



# PILOT PROJECT REPORT

Progress Report n° 1

CASA CIVIL  
MINISTRY OF FINANCE  
MINISTRY OF PLANNING

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# PILOT PROJECT REPORT

## I - INTRODUCTION

- 1. Sustaining the current economic upswing in Brazil will require increasing investment in infrastructure.** Most of this investment will be made by the private sector, in sectors ranging from energy to telecommunications and railroads (total investment has risen by 20% in the third quarter of 2004, vis-à-vis the same period in 2003). Some, however, will fall in the realm of the public sector. Public-sector infrastructure spending levels are today about half what they used to be in the 1980s. Part of this reduction is a consequence of the greater role taken by the private sector since the 1990s. Part of it, however, reflects fiscal constraints and has been reflected in delays in the completion of vital works. More recently, the level of public investment was in some cases so low that even maintenance work has suffered. Such a trend could produce adverse effects on the competitiveness of the Brazilian economy. Bottlenecks could rapidly appear in the wake of the recent boom of the domestic economy and of Brazil's exports. They could dampen potential growth, contributing to the creation of inflationary pressures.
- 2. How to balance the demand for public investment with on-going fiscal consolidation efforts is an empirical question underpinning the Pilot Project presented in this text.** Inquires about the interplay between public investment and fiscal sustainability have multiplied in recent years. Two studies associated with the World Bank, for instance, have looked at the effect of infra-structure investment on growth and implicitly on debt sustainability. Calderón and Servén (2004) attributed 1/3 of the lag between Latin America and Asia growth to lower spending in infrastructure in Latin America. They also noted that low levels of investment could contribute to raise the debt/GDP ratio by slowing the rise of the denominator of that ratio. The study also suggested that the rate of growth of Brazil could increase substantially if the country infrastructure quantity and quality were to rise to the level of South Korea. Of course, considering the often-documented reverse causation between growth and investment, the exercise needs to be taken with a grain of salt. Nonetheless, it point to the importance of investment in infrastructure. Fay and Yepes (2003), on the other hand, looked at the demand for investment created by vigorous growth over the medium term. They suggested that GDP growth of 5 percent in 2006-10 would spark a demand for investment and maintenance of infrastructure of at least 3 percent of GDP. The large numbers in both studies raise the question of affordability of such an effort in view of other budget priorities, including on current spending associated with transfers to individuals and the provision of social services. Balancing these factors is not an easy task, and most likely cannot be solved on analytical terms alone. Since infrastructure needs are quite present, and establishing a new pattern for public investment is a complex enterprise, developing an answer to these questions needs to be a learning-by-doing process, to be attempted on a trial basis. In view of that,

the Brazilian Authorities have decided to develop and implement the Pilot Project proposed hereafter. The project will focus on some key areas described below.

*Areas of greater demand for public investment to be addressed by the Pilot Project*

3. **The need for public investment in infrastructure has become acute in the transportation sector, particularly roads.** Despite the geographic continued expansion of the economy, road construction has slowed down in the last decades. Most of the existing 58,000 km of paved roads were built more than a quarter of a century ago and need heavy works. Less than 20% of those roads have received significant rehabilitation work in the last 10 years. Among the consequences of such a pattern are higher fuel consumption and maintenance cost to cars and trucks, as well as unacceptable accident rates. To address these shortcomings, and halt the deterioration process of the federal road network, expenditures would need to rise by about 20 percent over the next 5 years. Just addressing these needs, however, might fail to be optimal from an intertemporal standpoint. Indeed, standard optimization models such as the HMD (Highway Design and Maintenance Model) used in many countries and by the World Bank show that a true rehabilitation program, rather than bare maintenance, would save money in the medium term, in addition to improve the efficiency of the economy. Upgrading the road network to good conditions would require doubling spending over the next 5 years. This upfront increase in spending would be translated in lower maintenance costs in the immediate future and lower costs from delayed, but unavoidable rehabilitation further along. Such investment effort must be concentrate on the main highways, as roads with low traffic demand often are in kept in better conditions than those with high traffic.
4. **Ports also need special care.** The operation of Brazilian ports has largely been privatized, but the supply of infrastructure services remains largely under the responsibility of the public sector. Since early 2004, the government has established a task force to assess the situation of 11 major ports. This force identified a number of immediate needs, as well as a set of still focused, but larger interventions with quick and significant returns. This work was *not* focused on building new ports, but rather on ensuring the better operation of existing infra-structure, some of which relatively new (e.g., built in the last 20 years), although now either deteriorated or still incomplete. For this purpose, this effort will address issues of dredging, custom modernization, increasing security (inter alia, satisfying new anti-terrorism requirements), and road access to selected ports. This would help integrate different transportation networks with significant reductions in costs and allow some large investments made in the 1990s to, finally, begin to bear fruits in the envisage scale. This is, for instance, the case of the port at Sepetiba, near Rio de Janeiro.
5. **In contrast, most of the investment in railroads can be left to the private sector.** The rail sector was privatized in the late 1990s and has become increasingly profitable with the export boom. The main contribution of the government to this sector has been through better regulation. Better regulation has reduced uncertainty

to investors—including large users, which have financed the acquisition of transport equipment. It has also helped improve competition. The clarification of the rights and duties of the private sector and the government, as well as the solution of some ownership issues among early investors in the system, has contributed to increasing operational performance and growing cargo production (the volume of cargo has increased by 50% in recent years). Ensuring the competitive access to ports, such as Santos, has also been among the top priorities of the Land Transportation National Agency (ANTT).

