

FUNDACION PARA LA EDUCACION SUPERIOR Y EL DESARROLLO



AGGREGATE FISCAL ANALYSIS

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Paraguay's public finances had been relatively stable until the mid- to late-1990s, when a series of financial crises, the high growth of current spending and somewhat short-sighted debt management led to a liquidity squeeze during the 2002 economic recession. This manifested itself in public debt arrears equal to almost 4 percent of GDP in early 2003. The government of Nicanor Duarte Frutos, which took office in August 2003, embarked on a fiscal reform program, which has significantly improved the prospects for fiscal sustainability in the medium term. The challenge ahead will be to apply the recently enacted fiscal adjustment law to solidify institutionally the tax revenue collection efforts (which have been stepped up remarkably since August 2003), improve the efficiency and quality of expenditures, and forge ahead with the difficult tasks of deepening the structural reform process of the public sector. This will free up much needed resources for social and infrastructure projects.

I. BACKGROUND

Like many Latin American countries, Paraguay experienced somewhat of a 'lost half decade' in the latter part of the 1990s, accompanied by a weakening fiscal situation. Real GDP fell by 0.6 percent a year on average between 1996 and 2002, after a modest rise of 3.2 percent between 1990 and 1995. The decline was accompanied by a series of banking crises, which also affected private investment.¹ Per capita GDP, however, has remained on a long-run downward trend since 1982 (Mercer-Blackman (2005)). At the same time, the public sector finances weakened. Public investment² had been relatively low, at an average of 5.5 percent of GDP in the two decades to 1995. An important jump in the public investment rate between 1996 and 2002 to over 7 percent of GDP,

¹ Notwithstanding a new financial law in 1996, about half of the financial institutions failed between 1995 and 1998, as financial liberalization occurred in the context of a weak poorly regulate financial system.

² Defined as the gross investment and net lending of the consolidated nonfinancial public sector and the central bank.

financed through indebtedness³, proved to be relatively inefficient, with reported cases of mismanagement. It may have contributed to the displacement of private investment, which declined 7 percentage points of GDP since 1996 to 11 percent of GDP in 2002.

The deterioration of the fiscal situation in the second half of the 1990s in the context of a low-growth environment contributed to an important increase in the debt-to-GDP ratio (figure 1). The growth of the general government wage bill, both in terms of number of employees and contracted staff and their salaries, is responsible for the bulk of the current spending growth since the late 1980s, and has increased steadily from 4 percent in 1990 to 10.4 percent in 2001, and then experienced a minor decline. Central government tax revenues increased steadily from 9 ½ to 10 ½ percent of GDP between 1990 and 1996, and declined marginally between 1997 to 2002, in large part due to increasing exemptions on the profit tax, but also as a result of a reduction in tariffs following the Mercosur agreement. As a result, the debt-to-GDP ratio increased by 33 percentage points to about 50 percent from end-1996 to 2002 after declining steadily during the previous 6 years. A decomposition of the increase in the debt ratio shows that the contribution of the exchange rate depreciation during that period accounted for 18 percentage points of the increase⁴, while the real increase in the debt stock accounted for over 10 percentage points (IMF 2002 Art IV).

In 2002 Paraguay suffered the worst recession in decades, as several external shocks resulting from the regional crisis interacting with domestic vulnerabilities and the low agricultural production led to a large decline in output. The guaraní depreciated 50 percent in nominal terms and inflation soared. On the political front there was an important polarization in Congress, and an unpopular President with low credibility unable to implement substantive policies. In 2003 the economic recovery got underway, albeit slowly, but mounting financial problems had taken their toll, as the financing gap of the central government reached almost 3 percent of GDP by end-year.

An era of important reforms began in 2003. On the political front, it was marked by the rise of a reformist third party, *Patria Querida*, which broke the traditional two-party

³ The main public enterprises had important investment increases, despite the marked decline in investment of *COPACO* and *ESSAP* at-end 2001 when they were restructured for privatization.

⁴ The sensitivity of the fiscal stance to the exchange rate in Paraguay will become evident below.

hegemony in Congress of the Colorado party and the Liberal party. Nicanor Duarte Frutos from the reformist faction of the Colorado party was elected president in mid-2003. His government came in with a decisively reformist and anti-corruption agenda which improved the political environment for reform. The top levels of government were filled with individuals renowned for their integrity and professionalism who were given full support to pursue a reformist agenda. These included the head of the tax administration and the head of customs administration. An agreement with broad consensus was subsequently reached to produce an ambitious reformist agenda, which consisted of seven laws: two related to revenues, two related to expenditures, two in the financial sector, and one related to the restructuring of government debt (text box 1).

Text Box 1: Reform Agenda of the Current Government for the Public Sector

On October 2003 the new government signed an agreement to push ahead a reform agenda in 2004-2005 with members of Congress, civil society, and the main political parties, consisting of seven pieces of legislation. This ambitious legislative agenda was almost complete as of early March 2005.

The 2004 budget Law, which included new articles to improve the transparency and disincentives for continuous supplementary budgets throughout the year, and was also quite austere.

The Caja Fiscal Reform Law, signed into Law in December 2004, reduced the benefits of an unsustainable pension system, corrected some asymmetries across beneficiaries and increased accountability in the operation and data administration of the Fund.

The Administrative Reorganization and Fiscal Adjustment Law, signed into Law in June 2004, eliminated various exemptions, unified tax rates, and reformed tax administration (see below)

The Customs Code, which modernized the legal code and procedures in conformity with the SOFIA (Sistema de Ordenamiento Fiscal Impositivo Aduanero) system, updated the temporary admissions regime, legally enabled electronic transactions and set standards for the conduct and duties of officials. It was signed into Law in July 2004.

The Law to restructure the domestic debt, signed into Law on December 2003, made official the restructuring of public debt agreed with bondholders (mostly banks and contractors). It included the issue of new bonds with a total value of US\$138 million.

The remaining two financial sector laws may have perhaps the most important long-term fiscal impact, given the cost of financial crises in the 1990s. They are: the **Banking Resolution Law**, which also creates a deposit guarantee system (signed into law on August 2004) could reduce potential fiscal costs during a bank crisis; and the **law to reform the Public Banks**, approved by the Senate in March 2005, which would convert the main public development bank into a second-tier bank, could eliminate the quasi-fiscal activities that emanate from the BNF's precarious financial condition.

The new government was able to swiftly gain credibility and pass a series of measures, which averted a debt crisis and helped reduce the debt levels to 38 percent of GDP in less than two years. These developments were aided by economic recovery and prudent monetary and financial policies.

Despite the buildup of fiscal pressures during the last decade, Paraguay's debt-to-GDP ratio is still relatively low for regional standards. Table 1 shows that 30 percent of Paraguay's debt is mostly on concessionary terms, with a fixed interest rate below 3 percent. About 60 percent of the debt has a maturity over 15 years and 99 percent is owed to multilateral creditors and foreign governments (tables 2 and 3). Since Paraguay's public sector is not able to issue debt on the international market, it suffered only the secondary effects from the 1997-98 emerging market crisis (figure 2), and, unlike its neighbors, interest payments are remained relatively low and stable during that time. Moreover, compared to other countries in the region, (Bolivia, Argentina, Brazil and Uruguay), the central government deficit is a little lower, on average.

I.1 Size and Composition of the Public Sector

Paraguay's public sector spending⁵, at 15 percent of GDP, is the smallest in the region, but the composition of spending is not dissimilar to its neighbors. The public sector comprises the central administration (72 percent of total expenditures excluding transfers) which collects all the taxes with the exception of a few fees collected by regulatory agencies (less than 0.5 percent of total); and receives a substantial portion of its total revenues (22 percent in 2004) in royalties from the bi-national hydroelectric dam, Itaipú (see text box 2). The general government is composed of the central administration, four public universities⁶, 13 autonomous agencies engaged in regulatory and developmental activities⁷, the social security institute, IPS (*Instituto de Prevision*

⁵ Excluding operational expenditures of the public enterprises.

