* # 4431 (December, 2007).

Giambiagi, F., 2006a, "A Política Fiscal do Governo Lula em Perspectiva Histórica: Qual é o Limite para o Aumento do Gasto Público?", *Texto para Discussão* n. 1169, IPEA.

Giambiagi, F., 2006b, **Reforma da Previdência: O Encontro Marcado**, Ed. Campus / Elsevier, Rio de Janeiro, RJ.

Giambiagi, F., 2007, "Dezessete Anos de Política Fiscal no Brasil: 1991-2007", *Texto para Discussão* n. 1309, IPEA.

Giavazzi, F. and Tabellini, G., 2005, "Economic and political liberalization," Journal of Monetary Economics 52: 1297-1330.

Heston, A.; Summers, R. and Aten, B., 2006, *Penn World Table Version 6.2*. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September.

Kakwani, N., Neri, M. and Son, H. H., 2006. "Linkages between Pro-Poor Growth and the Labor Market," ANPEC - Associação Nacional dos Centros de Pósgraduação em Economia Anais do XXXV Encontro Nacional de Economia http://www.anpec.org.br/encontro2007/artigos/A07A096.pdf.

Mello, L. and Tiongson, E., 2006, "Income Inequality and Redistributive Government Spending," Public Finance Review 34(3): 282-305.

Perry, G. E., Arias, O. S., Lopez, J. U., Maloney, W. F. and Servén, L., 2006, **Poverty Reduction and Growth: Virtuous and Vicious Cycles.** Washington: The World Bank.

Persson, T. and Tabellini, G., 2003, **The Economic Effects of Constitutions**, The MIT Press.

Pinheiro, A. C., 2006 "Obstacles to Growth Acceleration in Brazil", December (processed)

Pinheiro, A. C. and F. Giambiagi, 2006, **Rompendo o Marasmo: A Retomada do Desenvolvimento no Brasil**, Ed. Campus / Elsevier, Rio de Janeiro.

Pinheiro, A. C., R. Bonelli and B. R. Schneider, 2007, "Pragmatism and Market Reforms in Brazil". In J. M. Fanelli (ed.), **Understanding Market Reforms in Latin America**, Palgrave.

Pinheiro, A. C. and R. Bonelli, 2007, "Financial Development, Growth and Equity in Brazil", in **Economic Growth with Equity — Challenges for Latin America**, edited by R. Ffrench-Davis and J. L. Machinea, Palgrave – MacMillan

Rojas-Suarez. L. and Johnson, S., 2006, "Helping Reforms Deliver Growth in Latin America", Center for Global Development, June (processed).

Tafner, P. and F. Giambiagi, (Org.), 2007a, **Previdência no Brasil – Debates, Dilemas e Escolhas.** Rio de Janeiro: IPEA.

Tafner, P. and F. Giambiagi, 2007b, "Uma Agenda Parcial de Reformas para 2009: à Procura de um "Pacto de Toledo" Brasileiro", *Texto para Discussão* n° 1299, Rio de Janeiro: IPEA, agosto.

Appendix

This exercise re-evaluates Brazil's long-term growth path contrasting what actually happened with what would have occurred if taxation and infrastructure investment remained at levels similar to those observed before the new Constitution was enacted. We conclude that the two responded for a big chunk of the observed growth deceleration—thus, for disappointment with reform, too.[33] To do that, we use a version of the neoclassic growth model that considers infrastructure as a public good subject to congestion, supplied by the public sector (Barro, 1990).[34] According to this approach, increases in the tax burden reduce the private return on capital and the reduction in public investment causes reduction in public good supply, which is complementary to private investment. Both effects, in turn, contribute to reduce the long run income level. By assessing the impact on the long run income level of these anti-growth policies, it is possible to estimate their impact on growth in subsequent time periods.

In order to evaluate that aforementioned impact, we will consider the following economy. Time is continuous. There is one representative agent who chooses consumption by maximizing the utility function.

$$\int_0^{\infty} e^{-\rho t} u(c_t) dt \,, \qquad (1)$$

in which ρ is the inter-temporal discount, $u(\bullet)$ is the instantaneous utility function, and c_t is consumption at time *t*.

The consumer rents labor and capital, and receives government transfers. He then maximizes (1), subjected to constraint

$$\dot{k}_t = (R_t - \delta) k_t + w_t - c_t + \chi_t \,,$$

in which k_t is capital per capita, w_t is labor earnings, $R_t - \delta$ is the capital revenue (net of physical depreciation) and χ_t is the *lump sum* transfers from the government to the agent. The firms rent capital and labor from the representative agent, pay taxes and sell goods in the market. Setting the good produced by the firm as a *numeráire*, the firm's profits are (in which τ is the production tax):

$$\pi_t = (1 - \tau) AF(K_t, L_t) - R_t K_t - w_t L_t \,,$$

Productivity *A* is related to public good supply, G_t. Provided that the public good is non-rival, it affects all firms symmetrically but, as long as the public good is subject to congestion, its productivity is reduced to the extent that it has been used. Thus:

$$A = \left(\frac{G_t}{Y_t} \right)^{\beta} \equiv g^{\beta} \,.$$

[33] This exercise is analogous to the one presented in Prescott (2004).