6. **Early public investment can be a springboard for greater participation of the private sector in infrastructure projects.** Several rehabilitated roads will be eligible to become concessions, allowing the operation and maintenance of these roads to become the responsibility of the private sector. More generally, the logic underlying the CREMA (Contrato de Reabilitação e Manutenção de Rodovias) mechanism supporting the rehabilitation of secondary roads also involves larger participation of the private sector. This mechanism, which is a sort of PPP, transfers to the private sector the decision on the best allocation of resources to achieve government-established levels of road quality. Initially, all the work will be paid for by the government. However, there is the expectation that it will become underwritten by the private sector in the case of medium- to heavy-traffic roads, as they become full-fledge concessions. Also, some of the major roads that have been upgraded (duplicated) will be eligible to become a concession. Unfortunately, in recent years the spending in these roads has been dislocated by other spending priorities. Timely completion of these roads will facilitate their transfer to the private sector.
7. **Accelerating investments to allow the transfer of the operation of the complete project from the central government applies to sectors other than roads.** This approach reduces the risks of future fiscal commitments by the central government and typically allows for more efficient operation of the service. The acceleration of spending schedules can, for instance, help complete select urban mass transportation projects in a few cities, reducing the financing cost associated with IADB, IBRD or developing bank loans and ensuring the implementation of the model of local full responsibility for these services, supported by those institutions. This implementation has long been delayed, generating important financial cost to the Federal government. Similarly, the government has spent hundreds of millions of dollars in irrigation projects, most of which remain incomplete and failing to generate returns for the resources already sunk in. Preparing these projects to be passed to the operation of the private sector can make them productive and generate substantial job opportunities in depressed areas.
8. **Public investment is also needed to reduce bureaucracy in the trade sector, as well as the administrative hurdles faced by entrepreneurs.** Keeping the positive momentum in international trade calls for the modernization of customs, to complement the purchase of the scanners associated with anti-terrorism policies, and for stepping up anti-smuggling activities. Real democratization of economic activity, on the other hand calls for simplifying, integrating, and reducing

registration requirements for business<sup>1</sup>. The latter involves the integration of tax and business registration systems at different levels of government, including at city level. New information systems will be required to achieve this goal in a sound and effective way, and this is already entailing substantial investment in this type of administrative infrastructure.

- 9. The pilot is an attempt to address these issues and demands in an orderly way.** The project described in the following sections is a cautious approach to these complex issues and is part of a large fiscal strategy.

*Fiscal and macroeconomic framework for the Pilot*

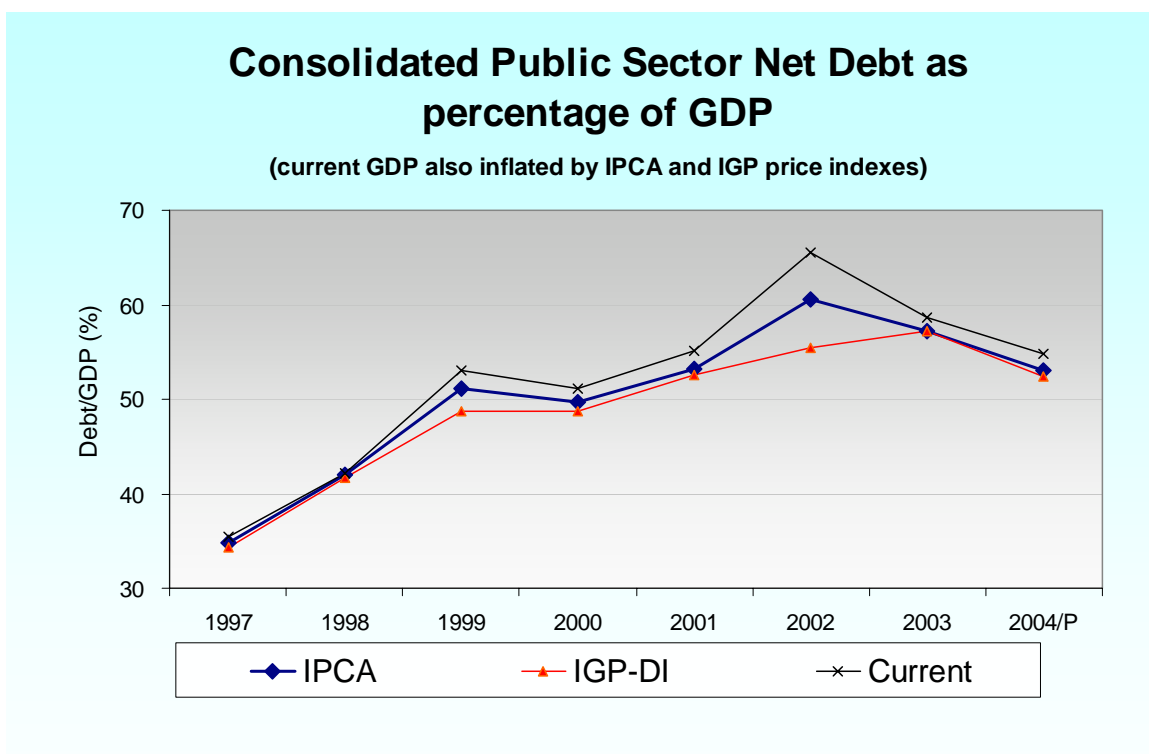
- 10. The Pilot aims at accelerating a limited amount of public spending in infrastructure investment, with a medium-term view to fiscal consolidation.** The fiscal impact of this acceleration will be of less than 0,2 percent of GDP annually over three years (for a total of 0.4-0.5 percent of GDP during 2005-07). From a fiscal standpoint, the allowance is modest and does not impinge on the solvency of the public sector, to the extent to which it has a clear economic and financial yield. The additional spending will be geared towards a small and well-defined set of projects in areas of greater demand for public investment. The specific choice of projects was made, as much as possible, on the basis of technically sound cost-benefit analyses, focusing on a rapid economic return and intertemporal savings, including the ability to raise the potential of tax generation in some regions. It reflected a competition for scarce funds, in light of cost-benefit analysis and other systematic approaches to project selection.

- 11. The Pilot will help buttress recent achievements in the macroeconomic arena.** Since 2003, Brazil has completed an impressive external adjustment, reflected in a swing of the current account of the balance of payments of about 6% of GDP. Fiscal and monetary discipline have contributed to smooth the effects of this large adjustment and provided the step stone for the vigorous economic growth experienced in 2004. Looking forward, the investment portfolio comprised in the Pilot will help increase the international competitiveness of the Brazilian economy and reduce supply constraints, thus contributing to reduce the external vulnerabilities of the economy and inflationary pressures. The fiscal allowance it entails is also compatible with ensuring a third consecutive year of decline in the public-debt to GDP ratio. This ratio, bringing GDP to end-year prices, reached 60,6% by the end of 2002, declined to 57,2 % by end-2003 and (considering

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<sup>1</sup> These investments are part of a project outlined in a study focused on identifying measures to simplify, integrate, and reduce registration requirements for business and address overlaps and redundancies between different agencies and levels of government, which was one of the Structural Benchmarks in the IMF program with Brazil extended in 2003.

preliminary GDP data) is expected to fall to 53,4% by end-2004.<sup>2</sup> Under current fiscal policies, the implementation of the Pilot will be consistent with lowering this ratio further in 2005.