⁶ Universidad Nacional de Asunción (UNA), Universidad Nacional del Este (UNE), Universidad Nacional de Pilar (UNP), and Universidad Nacional de Itapúa (UNI).

⁷ Instituto Nacional de Tecnología y Normalización (INTN); Consejo Nacional de la Vivienda (CONAVI); Dirección Nacional de Beneficiencia (DIBEN); Instituto de Bienestar Rural (IBR); Instituto Nacional del Indígena (INDI); Servicio Nacional de Salud Animal (SENACSA); Fondo Nacional de la Cultura y las Artes (FONDEC); Comisión Nacional de Valores (CNV); Comisión Nacional de Telecomunicaciones (CONATEL); Dirección Nacional de Transporte (DINATRAN);

Social), four small pension funds, and 17 governorates (*Gobernaciones*). The IPS accounts for about 8 percent of public sector spending, as it operates hospitals and employs a significant amount of medical personnel. As for universities, almost 80 percent of the income is transferred from the central government, while the rest is mostly tuition. The largest university by far, in terms of size of spending is the national university in Asunción. The largest regulatory agency is CONATEL, the telecommunications regulator which receives most of its income from fees charged to telephone companies for the use of bandwidth. CONATEL is expected to transfer about 75 percent of its income (after paying for wages and administration) back to the government⁸, but in practice it has received much less than budgeted: in 2004 it received about 40 percent of the budgeted amount. Other important regulatory agencies, in terms of size are the *Instituto de Bienestar Rural* (IBR) and *SENACSA* which provides health for cattle. The governorates receive their operational revenues as transfers from the central government, part of which come from royalties from Itaipú. The universities, regulatory and development entities and governorates constitute a very small share of total public sector spending (3 percent, 2 percent and 1.4 percent respectively). Transfers from the central government account for the bulk of their income, and their relatively small operational and financial independence means that they operate as *de facto* spending units. Although their overall operating balance is budgeted at zero, in practice they tend to generate a very small surplus.

While the size of both central government spending⁹ and the share of central government wages and salaries to GDP are among the lowest in the region (table 4), over three quarters of current spending goes to wages and salaries, and to pension payments of central government employees (the *Caja Fiscal*), compared to only 8 percent on average for transfers to the rest of the public sector (figure 3). Some of this creeping growth is the result of a tradition of patronage of the public sector, which has contributed to discretionary hiring practices, and until recently poor control of the accounts of the *Caja Fiscal*. Moreover, about 80 percent of the fixed capital investments

Secretaría de Transporte Área Metropolitana de Asunción (SETAMA); Ente Regulador de Servicios Sanitarios (ERSSAN); Instituto Nacional de Cooperativismo (INSNACCOOP)

⁸ The budget specifies every year the amount of transfers from the large public sector entities back to the treasury, which include the public enterprises, the BCP, the water and telecommunications regulatory agencies which remit the income from fees, as well as to financial entities, Fondo de Desarrollo Campesino and Fondo Ganadero.

⁹ Central and federal government spending of all other Mercosur countries were above 20 percent in 2003.

of the central government are financed with external loans. Social and development projects, in addition to infrastructure projects, are generally included in the investment classification. The central government executes about 40 percent of these projects.

Paraguay's public sector has seven public enterprises, two of which are semi-autonomous in their ownership structure since 2002. *PETROPAR* and *ESSAP*, in particular, face serious financial difficulties. The public enterprises are the following: the state gasoline and diesel wholesale distribution company, *PETROPAR*; the electricity distribution company, *ANDE*; the cement company, *INC*; the national port and geography and hydrology institute, *ANNP*, and the airport authority, *DINAC*. In early 2002, the telecommunications company *ANTELCO* and the Water and sewage company *CORPOSANA* were restructured into corporations with 99 percent of the ownership in state hands. This was a first step towards their privatization, which failed due to insufficient congressional support. They were renamed *COPACO* and *ESSAP*, respectively. Consequently both of these enterprises are defined as long-term concessions for operation. They have somewhat more operational and financial autonomy than other public enterprises, in particular, their budgets do not have to be approved by Congress. As will be discussed below, *PETROPAR* and *ESSAP* face serious financial difficulties, and to a lesser degree the port and airport authorities, *ANNP* and *DINAC* (although given their relatively small size they do not pose a fiscal problem for the state at this time (figure 4)).

In large part because of the very low and inadequate levels of investment of most of the public enterprises—with some not even investing enough to meet replacement investment for depreciation—the public enterprises together generally generate a surplus of between 0.5 and 1 percent of GDP. Consequently, the central government has contributed since 1990 to the bulk of the deficits. *ANDE* and *COPACO*, the better-run public enterprises, have been able to generate a small surplus while increasing their levels of investment in recent years. Although *PETROPAR* has also generated surpluses (0.2 percent of GDP on average since 1992), uncertainties originating from the regulation of the diesel price and structural problems have led to a rapidly declining financial position of the enterprise in recent years.

I.2 Financing of the Public Sector

Although the primary balance of the public sector has been on average in balance between 1990 and 2003, fiscal spending has been somewhat procyclical, with deficits during the years when availability of financing allows an expansion of capital spending, and a sharp reduction of spending during leaner years. The exception to this general pattern was in 2002 when spending remained strong despite the economic recession.

The composition of Paraguay's debt has not changed substantially in the last 10-15 years, despite its growth. Tables 2 and 3 show the breakdown of debt by creditor and by debtor on 2004, and the profile has changed little. The government receives the bulk of its loans from bilaterals (notably Taiwan, Japan, Spain, France and Brazil), as well as the IDB and World Bank. The central government did not have any domestic debt until 1994 when it made its first bond issue. Interest payments on debt have hovered between 1-2 percent of GDP, even with the debt-to-GDP ratio reaching 50 percent of GDP in 2002.

Despite the concessionary nature of the debt, Paraguay recently experienced some important liquidity problems, the result of a buildup of pressures in the mid-1990s when debt management practices were weak,¹⁰ and considerable contingent liabilities began to materialize during the financial sector crises of the mid- and late-1990s. At the end of every year the government found itself facing major liquidity problems. Congress authorized various government bond issues, which led to an increasing domestic debt starting in 1996. In 1999 the government once again found itself unable to honor debt service, but payment problem were averted when Taiwan made a \$400 million loan to Paraguay, the largest bilateral loan ever, under relatively generous terms: 20-year maturity, 5-year grace¹¹ period and interest rate of 1 point above Libor. The government issued special bonds, which are held by China Trust and ICBC banks.

¹⁰ There has been a recent improvement on this front.

¹¹ The grace period was extended one more year, and in 2005 the authorities were negotiating yet another extension.

Text Box 2. Finances of Paraguay vis-à-vis The Bi-national Hydroelectric Dams *Itaipú and Yacyretá*

One of Paraguay's greatest natural resources, hydroelectric power from the Paraná river bordering Brazil and Argentina, has translated into important revenues for the government from royalties and dividends of the Itaipú hydroelectric dam of almost 3 ½ percent of GDP annually, and minimal revenues from the Yacyretá dam related to complications within the company.

Itaipú

In the early 1970s Brazil and Paraguay created a consortium to build the second-largest dam in the world over the Paraná river that borders both countries. Each country put up half of the initial capital and agreed on the division of royalties and dividends from its operation once completed. The dam is able to supply about 25 percent of Brazil's total electricity demand and all of Paraguay's demand. The agreement stipulates that the output would be divided evenly between the two countries, however, since Paraguay's consumption needs equal only about 5 percent of the total output of the dam, Brazil pays Paraguay a *consumption compensation* for the portion of Paraguay's output it consumes. The royalties paid by Itaipú also grow every year by an inflation factor, according to the initial contract.