[34] Differently from Barro's approach, here we use a version of the neoclassical model in which the long run income level is influenced by economic policy. Barro (1990) adopts a version of the *AK* model in which policies affect the long run growth rate

A share λ of total public revenue is expensed in offering the public good and the remaining is transferred to the families. It follows that:

$$g = \lambda\tau$$

and

$$\chi_t = (1-\lambda)\tau Y_t .$$

In equilibrium, capital accumulation is given by the difference between production (including consumption) and the public good supply (net of depreciation). Consumption dynamics is given by the Euler equation. It follows that:

$$\begin{cases} \dot{k}_t = (1-\lambda\tau)Ak_t^{\alpha} - c_t - \delta k_t \\ \dot{c}_t = \sigma(c_t)\left((1-\tau)\alpha A k_t^{\alpha-1} - (\rho+\delta)\right) \end{cases},$$

in which $\sigma(c) \equiv -\frac{u'(c)}{cu''(c)}$. In steady state, by substituting $A = (\lambda\tau)^{\beta}$ in the Euler equation, it follows that the capital stock is given by:

$$k = \left[\frac{\rho+\delta}{(1-\tau)(\lambda\tau)^{\beta}\alpha}\right]^{\frac{1}{\alpha-1}},$$

Thus, per capita output is given by

$$y = Ak^{\alpha} = \left[\frac{\alpha(1-\tau)(\lambda\tau)^{\beta}}{\rho+\delta}\right]^{\frac{\alpha}{1-\alpha}}.$$

Our objective is to evaluate two distinct situations, before and after the "counter-reform". Let '0' denote institutions prevailing before 1988 and let '1' denote institutions prevailing after the counter-reform, in 2006, say.

It follows that the long-run income ratio (steady state) is given by

$$\frac{y_1}{y_0} = \left[\left(\frac{\lambda_1}{\lambda_0}\frac{\tau_1}{\tau_0}\right)^{\beta}\left(\frac{1-\tau_1}{1-\tau_0}\right)^{\alpha}\right]^{\frac{1}{1-\alpha}} = \left[\left(\frac{\Lambda_1}{\Lambda_0}\right)^{\beta}\left(\frac{1-\tau_1}{1-\tau_0}\right)^{\alpha}\right]^{\frac{1}{1-\alpha}},$$

in which $\Lambda \equiv \lambda\tau$ is the public investment share of GDP.

We can then calculate the impact on the long run income level of a given public investment reduction, Λ, and of a given tax burden increase. The tax burden increased from approximately 25% of GDP in 1988 to nearly 35% of GDP in 2006 (taking into account the new SNA methodology and results). Public investment, including the three government levels, decreased from 4% of GDP to 2% of GDP, approximately, between the same years. The capital share out of income was set in 40%, which is commonly used in development economics studies (Gollin, 2002). This is a conservative estimative with respect to the Brazilian economy. (recall that this parameter was set to 0.5 in our Solow decomposition exercise above). Parameter β, which is the output-public investment elasticity, is a more difficult parameter to fix because there is no consensus in the literature about its value. Ferreira and Nascimento (2005) present a summary of estimates for this parameter. They conclude that 0.09 is a conservative guess, which is the value we chose. A sensitivity analysis of this parameter is also presented next. Consider our standard specification in which now we adopt the parameters

$$\left\{\alpha, \beta, \frac{\Lambda_1}{\Lambda_0}, \tau_0, \tau_1\right\} = \{0.4, 0.09, 0.5, 0.25, 0.35\},$$

From these parameter values it follows that

$$\frac{y_1}{y_0} = 0.82.$$

This implies that the policy mix adopted since the late 1980s led to a GDP level in 2006 18% smaller than it would have been if the former policy mix had not been modified. Spread through nearly 20 years, such accumulated GDP reduction amounts to an annual average decrease of nearly 1.0% in GDP's growth rate (given β = 0.9). This means that, if it were not for the anti-reform represented by tax burden increases coupled with public infrastructure investment decreases, average GDP growth would have been on the order of 3.3% yearly, instead of 2.3%, implying a considerable loss of income. In particular, the present GDP level would have been 19% higher than actually observed.

The next figure illustrates the (negative) impact of the counter-reforms represented by tax burden increases cum public infrastructure investment decreases on the GDP growth rate (from 1988 to 2006). It must be added that we have not taken into account the fact that the increase in the tax burden affects labor supply and increases informality, with negative impacts on productivity. Thus, our estimate represents a lower bound to the impact of the aforementioned counter-reforms on growth.

Figure A.1: Alternative values of average annual GDP decreases according to alternative values of β (% per year)