12. **Importantly, the Pilot will not introduce changes in the methodology of computing the primary surplus.** Brazil already follows a golden-rule for the non-financial public sector, and does not need to introduce further methodological innovations in its accounts. Also, it would be counter productive to de-linking fiscal and budgetary policies from debt sustainability and fiscal vulnerability considerations. Rather, the Pilot is part of a cautious fiscal policy aimed at increasing public savings, stabilizing the tax burden and better focusing public spending.

*The impact of the Pilot on governmental procedures*

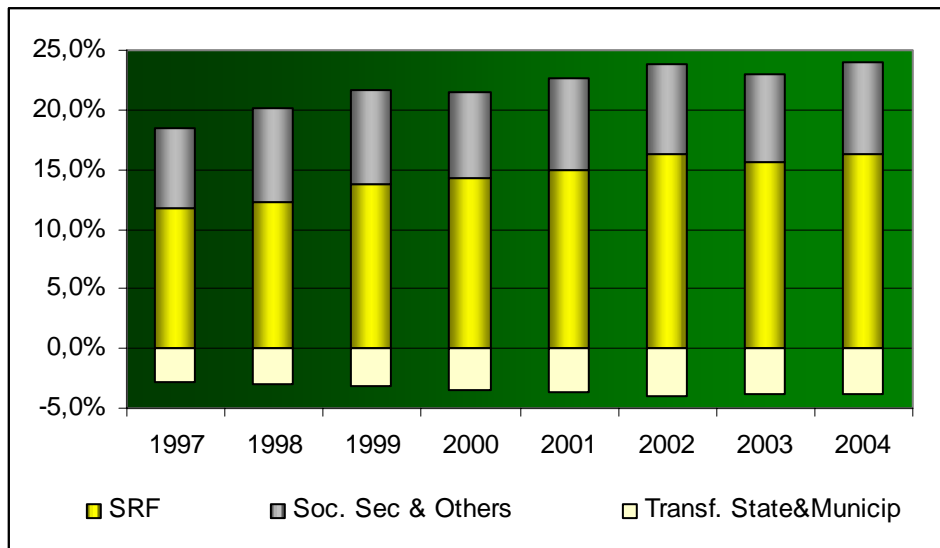
13. **The Pilot will help the government take additional steps to consolidate fiscal efforts.** Most of the effort undertaken since 1999 has been focused on aggregate measures and ensuring adequate levels of revenues. In the last two years, the authorities have begun a process of stabilizing the revenue/GDP ratio and the tax burden that has entailed a renewed focus on the quality of expenditure. Such a shift will require a strengthening in project evaluation and monitoring at the Federal

<sup>2</sup> The standard ratio of debt/nominal GDP would have moved from 65,5% in 2002 to 58,7% in 2003, and 55,0% in 2004. In this case, the drop would have been of 10 percentage points.

level, as part of a strategy to improve the budgetary and planning process. The strengthening of systems for assessing, prioritizing, and managing public investment projects is an integral part of this endeavor, being essential to improve expenditure efficiency. Such an improvement will be vital to ensure that the adequate provision of public services is compatible with the declining path for the tax burden sought by the current administration.

14. **The Pilot is a first step to improve institutional mechanisms to ensure that the resources available are used efficiently.** This is why resources will be concentrated on maintaining and rehabilitating existing infrastructure, speeding up the completion of ongoing projects, and facilitating the operation of ports. As a way to reform and rationalize the overall investment decision-making process, this choice is sound, because contracts for such works are much simpler than for new projects. They can, thus become testing grounds for innovations, also helping structure new investment projects. Also, independent of their visibility, maintenance and rehabilitation projects typically provide fast and easily measurably gains that help start producing fiscal savings.

Federal Revenues as a percentage of GDP



	SRF - Federal Revenue Service	Social Security and Other Revenues	Transfers to States and Municipalities
1997	11,68%	6,73%	-2,83%
1998	12,22%	7,97%	-3,05%
1999	13,79%	7,86%	-3,24%
2000	14,25%	7,21%	-3,44%
2001	14,95%	7,73%	-3,70%
2002	16,34%	7,57%	-4,05%
2003	15,61%	7,39%	-3,79%
2004	16,27%	7,78%	-3,76%

15. **The Pilot is already yielding important results in the institutional arena.** The selection of projects to be included in the pilot was a first instance of adopting a more structured planning process. The Pilot is also motivating the creation of new monitoring and implementation mechanisms to follow up public works. The process provided a welcome opportunity to harness the talent and work of officials in many ministries, which has already started to pay off. There has been a growing and broader awareness of the importance of stronger selection criteria in budgetary planning, and discussions about how to strengthen the implementation process in Brazil on a permanent basis. Preliminary contacts with the World Bank have also pointed to the possibility of developing a comprehensive technical assistance program in this area, with potential long-term consequences.

## II – SELECTING THE PROJECTS PARTICIPATING IN THE PILOT

### *Selection Process*

16. **The selection process started with an invitation letter from the Ministry of Finance to line ministries.** On August 27, 2004, Finance Minister Palocci sent a letter (Aviso 334/MF) to six line Ministries, to invite them to apply to participate in the Pilot Project. Applications were to be submitted by October 15 in order to give enough time to include a preliminary list in the 2005 budget during its discussion in Congress before the end of the year.<sup>3</sup> The letter established a blueprint for the applications, requiring for each project:

- a) A detailed description of the project;
- b) The stage of the project, i.e., whether a preliminary project (projeto básico) and detailed project (projeto executivo) had been prepared, and whether it had been through the tendering process (licitações e contratos expedidos);
- c) An analysis of the difficulties faced so far by the project, and the risks ahead, including regarding the time table to complete the project;
- d) The amount of resources envisaged in the PPA, the budget authorization for 2004, the pace of execution projected for 2004, budget expectations for 2005-2007, and the resources to complete the project by 2007;
- e) The ranking of the project within the portfolio proposed by the Ministry.