Paraguay's Law 1039 of 1998 established that the central government would keep 50 percent of the royalties for general use, and it would transfer the remaining 50 percent to governorates and municipalities as long as they were used in local investment projects. 40 percent would go to the municipalities and 10 percent to governorates, with those located in areas affected by the dam getting higher shares. The total royalties are expected to amount to about \$230 million an year (about 3 ½ percent of GDP). However, since the law passed, the sub-national government have received much less than the 50 percent stipulated (about 12 ½ percent in 2003). This situation is being gradually rectified in 2004 and 2005.

ANDE, the electricity company, obtained the initial loan to put up Paraguay's capital share in Itaipú, therefore it receives the dividends and compensation that corresponds to Paraguay, but also services the loan. During the 1990s *ANDE* accumulated arrears with Itaipú as it experienced debt-servicing problems and delays in electricity payments. The amounts overdue were later restructured as a loan from *Banco do Brasil*, which *ANDE* services to the tune of US\$1.3 million a month. The company is working on restructuring the loan to lower the effective interest rate (currently at 12 percent in dollar terms).

Yacyretá

A similar project was created with Argentina, Yacyreta. The contract was signed in 1973 between the two countries, but most of the construction took place in the 1990s, and the company has faced continuous problems since its inception (environmental, financial and governance-related), recently reviewed by an inspection panel, and the dam itself was only recently completed. Argentina has also had problems honoring its electricity payments to Yacyretá, which has translated into arrears of royalties from Yacyretá to Paraguay.

ANDE has had recent problems negotiating electricity prices with Yacyreta, and claims unequal treatment vis-à-vis Argentina. It claims that Yacyreta is charging Paraguay a higher tariff than Argentina, claiming that it is paying the Argentine government debts through the discount. Since 2005, the payment of the small amount of energy coming from Yacyreta is being accounted against the profits that Yacyreta owes to Paraguay.

While this loan provided some breathing space for public finances, at end-2001, without adjustment policies the fiscal finances continued to deteriorate. Most of the debt service was coming due at the end of the year (figure 5)¹². It took some moral suasion for the government to convince commercial banks, the largest holders of treasury bonds, to roll over the bonds. Finally, 5-year dollar-denominated bonds at a 9.5 percent fixed interest rate were issued in 2000, which gave holders the option of recalling 50 percent of principal by the end of the first and second year. By November-December 2002 the government was unable to roll over its domestic debt. Bankers became nervous given the acute regional crisis, compounded by the fall of the country's third largest bank. About 30 percent of the bonds were held by contractors who had received them in lieu of payments, and at some point they lost the ability to exchange them in banks. The government therefore defaulted on its domestic debt (both principal and interest payments), and in early 2003 ran into arrears with all external creditors, including multilateral organizations. As a result, multilateral creditors also closed off project disbursements.

The financing turning point came in mid-2003, when the government of Duarte Frutos acted swiftly to prevent the financial crunch, and restructure debt so as to improve the maturity distribution of debt across each year. A Stand-By Arrangement with the IMF was signed, the first in 43 years, which came with disbursements from the multilaterals equaling \$50 million (0.8 percent of GDP). In addition, an agreement was reached to restructure almost \$100 million of domestic debt coming due. The government was able to pay off all bilateral arrears ahead of program schedule (most were paid by April 1 2004). The exchange of old bonds for new bonds came with a slightly lower net present value profile (Table 5). Despite some administrative delays, most were restructured by July 2004. Importantly, the principal would now come due every year in March, not in December as was the former practice, in order to more evenly distribute debt service payments throughout the year. Assuming no new debt, the government is scheduled to amortize its domestic debt fully by 2009.

¹² Monthly seasonality in Paraguay's finances show that, although revenues are fairly evenly distributed during the year, expenditures in December are 17 percent of annual expenditures on average. Since 1996 The government would borrow at the end of the year, when it most needed it. A vicious circle ensued whereby the structure of debt service was also loaded at the end of the year, and by 2002 it was unsustainable (figure 5).

II. STRUCTURE OF REVENUES

Paraguay's revenue structure is comparatively simple, and is primarily based on consumption taxes and on royalties from the generation of electricity. The ratio of tax revenues (excluding pension contributions) to GDP has stood at 10 percent over the last five years, and is one of the lowest in the region (table 6). Moreover, given the large levels of informality of the economy (estimated at 50 percent (IMF, 2000)), Paraguay's effective tax base is very small. There is no personal income tax in effect.¹³ Three quarters of tax revenues are derived from indirect taxes such as the VAT, import duties and excise taxes. The most important excise tax is the ad-valorem tax on fuels, in particular diesel fuel (used by 85 percent of the vehicles in Paraguay). The price of diesel is regulated and so the tax rate has suffered various modifications, the result of negotiations between the state oil company, *PETROPAR*, the central government and the agricultural sector. Various other taxes such as the stamp tax and a financial turnover tax yield about 1 percent of GDP annually. Between 1990 and 2004, direct taxes included a profit tax at a 30 percent rate, the *Tributo Unico*, a small presumptive tax for small businesses and the *IMAGRO* tax on agricultural land. Taken together, these direct taxes raised less than 2 percent of GDP on average since 1990.

Until 2004, the tax system had been eroded by increasingly large exemptions and very high evasion rates (between 45 and 55 percent estimated for the VAT (IMF, 2004)), reflecting a very weak and poorly financed tax administration. Both tax and customs administrations were plagued with internal corruption, which created disincentives for compliance by the few taxpayers, which were involved in the formal sector. There was no personal income tax, and although the profit tax was 30 percent, a series of laws amending Law 125 of 1991 over the following decade (about 42 up to 2002¹⁴) added various exemptions to the profit tax and the VAT, which reduced effective tax payment by about 90 percent. Among the largest exemptions was the 5-year renewable tax holiday on all taxes for firms that presented reasonable investment projects (law 60/90), even if they were never carried out. The tax on agricultural activities, the *IMAGRO*, a presumptive rent tax, was based on the assessed fiscal value of the property, yet the tax

¹³ The personal income tax was signed into law in 2004, but is scheduled to begin implementation in 2006 (see below).

¹⁴ World Bank: Paraguay Country Assistance Strategy, 2003

base value of agricultural land was on average only 5.6% of its market price. Consequently, the agricultural sector directly contributed less than 2% of the total tax revenue over the last 10 years, whereas it contributes more than 20% of the GDP. (Molinas, 2000:39).

II.1 Recent Tax Reforms

In June 2004 a sweeping tax reform was finally passed, the *Administrative Reorganization and Fiscal Adjustment Law*, which attempted to ‘formalize’ the economy by widening the tax base and thus eliminating many of the horizontal and vertical inequities of the system. Attempts at sweeping tax reform had begun in 2001, but the political environment meant that repeated efforts had never acquired enough steam to get through Congress. It included a substantial broadening of the VAT and corporate income taxes, the extension of a more effective tax regime to large farmers, the elimination of large exemptions contained in the 42 separate laws and the introduction of a new personal income tax. The law is scheduled to be implemented gradually over the following 5 years or so, during which time all tax rates will be equalized at 10 percent. Some exceptions will be the personal income tax rate for income between 3 and 8 minimum salaries (8 percent) and some basic items subject to the VAT (between 0 and 5 percent). Excise taxes were increased slightly. It also introduced various provisions to strengthen tax administration, by improving the accountability of tax officials in their duties, clarifying the rights and responsibilities of taxpayers and creating incentives for economic agents to present receipts and improve their documentation. The law is estimated to yield 0.5 percentage points of GDP through its direct effects during its first full year of application, but by 2011 would yield about 1.3 percentage points of GDP (table 7). The success of the Law’s application will depend to a great extent on the operational and financial support given to the under-secretariat of tax administration (SSET): the administration is set to receive about 1 ½ percent of tax revenues from the 2005 budget, but this funding must be renewed every year through the standard budget process and could become uncertain if the political environment changes for the worse. The IDB is supporting a reorganization and modernization project of internal taxation.