17. **At the heart of the requirements laid out to candidates to participate at the Pilot were a minimal fiscal and economic data, starting preferentially with a**

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<sup>3</sup> A second letter was sent to the same Ministries on October 14 (Aviso 429/MF).

**cost-benefit analysis.** This analysis would be one of the major keys to help the team preparing the pilot to rank the projects. The list of requirements included:

- a) A summary cost-benefit analysis;
- b) Estimates of the job-generation potential of the project, as well of its impact on GDP growth and international trade;
- c) Tax generation potential during construction as well as afterwards, if possible by type of tax and contribution;
- d) Financial return of an eventual concession, when that was envisaged, with generation potential of tolls, tariffs and other cost-recovery mechanisms;
- e) Depreciation and maintenance costs, and the future reduction in public spending owing to the conclusion of the project;
- f) Analysis of legal, environmental and other risks, including of generating contingent liabilities.

18. **Cost-benefit analysis (CBA) was an integral part of almost all the proposals made by the Ministry of Transportation.** The Ministry of Transportation is well acquainted with CBA, using, for instance, the HDM-4 software for road evaluation developed by the World Bank. The HDM-4 helped select which roads should benefit from improved maintenance and rehabilitation, estimating the gain of any additional expenditure over a period of up to 20 years. A team from the Treasury reviewed the process and extended its use for the evaluation of the duplication of BR-101 and BR-381. The selection process with other line ministries, although sometimes less formal, was based on several quantitative technical-economic assessment procedures. Recommendations by the World Bank and the IADB were often an important consideration, especially where these institutions had conducted in-depth analysis of the sector and evaluated the cost of delaying some well-advanced projects. In sum, CBA and other quantitative tools were instrumental to screen out investments whose benefits proved inadequate in view of the budgetary constraint.

19. **The Pilot provided a prime opportunity to implement a structured bidding process for funds.** Since the amount of resources available to the Pilot was limited beforehand (R\$ 2,8 billion a year), projects had to undergo a bidding process for the available funds. Of course, it is already well understood by line Ministries that any project has to compete for general funds—even when a spending is formally the target of earmarked revenues. The novelty in this case was the transparent and structured way the process was conducted. Therefore, a side product of the process was strengthening at once the project preparation capacity of some line ministries.

20. **Inclusion criteria were binding.** Several projects were rejected because of insufficient information or inadequacy with the pilot objectives. Among the 9 projects of rail mass-transportation submitted by the Urban Development Ministry (Ministério das Cidades), only one survived the screening. This, of course, was not necessarily because of a fault of these projects, which have been supported by the IADB and other development institutions. Rather, they responded to a number of reasons, such as:

- a) Size was a consideration, as well as how advanced the construction process was. This second factor was important because more advanced projects are more suitable to test the envisaged transferring of operation and financial responsibility to local authorities upon the completion of the construction work;
- b) The expected return was a major factor, which led to the exclusion of several projects. For instance, the Ministry of Transportation had proposed two locks. However, while Tucuruí was considered eligible to participate in the Pilot, the dam associated with the Lajeado dam was not included this time around. CBA showed that benefits from this investment would arise only in a very long term, being shadowed by its costs.
- c) Several other projects of merit, but of different nature (e.g., without an measurable economic benefit) were also dropped out after consultation with the line ministry.

21. **CBA helped achieve a better resource allocation within the Pilot.** For instance, the Ministry of Transportation had asked for R\$1,5 billion for road rehabilitation, but only about R\$ 1,0 billion was included in the Pilot. On the other hand, the Ministry of Regional Affairs or *Integration* (Ministério da Integração) applied for a single irrigation project. Analysis of existing projects in the area, as well as of the general policy of the Ministry regarding the future operation of these projects, showed that including other projects was consistent with the goals of the Pilot. This was so because of the relatively low marginal cost of this expansion and the benefits of a more broad-based approach to the issue, which could set a new pattern for the construction and operation of these projects.

22. **The selection process also provided better integration of several decision-making bodies.** Although the overall responsibility for inclusion of projects in the Pilot rested with the Finance Ministry, close cooperation was developed with the Planning Ministry and Casa Civil. As in many countries, the Planning Ministry has a unique role in selecting projects for consideration in the Budget, and to lead discussions with line ministries. The expertise of the Secretariat for Planning and Investment (SPI) at the Planning Ministry was thus invaluable. Casa Civil played its role of coordination across ministries and helped provide thrust to efforts to step up monitoring mechanisms in the implementation of public works.

### *Selected Portfolio*

23. **The selected portfolio is described in a set of worksheets annexed to this report.** These worksheets found at the back of the main text present the main aspects of the specific projects, including a short background note indicating some of the goals to be achieved. They also include the amount assigned in the baseline for that project and the additionality provided by the Pilot. A summary of the cost-benefit analysis is also presented, together with indications about any conditionality attached to the participation of the project in the Pilot. In the cases where the project reflects a

program with different segments, a breakdown of the investment is also provided, as well as any additional information deemed relevant.

24. **The selected portfolio weighed on transportation projects, while addressing other important areas.** Investment in roads has been conducted in a somewhat haphazard way in recent years. On the one hand, important projects were slowed down, with effective outlays well below budget allocations. On the other hand, hundred of small projects were initiated throughout the country, with a substantial dispersion of efforts. In some cases, this work was never completed, although the government continued to pay for skeleton crews and equipment to avoid decommission charges. In many others cases, repair work proved precarious and short-lived, requiring new spending in a short period of time. The Pilot will help concentrate efforts and improve the implementation record. Maintenance and rehabilitation will be focused on federal roads, as local roads now benefit from direct federal transfers, which exceeded R\$ 1,1 billion in 2004 and will likely reach R\$ 2 billions in 2005. Construction will be focused on the duplication of a few key roads (e.g., BR-101) and the completion of other equipment (e.g., Tucuruí lock) that have been under construction for many years, but have not been complete due to insufficient priority in fund allocation.

## Budget Execution of Selected Transportation Projects in Recent Years 1/

Transportation		BR 101/SUL -- duplication				
Ano	PLO	LOA	Lei + Créditos	Empenho	Liquidado	Liq/Lei+Cred
1998	4,00	4,00	4,00	0,00	0,00	0,00%
1999	10,00	10,00	10,00	0,00	0,00	0,00%
2000	17,48	17,48	17,78	11,51	11,51	64,74%
2001	40,00	40,00	40,90	2,67	2,67	6,53%
2002	57,00	52,60	40,01	2,71	2,71	6,77%
2003	12,00	41,91	35,53	0,55	0,55	1,55%
2004	80,00	93,79	138,29	39,51	39,51	28,56%

Transportation		Rio Beltway -- duplication				
Ano	PLO	LOA	Lei + Créditos	Empenho	Liquidado	Liq/Lei+Cred
2000	0,00	0,00	0,00	0,00	0,00	-
2001	0,00	0,00	0,00	0,00	0,00	-
2002	0,00	0,00	0,00	0,00	0,00	-
2003	0,00	0,00	0,00	0,00	0,00	-
2004	20,00	28,00	28,00	1,30	1,30	4,64%

Transportation		Main Ports Agenda				
Ano	PLO	LOA	Lei + Créditos	Empenho	Liquidado	Liq/Lei+Cred
2000	207,52	207,52	207,52	125,80	125,80	60,62%
2001	188,28	188,28	188,28	133,98	133,98	71,16%
2002	201,74	201,74	201,74	76,90	76,90	38,12%
2003	204,86	204,86	204,86	26,15	26,15	12,76%
2004	45,00	133,83	133,83	84,70	84,70	63,29%

Transportation		Tucuruí locks				
Ano	PLO	LOA	Lei + Créditos	Empenho	Liquidado	Liq/Lei+Cred
1995	1,16	1,16	1,16	1,16	1,16	100,00%
1996	3,30	10,00	6,90	6,90	6,90	100,00%
1997	0,00	13,50	13,50	2,80	2,80	20,74%
1998	40,00	40,00	21,30	31,30	20,43	95,92%
1999	0,00	39,15	26,97	26,97	26,97	100,00%
2000	30,00	30,00	40,75	37,99	37,99	93,23%
2001	100,00	90,00	90,00	89,80	89,80	99,78%
2002	70,00	70,00	78,00	22,50	22,50	28,85%
2003	50,00	62,30	46,07	8,00	8,00	17,36%
2004	70,00	69,87	69,87	51,30	51,30	73,42%

1/ PLO=Budget Draft Law sent by the government, LOA, Budget Law approved by Parliament; Créditos: Supplementary Credits; Empenho: Commitments; Liquidado: Invoices to be paid.

25. **The final portfolio attempted to provide a good balance between sectors.** For instance, the balance of 10 years of the Port Modernization Law of 1993 is considered positive by the government.<sup>4</sup> Dock companies in the public ports are,

<sup>4</sup> This law allowed the privatization of operations (terminals), and the decentralization of port administration. It also reduced the need for public spending, as it opened the way for the construction of many private (own account) terminals. Progress was also made in creating new institutions, including Port Authority Councils

however, still controlled by the government. Hence, the government is responsible for providing infrastructure services, ranging from dredging to road access, which have been identified as two of the major challenges for further increases in efficiency. Therefore, although not every spending in the group included in the Pilot passed a formal CBA, several indicators pointed to the quick and positive return of the investment could achieve. Investments in the modernization of customs, port security and tax administration went along the same line. In a quite different field, cues were taken from the observation made by the World Bank that more than US\$ 2 billion of public funds have been already invested in irrigation works in Brazil over the past three decades and that while a number of these projects have had negative rates of return so far, they can be profitable.<sup>5</sup>

**26. The government believes that irrigation projects can be efficient,** if accompanied by complementary actions that facilitate dynamic private sector management and an innovative capacity to respond to market requirements and production scenarios. In addition irrigation has contributed substantially to poverty reduction and to reducing rural migration, especially towards overpopulated cities in the Northeast, making worth giving priority to capital spending, as long as it is accompanied by clear policies. These considerations, together with World Bank studies pointing out that standard CBA tools such as the FARMOD software indicate that, under adequate design and implementation conditions, irrigation projects can be profitable and economically adequate, contributed to the selection of some irrigation projects in the portfolio of the Ministry of Integration. Support for the Pro-Agua project, on the other hand, will help test the scope for projects centered in adequately pricing new supplies of water, with a view to guarantee its sustainability and to improve the efficiency of the resources invested or to be invested on increasing water supply in the drought-vulnerable areas.

**27. A few other small projects were included for their specific importance, as well as a means to spread the approach of the Pilot over a larger number of ministries.** These projects are mainly related to R&D, although straddling over several ministries. It is well documented that the return of investments in research and development is typically among the highest among the investment opportunities available to the public sector. The selected projects will also foster private sector investment, as they are focused on providing public infrastructure to private businesses where markets would either not provide such facilities or services, or the equilibrium supply might not be efficient. This is the case of the laboratory in the Amazon and the upgrading of weather forecast services to the agricultural industry. An additional project aims at providing satellite data to enforce property rights in the agricultural sector. These three projects will be conducted, respectively, by the Ministries of Science and Technology, Industry and Trade, and Rural Development.