Recent efforts to reduce evasion and corruption have had a substantial return in terms of revenues in Paraguay. Even before the tax law went into effect, the new government was able to increase tax revenues by 41 percent between August and December 2003, and 35 percent in the following year, in part due to some efficiency measures, but mostly as a result of better compliance and a reduction of internal corruption of the tax and customs institutions. The most impressive increase has come from revenue collected by the customs administration, an increase of 70 percent in the first year since the change of Director under the Duarte Frutos administration. This was achieved through various seemingly simple measures that have had important effects in curtailing corruption. A new Customs Code will come into effect in 2005 which is expected to enhance the Customs Administration's operations substantially: customs will receive some percentage of the duties collected¹⁵, the importing process will be streamlined and modernized to be performed electronically, and measures will be taken to reduce the average merchandise processing time and the opportunities for direct contact with officials, which can lead to corruption.

Despite some mounting pressures from certain groups to delay the implementation of the tax reform, the government has been able to keep extraordinary momentum in tax collection. A 14 percent increase is expected for 2005 as the two laws (the tax law and Customs Code) come into effect and the restructuring of the institutions begins to bear fruit. The challenge will be to institutionalize the gains by implementing the needed structural reforms that will endure beyond the tenure of any particular administration. Such a successful demonstration of reform, with tangible results has not only helped to stabilize the fiscal situation, but has also improved the public's perception of the ability of the government to perform its functions adequately. The government has agreed, under the revised Stand-By precautionary Arrangement with the IMF, to save 30 percent of every guaraní collected above the program target, and to spend the remaining 70 percent in high-quality investment expenditures.

II.2 Non-tax Revenues and Revenues of the Rest of the Public Sector

¹⁵ The Customs Administration will cease to be a Directorate within the Ministry of Finance and will become an autonomous entity outside of the central administration.

The most important non-tax revenues of the central administration are royalties and pension contributions, as transfers from many government entities to the central administration have been erratic and considerably below the budgeted amounts. Non-tax revenues of the central government consist of three main items: (i) contributions of central government employees to the *Caja Fiscal* (6 percent of total revenues); (ii) royalties and compensation payments from Itaipú, (over 20 percent of total revenues) (text Box 2) and (iii) transfers from the large entities of the rest of the public sector, determined every year in the budget (2 ½ percent of total revenues in 2004). With the exception of *ANDE* and the Central Bank, most other institutions typically transfer amounts 25-50 percent below the value set in the budget, either because their revenues from fees fall short of projections, or because the central administration has debts with them for past-due payments for services, so they unilaterally establish informal compensation mechanisms whereby they reduce the amount transferred by the equivalent of the amounts owed by the central administration. These ad-hoc reductions in transfers and compensation mechanisms are prevalent across government entities in Paraguay, and recent efforts by the Ministry of Finance have focused on moderating the situation. For example, the government has made some important gestures recently to strengthen intergovernmental relations with the governorates and municipalities (the latter are not included in the accounts of the public sector), by demanding greater transparency and accountability of funds transferred from the central administration to regional and local governments and improving the predictability of monthly transfers to line ministries.

Net revenues of the **public enterprises** have varied considerably across time, as prices of their goods and services are set by the government, in many cases below marginal cost, and operational net revenue of the enterprises are strongly dependant on the exchange rate vis-à-vis the dollar. Domestic demand for most services has grown about 3 percent in guaraní terms in recent years,¹⁶ but costs have fluctuated with dollar prices of inputs. Prices of utilities are regulated in Paraguay, as in most countries in Latin America, but there are no set rules. In the case of *ANDE* and *COPACO* (fixed telephony and electricity), this price regulation has not imposed a financial constraint in recent years for reasons that will be discussed below, (with the exception of 2002 when the

¹⁶ Growth has been slightly higher during instances when campaigns to combat illegal use of services have been imposed.

nominal exchange rate depreciated by almost 50 percent). However, it has been one of the main causes of the financial troubles of *ESSAP* and *PETROPAR*. In the case of *ESSAP*, in charge of providing water and sewage, prices in 2004 were estimated to be about 40 percent below marginal costs, in part because of a long lag in tariff adjustments and in part because of the heavy debt service burden from project loans in the mid-1990s. In the case of *PETROPAR*, about 93 percent of the enterprise's total cost structure depends on the international price of fuels it imports (mostly diesel fuel and gasoline)¹⁷, and the exchange rate. Consequently, fluctuations of these two variables cause large changes in net revenues and thus profit margins. *PETROPAR*'s net revenues, in particular, have been negatively affected by the lack of rules and uncertainty in the regulation policy of utility prices. Despite various decrees in recent years aimed at setting up an automatic adjustment mechanism of the regulated prices of diesel, few have been implemented due to political opposition. This is also a factor complicating the central government finances, since price adjustments frequently come hand in hand with reductions in the excise tax charged on diesel fuel.¹⁸ On the one hand this improves *PETROPAR*'s profit margin but reduces excise tax revenues for the central government.

III. STRUCTURE OF EXPENDITURES

Underlying the relatively simple structure of expenditures in Paraguay are various inefficiencies in spending and a loose relationship between budgeted amounts and actual spending outcomes. While a relatively large share of public expenditures go to the social sectors (health, education and pensions), in economic terms the spending goes mostly to wages and pension benefits of these sectors, as well as administrative costs. The public function of provision of public services is subordinated by the function of providing a stable income stream to those employed in the government. This section looks at expenditures by functional and institutional classification, and then expands the analysis by economic classification.

¹⁷ The price of diesel fuel in Paraguay is regulated, but the price of gasoline is set by the market.

¹⁸ This is usually a compromise with final users, so the final price increase is smaller.

III.1 Expenditures by Functional and Institutional Classification

With the growth of the size of government spending since 1990, social spending and other economic services, in particular public works grew considerably, while defense spending fell in line with the onset of democracy. In terms of functional classification, figure 6 shows that in 2004 Paraguay's central administration spent 22 percent of its total on administration, which is somewhat higher than for comparable countries, and only 7 percent of total spending on interest payments (lower than for comparable countries). While the share of spending on administration has fluctuated around 20 percent of GDP since 1990, the share of defense spending and interest on debt in total spending have declined considerably over the same period (figure 7). The largest component of spending is social services--at 43 percent of total--although given the small size of the government, this amounts to only 7 percent of GDP in 2004. The two components of social spending, social services and pensions, grew from 3 percent of GDP in 1990 to 10 percent of GDP in 2000, and have since fallen, in particular in the last two years. Spending on economic services, 90 percent of which is spending on public works, had a similar trend during this period: it grew from 1 percent of GDP in 1990 to almost 4 percent in 1998, and then declined to 2.5 percent of GDP in 2004.

However, only a small fraction of social sector spending is geared towards programs more likely to benefit the poorer and needier segments of the population, and this portion declined somewhat in 2004. The table below figure 6 shows that over half of social spending of the central administration went to education¹⁹, but this includes wages and salaries to teachers and school administrators; and over 30 percent of central government social spending is payments to pensions of civil servants (the *Caja Fiscal*). About 4 percent of social spending (0.3 percent of GDP) went to social assistance programs in 2004, which would be more likely to reach the poor and informal sector. Although the composition of social spending is somewhat different if one looks at the public sector as a whole (which also includes spending on health and pensions by the IPS), the same pattern comes through: the bulk of social spending goes to education, pensions and health, and only 10 percent (over 1 percent of GDP) went to social

¹⁹ And half of that is for primary education. According to World Bank (2003b), Paraguay's spending on public education of almost 4 percent of GDP is about average for Latin America, but spending on public health is about half of the Latin American average (see chapters below).

assistance. Moreover, total public sector social assistance spending fell in 2004 compared to 2001/2002, after rising slightly since 1997.²⁰

Central government expenditures by spending group also show important differences between the level of execution across ministries (table 8). Moreover, differences in general between the outcome of expenditures and the budgeted amounts are clearly evident if one looks at spending by entity. In the executive branch, the largest ministries in terms of spending are the ministries of health, education and public works, with the latter at a very low rate of execution (around 54 percent). The Ministry of Defense still receives a somewhat large part of the budget (5 percent), but this has been declining. The judicial branch is small as a percentage of total expenditures, however, it has the legal ability to request Congress for budget increases, and is responsible for the greatest fluctuations between initial requests and approved amounts at the various stages of the budget. Recently Congress and the judiciary have been able to receive salary increases when wages in the executive have been frozen.