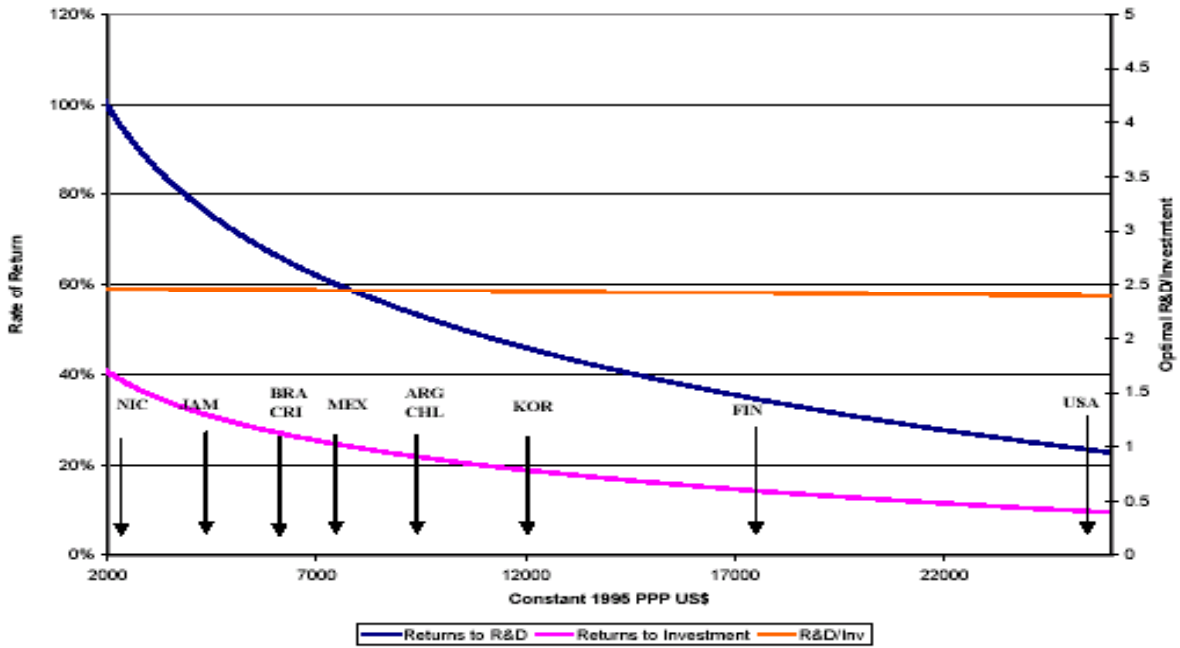
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(CAPs) and Labor Management Organizations (OGMOs). As a result, operational costs were in some cases cut by half, operation speeded up, and labor productivity in a few ports rose by more than 30%.

<sup>5</sup> Brazil irrigated agriculture in Brazilian semi-arid region: Social Impacts and Externalities. Rep. N. 28785-BR, 2004.

They will be good pilots to spread new standards of investment selection, monitoring and evaluation. They will also help the government to assess the main challenges in the implementation of this new approach.

### Return of physical and R&D investments by level of national per-capita income



## Main Indicators for the Pilot Project Portfolio

AREA	Ministry	Project	2005			2006	2007	TOTAL	
			PLO	PILOT	TOTAL				
<b>TRANS- PORTATION</b>	Transportation	Road Maintenance & Rehabilitation	874	952	1.826	1.500	1.500	4.826	
	Transportation	BR 101/SUL -- duplication	135	285	420	600	700	1.720	
	Transportation	BR 381/MG -- duplication	45	153	198	130	195	523	
	Transportation	BR 101/NE -- duplication	96	307	403	550	950	1.903	
	Transportation	Rio Beltway – duplication & construction	49	88	137	140	250	527	
		<i>Total Roads</i>		1.196	1.785	2.984	2.920	3.595	9.499
	Transportation	Main Ports Agenda	101	226	327	0	0	327	
	Transportation	Tucuruí locks	70	150	220	150	0	370	
		<i>Total Ports</i>		171	376	547	150	0	647
		<b>TOTAL TRANSPORTATION MINISTRY</b>		<b>1.370</b>	<b>2.161</b>	<b>3.531</b>	<b>3.070</b>	<b>3.595</b>	<b>10.196</b>
		<i>Finance</i>	<i>Scanners, etc.</i>	0	340	340	500	0	840
		<i>Urban Development</i>	<i>Belo Horizonte Subway</i>	20	82	102	0	0	102
<b>Profitable irrigation and water supply</b>	<i>Integration</i>	<i>Irrigation Projects</i>	100	50	150	0	0	150	
	<i>Environment</i>	<i>Pró-Água</i>	14	10	24	0	0	24	
<b>R&amp;D Facilities</b>	<i>Science &amp; Technology</i>	<i>Meteorology Lab</i>	0	15	15	21	0	36	
	<i>Rural Development</i>	<i>GPSland survey</i>	29	0	29	29	0	58	
	<i>Industry &amp; Trade</i>	<i>Bio-Science Manaus Lab</i>	11	3	14	14	14	41	
<b>Streamlining business Requirements</b>	<i>Social Security</i>	<i>Payroll tax rate reduction</i>	0	100	100	0	0	100	
	<i>Finance</i>	<i>Tax Integration with states</i>	0	60	60	0	0	60	
<b>TOTAL</b>			<b>1.545</b>	<b>2.820</b>	<b>4.365</b>	<b>3.633</b>	<b>3.609</b>	<b>11.607</b>	

### III – IMPLEMENTATION ISSUES

#### *Background and general remarks*

28. **The consolidation of the Fiscal Responsibility Law opened the way to improvements in existing budgeting practices.** The Fiscal Responsibility Law has helped put public finances on a sound footing. The adjustment, however, has been achieved in large part by raising taxes. Only in 2003, and for the first time in many years of increasing spending and taxes, the government managed to raise the primary surplus without increasing taxes (taxes raised by the Federal Revenue Service dropped to 15,60% of GDP from 16,34% in 2002). This was achieved through a reduction in current as well as investment spending, but was most felt in the latter (preliminary GDP data suggest that the tax burden was again kept below the 2002 level in 2004, albeit increasing vis-à-vis 2003). Further efforts in spending will be required in coming years, probably requiring structural changes in the budgeting and budget execution process. In this respect, several ideas have been discussed in recent years, and an OECD review conducted around the 2002-2003 transition period between administrations provided a useful summary of some new possible venues.<sup>6</sup> The study pointed, for instance, to the scope for better integrating budgeting procedures with planning, and, moving forward, for considering a rolling multi-year budget framework. Those changes would build on the experience with the PPA framework. Also, output/outcomes-oriented planning processes should be fostered, instead of focusing mainly on the amounts of resources spent (e.g., literacy goals instead of numbers of schools). This is a medium-term task, and the Pilot is viewed by the Brazilian authorities as a first step toward those objectives.
29. **The Pilot provided an opportunity to check whether selected projects are consistent with the national or strategic plan and pass a microeconomic review.** Such an approach strengthens the basic lines of the PPA, giving prominence to infrastructure investment planning. As mentioned, in this first phase of project selection for the Pilot, formal CBA was done mainly in the Transportation Ministry, although other ministries drew on specific expertise from multilateral institutions, in particular when the candidate project was linked to loans from those institutions. A quite pragmatic approach to the selection process was taken in the case of the smaller investments in the technology area outside the standard heavy “infrastructure” areas. As noted, even in these cases, however, the process allowed staff in line ministries and central ministries to establish a common language and systematic approaches to discuss infrastructure investment. Looking forward, the objective is to provide an environment where CBA will be undertaken by all line ministries as a standard tool.