III.2 Central Administration Current Expenditures by Economic Classification

The largest and fastest-growing central government expenditure categories, by far, have been wages and salaries and the *Caja Fiscal*. **Wages and salaries** grew from 3 percent of GDP in 1990 to 9 percent of GDP in 2000, and then declined somewhat to 7 percent of GDP following a wage and hiring freeze. Hiring practices in Paraguay's central administration give much discretion to the incoming administration and unit directors, and it is virtually impossible to reduce personnel, even if a particular civil servant has no specific task to carry out. These employment practices, a legacy of a long history of patronage in Paraguay, are common to virtually all entities of the public sector (See chapter on employment below).

Expenditures on goods and services, on the contrary, have remained at about 1.1 percent of GDP since 1990, with fluctuations roughly in line with fluctuations in investment expenditures.²¹ This expenditure compression results because the first line of

²⁰ Data excludes information on social spending by governorates and municipalities.

²¹ It is estimated that current expenditures related to a project's overhead is about 10 percent of the total cost.

defense of the government strapped for cash within the fiscal year has been to withhold transfers to ministries, mostly for purchases of goods and services. Since some purchases are still carried out, and the practice of commitment accounting does not exist, this has led to domestic arrears (*deuda flotante*). Moreover, procurement practices in the past have been discretionary and politicized, with various contractors and providers chosen for contracts or purchases in return for favors. In early 2004 the government began implementing the Procurement Law passed a year earlier, which specified that all purchasing and contracting bids above US\$60,000 had to be placed, and awarded, through the new web-based procedures and electronic forms, with all information publicly available on the internet. Moreover, funds for the purchases would be withheld from procurement units that did not follow these procedures. The 2004 budget also restricted the use of telephone services, and withheld transfers to ministries that were not up to date with payments of utilities. Important savings have been reported by the authorities as a result: in 2004, the ministry of health reported roughly 40 percent cost savings from pharmaceutical purchases since implementing the procurement law.

The **Caja Fiscal** has been recently reformed following concerns that its annual deficit was the greatest contributor to the overall central government deficit, and in actuarial terms its financial situation was unsustainable. Figure 8 shows that the deficit of the *Caja Fiscal* grew from 0.6 percent of GDP in 1990—compared to an overall central government balance of 3 percent of GDP—to 1.9 percent in 2002, compared to an overall deficit of 2.3 percent. The Fund, which consists of a payments office within the Ministry of Finance, is divided into a ‘contributing’ category of beneficiaries (which has six different regimes depending on the career function) and the ‘non-contributing’ category, which consists of benefits to veterans of the 1936 Chaco War and their heirs. Table 9 shows that the veterans and heirs produce the largest share of the total cash deficit because they do not contribute. Nonetheless, all the groups produce a considerable drain on the public finances, and the teachers’ regime produces the greatest actuarial deficit in the long run,²² even though the retirement rate of teachers is small, due to overly generous benefits.²³

²² As the death rate of veterans is projected to increase greatly over the next 10 years, the deficit of the non-contributors will shrink.

²³ The replacement ratio, retirement age and number of working years depended on the regime. The most generous was the teachers’ regime (left at 28 years of service, 87 percent replacement rate) to the civil

Recent reforms of the government pension system have improved the financial outlook, but more equal treatment across beneficiaries, and eventually across pension systems, would be desirable. At end 2003, the government passed Law 2.345 to improve the sustainability of the *Caja Fiscal*. It had an immediate impact on the government finances through the increase in the contribution rate from 14 percent to 16 percent, the wider definition of the salary base for contribution purposes (benefits would now be included) and the elimination of the 13th month pension, which followed the bonus (*aguinaldo*) given to active employees. An effort was also made to equalize benefits across regimes, but after pressure from the powerful teachers' unions their benefits were increased relative to the draft law. The reform allows employees to take early retirement under the old terms, which creates a short-term jump in expenditures in 2005. Benelli (2005) estimated that the net present value of the sum of operational balances of the *Caja Fiscal* will be reduced by 41 percentage points of GDP after the reform, with the greatest savings coming from the reduction of the benefits of the contributive regimes. The pension regime for the military and police were not affected, although there is a draft law in Congress to reform their regime as well as the social security pension regime. However, there have been minimal advances in the legislature.

Before the reform, the *Caja Fiscal* was also badly administered, with minimal documentation and lax identification requirements, in particular with regards to the Chaco War veterans.²⁴ In early 2004 a purging of the rolls of the *Caja Fiscal* got under way. The first stage, which consisted of cross-checking the database of beneficiaries and pensioners against other national demographic databases, revealed many duplications. Their elimination led to savings of G11 billion in the first 3 months. The database is being cleaned up, and the pension application and benefits claims procedures have been streamlined.

III.3 Central Government Capital Expenditures

servants regime (retirement age at 62, at least 20 years of service, 2.7 percent per year replacement rate after 20 years)

²⁴ According to the *Caja Fiscal*, there were approximately 12,000 Chaco War veterans claiming pensions from a war that occurred more than 75 years ago, while the population census showed that there were 14,000 Paraguayans over the age of 85 alive. These figures and other patterns led to suspicions of double-counting and phantom beneficiaries. It is estimated that the cleaning up of the rolls could save about 0.1 percent of GDP per year.

Most public investment in Paraguay has been in infrastructure, while the largest source of financing has been foreign loans. Figure 9 shows the composition of public investment by functional classification and source of financing. By far the largest type of public investment is in infrastructure (62 percent)²⁵ followed by agriculture and rural development (15 percent). Investments in health and education have also been important, with some good results in the education projects (see chapter below). Moreover, 75 percent of investment was financed by external project loans, which require 10-15 percent domestic counterpart funds, and this composition by financing has been very similar over the past 10 years, suggesting an important influence of foreign creditors.

Some evidence suggests that public sector investment has not been very efficient in Paraguay, although it is difficult to isolate each effect. Capital expenditure of the central government (nonfinancial public sector) averaged 2.9 percent of GDP (6.3 percent of GDP) during the 1990s, slightly above the average for Latin America, but below the average for developing countries.²⁶ Average private investment was high during the same period, at almost 18 percent of GDP. Nonetheless, per-capita GDP in Paraguay dropped, and total factor productivity contributed negatively to growth in the 1990's (see Loayza, Fajnzylber and Calderón, 2002), while most countries in the region recovered from the low-growth decade of the 1980s.

The low productivity of public investment relates back to the low quality and quantity (in recent years) of public investment over at least a decade and a half. The government has actively started to identify the impediments to greater and more efficient public investment in Paraguay. A study conducted by the Ministry of Finance in 2003 showed that only 30 percent of projects funded with external loans and 25 percent funded with grants were executed between 1998 and 2003. As a result of this, it created a technical unit, UCIP (*Unidad Central de Inversiones Publicas*) to assess the reasons for the slow rate of implementation of projects and assist ministries that implement projects in

²⁵ Assumes that capital transfers of royalties to the municipalities are used for physical and social infrastructure, although there is no actual verification of this.

²⁶ Levels of public investment vary widely across Latin American countries, from over 4 percent in Chile, which has privatized most enterprises, to 9 percent in Venezuela which has a large state oil sector. Figures are for 1990-98 from Calderón Easterly and Servén (2003) and IMF, various country staff reports.

overcoming the obstacles. The endemic delays in project implementation and low quality of execution seem to be related to the following factors.