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<sup>6</sup> Budgeting in Brazil, 2003, GOV/PUMA/SBO(2003)10 -- OCDE.

30. **The process highlighted the importance of conditionality in achieving time consistency.** The development of a desirable multi-year approach to budgeting requires the establishment of mechanisms promoting policy time consistency. Monitoring and self-correction mechanisms are important tools for this purpose and can be embedded in a set of conditionality for effective participation of selected projects in the Pilot. In particular, it was felt important to tie future disbursements (especially in 2006-7) to the achievement of some standards and institutional goals. For instance:

- i. The Transportation Ministry is committed to auction off rehabilitated roads with enough traffic to become concessions. The work towards this goal will be conducted in 2005 and its completion and the preparation for the auctioning of at least five segments will be a condition for the participation of road maintenance projects in the Pilot in coming years.
- ii. Participation of the roads being duplicated (especially the stretches of BR-101) will also be dependent on the results of the monitoring of the spending schedule and physical progress, as well as of the steps taken towards bringing in the private sector to either operate or complete and operate them.
- iii. Participation of the Rio de Janeiro Beltway will depend on the completion of engineering plans, as well as the model for operation (e.g., full concession or PPP).
- iv. Pari passu with the development of the Agenda Portos, the government will continue to address the institutional issues surrounding the implementation of the 1993 Port Act and the financial soundness of the Federal Dock Companies.
- v. Participation of the BH mass transportation project will be conditioned to the agreement by the local government to take over the whole project by the time of the conclusion of Line 1, forsaking further financial support from the Union to operate, expand, or maintain existing or futures lines. Participation of other mass transportation systems in the Pilot in the following years will depend on the success of the BH pilot and on agreeing on similar terms.
- vi. In the case of irrigation, participation in the pilot in 2006 will depend on the preparation of other perimeters (projects) to be put under a concession regime (about ten, considering viability studies conducted by Ministry of Integration) .
- vii. Participation of the Manaus Lab in the pilot in 2006 will require solving the issue of the administrative structure of the Laboratory . Further development of market research identifying specific potential customers in the private sector will also be demanded.

31. **The pilot called for the creation of a Coordinating Committee comprising representatives from three Ministries to oversee the implementation of participating projects.** The committee will comprise undersecretaries from the Casa Civil (Office of the Chief of Staff), the Ministry of Finance and the Ministry of Planning. Committee decisions will be formal and unanimous. The Committee will establish a special technical unit to process the information required to follow up the projects and decide on disbursements and their fiscal treatment. The unit will be based in the Treasury, being authorized to contract specialized staff to monitor

the projects and review parameters and implementation schedules. This unit will work together with the Budget Secretariat (SOF) and the Investment Secretariat (SPI) of the Planning Ministry to develop and implement permanent monitoring procedures to be enforced by the latter Ministry in the aftermath of the Pilot. The unit will also be the bedrock for the development of monitoring and planning units in line ministries, which are expected to be one of the most enduring legacies of the Pilot.

32. **The Pilot will build on existing monitoring and control procedures.** The federal government already operates a relatively comprehensive data system to follow up projects, and it is of general interest that the Pilot improve on it, rather than starting everything anew. This general system is called SIGPLAN and is updated twice a month by the manager of each project under the supervision of the Ministry of Planning. It is also integrated with the internet-based federal government cash/financial management SIAFI system (SIAFI is the workhorse for development, execution and control tasks related to the federal budget). In addition to the standard SIGPLAN, SPI has developed the SIGPLAN-*Fluxos de Recursos* tool, which will be adjusted to the new environment and made to operate in connection with the Treasury. The SIGPLAN-*Fluxos* will help, inter alia, to adjust the pace resources will be transferred to a given project, depending on its pace of implementation and compliance with agreed standards.

#### Monitoring and Implementation Structures for the Pilot

UNIT	PARTICIPANTS
Coordinating Committee	Casa Civil Finance Ministry Planning Ministry
Technical Unit (in the Treasury)	Executive Manager Monitors Specialists
Existing Structures	Finance Ministry STN - National Treasury Planning Ministry SPI - Planning and Investment Secretariat SOF - Federal Budget Secretariat Casa Civil SAG - Government Secretariat Line Ministries Executive Secretary PPA Managers Action Coordinators

## *Monitoring projects*

33. **Projects selected to the Pilot were singled out in the budget with a view to facilitate their monitoring and implementation.** A special code was issued by the Budget Department at the Ministry of Planning (SOF) during the final phase of the approval of the Annual Budget in Congress. Special spending limits will be set for these projects when preparing the expenditure programming decrees defined in Art. 8 and 9 of the Fiscal Responsibility Law. In addition, the *whole budget allocation* associated with projects in the Pilot will receive special treatment. Special efforts will be made to shelter the baseline spending for these specific projects from the *contingenciamento*, as long as the *whole project* comply with the requirements set by the Pilot. This is a novelty to ensure that projects will be implemented as envisaged, both in terms of time schedule and implementation standards.
34. **The budget also incorporated incentive mechanisms aimed at improving the resource allocation across projects in the Pilot.** The budgetary law granted additional discretion to the government to expand or reduce the budget allocation for projects in the Pilot. While this margin is ordinarily of 10% of the initial allocation, the government will be allowed to use a margin of 30% in the case of projects in the Pilot. Therefore, the Committee will be able to periodically adjust the fiscal limits of individual ministries, providing more funds to those with projects successfully implemented and reducing the funds to those showing weaker performance. These instruments are expected to promote a healthy competition among project managers for funds. The bi-monthly budget execution report established by the LRF will also contain an evaluation of the performance of distinct projects and the compatibility of fiscal limits within the Pilot, facilitating their monitoring by the public.
35. **The National Treasury will be responsible for controlling and classifying disbursements associated with the Pilot.** This monitoring will imply that failure by the project to comply with the requirements set by the Committee will translate into invoices (*empenho liquidados*) associated with that project being paid by the general discretionary funds of the related line ministry, rather from the resources accounted as part of the Pilot. These requirements will be largely linked to the pace and the way projects are implemented, and will be verified by the unit set up at the Treasury to follow up the projects in the Pilot, in tandem with the evaluation work conducted by the Ministry of Planning and the Casa Civil. These conditions will be agreed beforehand between the Treasury and line ministries for the purpose of the budget and financial programming required by Art. 8 and 9 of the LRF.
36. **Existing information systems will be strengthened and integrated.** SIGPLAN-*fluxo* have the identification of actions sharpened, so that resources are always tagged to an exact destination. SIAFI will also be adjusted to allow a finer breakdown of the spending process, with more detailed and frequent events triggering payment orders or reviews. The Coordinating Committee will be granted

full access to the monitoring system of line ministries (which are not integrated as of today) and of those individual organization outside the central government when projects are executed by such parties (e.g., in the case of transfers to the dock companies. Also, projects will be submitted to an annual external auditing (including from the private sector, without prejudice of the work of the Internal and External public auditing bodies). All these procedures will help translate the existing controls over amounts spent to controls over the quality of the expenditure.

37. **Oversight by the Coordinating Committee will not replace the responsibility of project managers.** Managers in line ministries are the ultimate responsible for the implementation of investment projects and other payment decisions. Their decisions are fully recorded in the SIAFI and their views and comments are part of the documentation of SIGPLAN and SIGPLAN-*fluxo*. They will be supervised, in the case of projects belonging to the Pilot by the Coordinating Committee. This oversight will complement the surveillance already exercised by the Planning Ministry through the mechanism of project managers existing since the late 1990s. Selective internal audits for propriety and efficiency by the Inspector General (Controladoria Geral da União) and external audit procedures by the Accounting Court (Tribunal de Contas da União) will remain in place. In sum, the role of the Treasury will *not* be to clear payments (which is the responsibility of line ministries and the Planning Ministry), but establish if they are eligible to be included in the special allowance associated with the Pilot.

## Management Tools for the Pilot

- **General Plan** - Prepared by the Coordinating Committee (including evaluation plans)
  - Aims at guiding the steps required to define the process and establishes terms to ensure the commitment of line ministries
- **Execution and Disbursement Schedules** - Agreed with the Treasury to allow spending to be accounted as part of the Pilot
- **Information Systems** - Sigplan, SIAFI, programs developed by monitors in the Unit at the Treasury
  - Reports and systems to allow frequent and comprehensive monitoring of implementation.
  - Will be supported by the MPOG, Treasury and mesh in with existing structure in the Casa Civil

## IV – FINAL REMARKS

38. **The planned steps are already under way.** Project selection to the Pilot was complete by the end of 2004. The Treasury and the other ministries are now focused on strengthening the monitoring of these projects. Specialized firms are now being researched and selected. Reliance on external auditing and evaluation is an approach

proposed, inter alia, by the Senate in the case of PPPs, which will find an excellent testing ground in the Pilot. Meanwhile, Casa Civil and other ministries are working to integrate the management systems of key line ministries.

39. **The technical unit at the Treasury is itself a pilot.** Hence, in addition to ensure the implementation of the program, the unit will develop and disseminate techniques, standards and procedures related to the best implementation of governmental projects. Together with the Planning Ministry, it will help develop new mechanisms and procedures for project selection and evaluation. This is an integral part of the mission of the unit, with a view to disseminate best practices to improve the quality of federal public spending. The unit, in addition to work in close cooperation with SPI and SOF with a view to benefit from their experience as well as to strengthen it, will help implant technical units in line ministries that will carry on the new methodology and techniques after the conclusion of the Pilot project. Such a mission is important because, as noted by experienced economists in the field of public finance, whether or not public investment supports better public sector performance will depend on whether institutional arrangements are aligned with performance oriented public sector management.
40. **The pilot will be evaluated at regular intervals.** Of course, the Brazilian authorities expect to evaluate the performance of the Pilot with the IMF after its first year of implementation, considering the multiyear aspect of the experience. However, interim evaluation will occur at the intervals established by the Fiscal Responsibility Law—LRF. The LRF establishes Congressional Hearings to review the execution of the budget every four months. These will be well-structured venues to discuss the performance of the Pilot, including its impact on the macroeconomic and fiscal environment, as well as its contribution in strengthening the spending framework and the institutional environment at the central administration.
41. **The incorporation of the tools refined for the Pilot will help draft the 2006 budget.** The regular review for the Congress, increasing use of cost-benefit analysis, the adoption of formal assessments of the economic impact and fiscal outcomes of new projects are expected to become standard procedures for the inclusion of projects in the PPA and the budget. Full use of these criteria by SPI and SOF will also help increase the integration between the two branches of the Ministry of Planning, enhancing the dialog with line ministers (a suggestion of the OECD study on budget practices). Looking forward, the Pilot may help evaluating the scope of multi-year investment budgets as a mechanism to ensure greater protection to this spending over time, raising the predictability of flows and the ability of managers to program their actions. Of course, these developments will depend not only on the success of the Pilot itself, but also on the dynamics of other expenditure, including that related to entitlements and other social transfers.
42. **The Pilot is expected to have a lasting impact on line ministries.** The ultimate objective of the measures currently taken by the government is to strengthen the institutional environment of many ministries. Independent of the Pilot, a number of measures are already being taken in several areas, which will help the Pilot to have

a meaningful impact on public investment. The Ministry of Integration has invested a great deal in strengthening its institutional environment since 2003. DNIT, the department responsible for public works within the Ministry of Transportation is also undergoing important changes. Greater oversight over spending decisions, together with a strengthening of local monitoring capacity, is expected to make spending schedules of the Ministry of Transportation more coordinated. This will help ensure the full and efficient use of resources available, and impart greater transparency to this important area of the federal government. The Pilot will benefit from this progress, while further ensuring a timely monitoring of public spending as a counterpart of making financial resources to infra structure investment more secure and predictable.

43. **Adequate implementation will also allow society to reap the benefit of this additional expenditure.** The benefits of the Pilot will thus be reflected not only in a better-functioning government, but also in safer and better roads, ports with higher turnover and new jobs in drought-sensitive regions. Both aspects will contribute in important ways to ensure the sustainability of the current increase in GDP growth in Brazil.