Indebtedness: As mentioned earlier, the indebtedness policies of the government have responded to short-term financing requirements. There is no long-term strategy for development financing, and a lack of domestic strategic planning of social and infrastructure spending (such as a 5-year plan). As a result, most of the project loans in Paraguay reflect the priorities and strategies of the creditors, which in many cases have competing interests or overlapping objectives and may not always reflect the development priorities of the country.

Delays in loan approval process: In Paraguay all external public loans need to be approved by Congress, which leads to a delay of about 3-6 months, and the appropriation of the funds must come during or after the approval of the loan, but within the same fiscal year. In many cases it happens that the loan is approved too late in the fiscal year to begin implementation and must wait until the next fiscal year for the budget appropriations of the funds necessary to execute it. All this causes delays in project implementation.

Counterpart funds are not available: there is no coordination between the budgeting process and debt policies, consequently in many cases the external project funds are available in a given year, but the counterpart funds are not included in the budget. Even when they are included, there may not be enough cash flow during the year to pay for the counterpart funds, without which the external funds cannot be disbursed. The uncertainty regarding the cash flow that will be available within a year for the spending ministries, which in practice may have minimal relation to the approved budget, also leads to the unavailability of sufficient counterpart funds. Consequently, the budget appropriation is renewed the following year, with the hope, albeit not the certainty, that enough counterpart funds can be amassed that year. This is why external funds for projects remains in the pipeline unused for very long periods, and with frequent requests to creditors for extension of disbursement expiration dates.

Budget process creates perverse incentives: the rationing of cash flow throughout the year leads to two undesired outcomes, which ultimately affect the quality of

implementation of the projects. First, it leads ministries to accumulate domestic arrears (floating debt) during the year. By law, these arrears must be paid during the first two months of the following year before new expenditures can be made. Consequently, projects tend to get a very late start during the year, but accumulate quickly at the end of the year²⁷. Second, there is a perverse incentive to request large budget appropriations, larger than what would be required in anticipation of the cash rationing. The Ministry of Public Works, for example, typically lobbies for large appropriations during the budget period, and for supplementary appropriations during the fiscal year. Consequently, about 55 percent—the historical average—of what is budgeted for capital investments is actually executed (see Chapter 2).²⁸

Lack of technical know-how in project implementation: There is also a lack of personnel that is technically proficient to administer and coordinate projects. Many who work in these areas within the largest executing ministries are not properly trained to manage projects, and they have trouble attracting foreign consultants to do it instead, since legally they must pay the same salaries to national and foreign project administrators, and these are uncompetitive internationally. On the demand side, there are few qualified independent contractors capable of elaborating a technical bid, therefore few or no bids are presented for a given project. There is also poor oversight of the project and few incentives to monitor it efficiently. Overhead costs, budgeted at about 10 percent of total costs, tend to be somewhat larger in practice.

The new administration has begun taking measures to tackle these issues, but UCIP is still in an evaluation phase. The Ministry of Finance has also taken measures to reverse the perverse incentives regarding cash transfers to spending units. In 2005 the floating debt at the beginning of the year was minimal, so the treasury was able to initiate cash transfers to spending entities punctually, and for the amount announced. The current administration aims to improve the predictability of cash flows and minimize requests for supplemental funds in Congress, thereby enabling the ministries to improve their planning.

²⁷ Since 1997, about 53 percent of capital expenditure take place in the last quarter of the year, and 8 percent in the first quarter see figure 5.

²⁸ In the 2004 budget last-minute changes inadvertently cut funding for various important priority projects, including over US\$50 in million education project loans for the World Bank and IDB.

III.4 Expenditures of the Pension Funds and the Social Security Institute

The social security institute (IPS) is by far the largest public pension institution in terms of funds and membership, and generates a large surplus every year, despite a history of inefficient management and corruption within the organization. The reason is that pensions are very small, and very few contributors meet the requirements necessary to receive a pension (such as 25 continuous years in a formal employment in which the same employer has contributed, in a country in which the formal sector outside of the public sector is minimal). Consequently, the IPS traditionally invested large part of its funds in the domestic banking sector and in real estate (including hotels). In the last years the investment rules have become progressively more stringent, and in 2004 a new set of investment rules were approved aimed at providing long-term development funds through the financial system while minimizing their risk. Various administrative measures taken by the new management of the IPS in 2004 have led to substantial savings in medicine purchases and increased revenues from employer contributions: revenues grew by 15 percent and costs were cut by over 3 percent in 2004.

The public sector also has four other pension funds, whose combined annual income is about 0.7 percent of GDP: *Caja ANDE*, the pension fund for *ANDE* employees, *Caja Ferroviaria*, (for the recently privatized railway), *Caja Municipal* for the municipal workers and *Caja Bancaria*, which is experiencing serious financial difficulties. The government estimates it will have to inject funds equivalent to 0.2 percent of GDP each year into the *Caja Bancaria*, in addition to increasing contributions and cutting benefits.

III.5 Expenditures of the Public Enterprises

In recent years the public enterprises have made concerted efforts to improve their financial position, but with the possible exception of *ANDE* have only been able to make marginal progress in patching up situations that require major structural changes. Because their main purchases and non-wage costs are in dollars and their revenues from services are in guaranies, the finances of the public enterprises are very sensitive to the exchange rate: it is estimated that had the exchange rate in 2004 been 20 percent more depreciated, the overall balance of the public enterprises would have been 0.9 percentage points of GDP lower (a deficit of ½ a percent of GDP). Investment rates

have been very low; and recent investments have been geared towards technologies to reduce the fraudulent use of services. The situation of the four main enterprises is described below. Table 10 summarizes their overall financial situation.

ANDE

ANDE is perhaps the enterprise in less need of immediate reform, with an important net cash flow over the last 2-3 years (table 11). *ANDE* has posted a small surplus of about 0.2 percent of GDP on average over the last decade, but ran into payment difficulties in 2002 when the guaraní depreciated sharply against the dollar. Since 2003 its situation improved markedly when its contract with Itaipú, the main electricity supplier, reduced the price per MWh of electric power, and thus its electricity costs by one third. The contract specified that *ANDE* could only purchase the excess energy from the dam, which leads to a very small risk that, if extreme drought conditions reduce the water levels enough, they would have to pay a much higher price per MWh. The stabilization and appreciation of the exchange rate in 2003 also increased its profitability, since electricity purchases are made in dollars. The company has taken advantage of the relatively favorable financial situation not only to service its debt ahead of schedule (with some interest savings), but also to plan medium term investments, starting with a large investment project since 2004 aimed at replacing lines in rural areas that were not properly installed in the 1990s.²⁹ The company is also continuing investments in new technologies that will reduce transmission losses and clandestine connections by businesses, and will implement an electricity subsidy program behalf of the government.³⁰

COPACO

Despite some recent efforts to restructure and reduce costs, *COPACO* still must reduce the baggage of excess employment inherited during the 1990s when many employment positions were created under patronage. As mentioned above, *COPACO*'s ownership

²⁹ This was part of a project to include workers from the local communities in the installation of the lines, but their low technical expertise left the final installation in poor shape. Not only had this led to large energy losses, but also created serious safety hazards.

³⁰ In 2005, the government established a subsidy for small consumers in certain areas, who would pay a tariff equal to 25 percent of the normal tariff. The subsidy would be financed through the payment of VAT on electricity. Since many of these consumers are in arrears with their payments, the effects are likely to be small.

structure was established in 2002 as a corporation with the state as the majority shareholder. Before it was known as Antelco, *COPACO* inherited an inefficient workforce³¹ and substantial losses from clandestine use of phone lines, many of them created in-house.³² *COPACO*'s largest non-wage costs consist of payments to international connectors and competing mobile phone companies with tariffs rates tied to the dollar, so the 2002 depreciation of the guaraní had a negative effect on the company's finances (table 12). It's financial situation improved in 2003 when it was able to eliminate its arrears to suppliers and creditors and reduce its losses from non-payments. The main investment, the '*Plan 100 dias*' completed in mid-2004, consisted of digitalizing the urban and then rural network stations and establishing other technologies to eliminate clandestine use of telephone lines. It is also in the process of modernizing its billing software and human resource management. *COPACO* has also tried to tackle its inefficient workforce: several employment positions without defined tasks were eliminated, and a voluntary retirement plan aimed at reducing employment by 500 out of about 4200, is advancing, albeit slowly. Nonetheless, *COPACO* has important structural problems. If the telecommunications sector were reformed and *COPACO* no longer had a monopoly on fixed telephony, it would be unlikely to survive without major restructuring and an infusion of private capital.

ESSAP

ESSAP is relatively smaller than *ANDE* and *COPACO* (table 13), but has been burdened by a very high debt service. Like *COPACO*, *ESSAP* is a corporation with majority state ownership created in 2002 from *Corposana*. The assets of the enterprise are owned by the state, and *ESSAP* has a long-term lease to run the water and sewage company of greater Asunción, use and maintain the assets. However, the responsibility of paying the very high debt (mostly to the IDB and World Bank, contracted in the mid 1990s to finance a failed investment project) was also given to the new company, *ESSAP*, and until recently the accounting rules did not permit *ESSAP* to deduct a depreciation cost for its assets. While the company has also made some efforts to improve the operations and reduce clandestine water connections, since 2002 it has been unable to pay the principal on its debt service (equal to about 50 percent of income), and even less able to

³¹ the number of workers per phone line is over 20 times higher than in neighboring countries

³² The employees had the ability to activate accounts without names, thus there was no one to send the bill to.

make investments. The central administration was thus forced to make the payments (about US\$8 million in 2004). In 2005 the arrangement was formalized and a decree was signed whereby the government assumed the external debt of *ESSAP*, and in return *ESSAP* would make monthly transfers to the government for roughly equal amounts. *ESSAP* claims that the arrangement does not relieve its financial situation enough and is currently trying to reduce the amount of the transfer.

PETROPAR

Despite a small surplus of about ½ percent of GDP in 2002 and 2003 (table 14), for the last three years, a steady decline of *PETROPAR*'s net worth has been brought on by domestic fuel price adjustments that are insufficient to compensate the company for rising international fuel costs, and to a lesser extent its inability to hedge from unfavorable exchange rate changes. *PETROPAR* also began to accumulate arrears to its suppliers of diesel fuel, which during 2003 hovered around two months' supply of fuel imports.³³ Reluctance of the government to raise the regulated diesel tariff sufficiently led to a continuous accumulation of arrears, and thus net worth losses of the company. In October 2003 *PETROPAR* stopped passing on payments for diesel excise taxes to the government to the tune of about US\$7 million a month. In August 2004 the government reduced the tax on diesel, and later in January 2005 raised the diesel price in response to mounting losses at the end of the year and despite strong political opposition. By February 2005 *PETROPAR*'s arrears to suppliers had been virtually eliminated: the favorable exchange rate and a recent contract with Argentina's YPF contributed to revamp the cash flow of the company. Nonetheless, the underlying problem is still present, as sudden changes in the exchange rate or the international price of oil will quickly reverse its position, as well as make it difficult for the company to plan financially. It is highly unlikely that diesel prices will be deregulated in the near future

As with other public enterprises, there have been some recent gestures to diversify and increase efficiency. A commission led by the Ministry of Industry and Commerce, which includes the private sector and *Transparency International*, is looking at ways to restructure the company and improve contracting practices. *PETROPAR* is diversifying

³³ *PETROPAR* is a de facto monopoly in the importing of diesel fuel, since there are no barriers to entry, but it is not a profitable business because the price is kept artificially low. About 90 percent of *PETROPAR*'s revenues come from the sale of diesel fuel. Smuggling to neighboring countries, where prices are about 10 percent higher, has been a big problem.

by revamping its ethanol-producing plant, looking into biodiesel production and marketing cheaper blends of gasoline. Moreover, it is pressuring the government to let it run service stations, currently prohibited, as it would receive a fixed margin of the price.

The other smaller public enterprises have similar problems and inefficient management. In early 2004 management of the cement company, *INC*, was overhauled leading to a positive balance by the end of the year. The Port authority, *ANNP*, has 30 percent of the market for port services, but competes with private ports that are much more efficient and do not have to charge for the costs of the river dredging and geographical surveys (of which *ANNP* is in charge). The new customs code will force *ANNP* to become more efficient in dispatching merchandise.

In the medium term, all enterprises will need to be restructured, but *PETROPAR*, *INC* and *ESSAP* have more serious and immediate problems. The government is contracting independent external audits of all the public enterprises, including the telecommunications regulator *Conatel* and the *IPS*, which should be completed in 2005. The audits are considered a first step in assessing the state of the public enterprises and considering long-term restructuring plans. Preliminary strategies consider the participation of private capital in *ESSAP* and *COPACO*, but outright privatization is no longer considered politically viable after the failed attempt in 2002. Commissions have been formed, which are devising long-term business plans for *ESSAP*, *COPACO*, *INC* and *PETROPAR*.

III.6 Sub-National Finances

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III.6 The Financial Public Sector

The Financial Public sector comprises the central bank (Banco Central de Paraguay), the Banco Nacional de Fomento (*BNF*), the largest development bank, and six specialized banks. These are: Banco Nacional de Ahorro y Préstamo para la Vivienda

(BANAVI), Crédito Agrícola de Habilitación (CAH), Fondo Ganadero (FG), Fondo de Desarrollo Campesino (FDC) and Caja de Préstamos del Ministerio de Defensa Nacional. All the development banks face problems of a bloated workforce and various administrative inefficiencies. Figure 10 shows their relative size. As of December 2004 the *BNF* has nonperforming loans hovering around 50 percent, many politically connected to the weak and insolvent transport sector. Nonetheless, liquidity is high due to transfers of public sector deposits from the social security and pension funds and the central administration. A change in management in 2003 and a capital infusion thereafter gave a temporary breath of fresh air, but by international accounting standards, the bank is insolvent. A law to convert the *BNF* into a second-tier development bank, which would channel resources through the commercial banks was approved by the senate in March 2005 and is now awaiting approval by the Chamber of Deputies. The smaller public banks are highly politicized and special interests have been resistant to their restructuring. Recent efforts to better account for contingent liabilities of the public sector will enable a better understanding of the financial state of these banks.³⁴

IV. FISCAL SUSTAINABILITY

Additional structural reforms and higher-quality investments will be necessary if higher economic growth rates are to be sustained in Paraguay. With a population growth rate of 2 ½ percent per year it would take almost 14 years just to recover the per-capita levels reached in 1982. In order to significantly increase average growth rates, Paraguay will have to overcome the structural impediments to investments that have plagued the economy. While higher growth will only be possible if the private sector steps up its role in economic activity, a more friendly business environment can be enhanced if the traditionally dominant public sector becomes leaner. A more efficient public sector will leave resources for government investment in infrastructure and human capital. Reforms of the financial public sector and social security will increase the supply of long-term funds for private investment, while sustained institutional reform and improved governance will provide incentives for productive investment. Fiscal sustainability with

³⁴ As part of a transparency initiative of the government, the balance sheet of the public sector is being monitored and published. Once the balance sheets of the public banks are assessed, the costs to the government of the nonperforming loans will become evident.

a higher investment rate in human and physical capital will require not only improved debt management, but also prudent choices of projects and improved implementation capacity.

As mentioned, Paraguay embarked on a strong and impressive adjustment program beginning at end-2003, which has permitted it to virtually eliminate its external debt arrears. The following medium term projections assume that the fiscal reforms continue according to the Government's economic program. Therefore, the fiscal projections for 2005 correspond to the latest projections under the IMF program (EBS/05/) (Annex table 1 and 2)

IV.1 Projections and Debt sustainability analysis

All the debt scenarios developed in this section assume that recent reforms continue to bear fruit in the outer years, but no new reforms are planned. What differentiates the scenarios is the assumption about investment spending.

- In the first scenario, public investment is allowed to grow be almost 40 percent higher than its current historical rate. The public debt-to-GDP ratio falls about 5 percentage points in 2010 to 33 percent, and continues on a downward trend, demonstrating that it is still sustainable.
- In the second scenario, public investment rises slightly in 2005 but remains at those levels as a percent of GDP, perhaps because efforts to reform the public enterprises stall. The debt-to-GDP ratio falls to 35 percent, but continued inefficient spending leads to the need for additional domestic indebtedness. Debt thus rises to about 43 percent of GDP by 2010. The economic and social situation does not change (although the possibly that growth stalls is considered).
- In the third scenario, investment is allowed to increase at a realistic pace, by one percentage point more than the 2005 projection, and to remain at that level thereafter (at 7 percent of GDP). The quantity of social and infrastructure spending is expected to improve, following assistance by UCIP. Some deepening of the current reform efforts would be required, but no new reforms are assumed.

The results from all three scenarios illustrate that the problem of Paraguay is not necessarily an unsustainable debt position. While the debt burden is certainly not low, the quality and efficiency of the investments need to be improved. The very large increase of investment (almost doubling from its 2004 figure) in the first scenario is unlikely to happen due to capacity constraints, yet the fiscal position continues to be sustainable.

Table 15 summarizes the main macroeconomic assumptions for the projections. External projections (such as LIBOR, international price of oil and export demand) are taken from the World Economic Outlook. The following assumptions are made about the fiscal situation:

- **Central Government Revenues:** With the upcoming implementation of the Fiscal Adjustment Law and the Customs Code, as well as continued administrative and organizational improvements, central government revenues should remain close to 12 percent of GDP. Non-tax revenue are projected to be constant in dollar terms, as revenues from Itaipú should grow by about US\$3 million a year, but with a gradual (1 percent) real appreciation of the guaraní, these revenues fall slightly in terms of GDP.
- **Current Primary Expenditures** are expected to remain roughly constant as a percent of GDP. The first and third scenarios assume that civil service reform gets underway, there may be some initial costs of severance payments that would compensate for the expected reduction of personnel, but since the government does not currently have a plan this would be speculative. Other current expenditures would remain the same as in recent years as a percent of GDP. It is assumed that cost savings from reforms would be compensated by higher operational expenditures to complement new investments.
- **New debt:** Paraguay's access to official debt is not expected to change in the medium-term, so project disbursements are expected to come from the same creditors and in the same proportion as in recent years (see table 2).

Rest of public sector assumptions: The position of the rest of the general government is expected to remain the same as in 2005 as a percent of GDP. The IPS and public banks engage in more prudent lending, which improves the liquidity constraints of all the public sector through controlled net lending.³⁵ The public enterprises may experience important changes in the coming years. The position of *ANDE* will depend greatly on the outcomes of negotiations with Itaipú, but few risks on the downside are expected. The first and last scenarios assume that part of the increase in public investments come from *ANDE*, *ESSAP* and *COPACO*. *PETROPAR*'s structural reforms are assumed to lead to improvements in the operational surplus through a leaner cost structure.

Figures 11a, 11b and 11c and table 16 show the results under the three scenarios. Figure 11d compares the three scenarios.

Scenario 1 (high-investment scenario). Badly-needed infrastructure investment in the first years, which will pick up fairly quickly, will create a boost to growth. The central government in 2010 has a deficit of 2 percent of GDP and the public sector has a primary surplus of almost 2 percent and an overall balance of 0.2 percent of GDP. The debt to GDP ratio stays at 33 percent of GDP. The investment rate increases 40 percent compared to historical standards.

Scenario 2 (low-investment scenario). Investment spending rises slightly in 2005, as projected, and remains at that level as a percent of GDP. There is minimal reform in the public enterprises, access to external financing is curtailed, and thus keeps their investment to GDP at current levels, and a greater need to borrow domestically. Current costs on goods and services of the public enterprises rise slightly. Wages and salaries of the general government are expected to creep up slightly in the absence of reform, based on continuing hiring practices. In this case, the debt-to-GDP ratio falls initially to about 35 percent of GDP but rises gradually to 43 percent by 2010. Underlying this assumption would be lower-quality investment compared to the first scenario and continuous payments problems, which would raise the spread over Libor for both

³⁵ The government is also interested in developing a larger and more dynamic market for financial instruments, in particular for domestic bonds. If this gets underway, this will also increase the liquidity of the government.

Despite the buildup of fiscal pressures during the last decade, Paraguay's debt-to-GDP ratio is still relatively low for regional standards, and in the outer years is sustainable under reasonable macroeconomic assumptions. Nonetheless, mounting liquidity problems finally erupted at end-2002, with the worst recession in years, when Paraguay briefly defaulted on its public debt service to practically all creditors. Since 2003 the modus operandi of the public sector has taken a complete turn for the better. New leaders were appointed to manage the most important, but also the weakest and most inefficiently-run institutions. Moreover, the government embarked on a serious and credible macroeconomic reform program, which in less than two years stabilized the economy and allowed a reduction and restructuring of the debt, thus eliminating all payments problems. Debt management practices used to be weak, but have improved considerably.

Paraguay's public sector as a percent of GDP is not large by regional standards. The public enterprises, many strapped for cash, spend minimal amounts on investment (1.9 percent of GDP on average between 1990 and 2004), and many do not invest enough even to cover depreciation. The composition of spending by functional classification in itself seems to pose no problems, but some evidence suggests that spending on administration and overhead may be somewhat high, reflecting inefficiencies practices. The current administration has launched a strong program to reform the administration of the public sector, starting with a pilot program of transparency and responsibility in the Ministry of Finance. The demonstration effects of such initiatives could go a long way in Paraguay.

Tax revenues should reach almost 12 percent of GDP in the outer years, which is still somewhat low but adequate for the near future. Tax revenues were 10 percent of GDP between 1990 and 2002, the lowest in the region, and given the large size of the informal economy, Paraguay's effective tax base is very small. The 2004 tax law and Customs Code have gone a long way to address this problem, by reducing exemptions and strengthening the mandate of tax and customs administration, which will help reduce tax evasion. Even before that, improvements in tax collection have been impressive as a result of a new style of leadership since mid-2003, which managed to turn around the administrations. However, unless the government is able to continue receiving political support to diminish the influence of very strong pockets of corruption

domestic and external bonds by 200 basis points. In addition to this scenario, we consider what would happen if growth were lower (table 16): there would be minimal improvement, possibly a deterioration of the social and infrastructure conditions. The debt burden would get on a rising trend, at 47 percent of GDP by 2010.

Scenario 3 ('realistic' scenario): A more realistic scenario, which would imply slightly lower investment rates than under the first scenario, but fulfilling the investment needs identified in the following chapters, will lead to a declining and sustainable debt-to-GDP ratio of 31 percent by 2010. Current primary expenditures would be the same as in the first scenario, but lower capital expenditures would imply somewhat smaller financing needs. The debt-to-GDP ratio is lowest under this scenario.

Table 15 shows the sensitivity analysis of changing the assumptions on interest rates, growth, and the exchange rate. As mentioned earlier, the greatest effects come from changes in the assumptions on growth and the exchange rate. An external shock that leads to a depreciation of the exchange rate increases revenues from royalties for the general government, but this effect is more than compensated by a deterioration of the balance of the public enterprises: a 1 percent depreciation of the exchange rate at the equilibrium point will lead to a 1.9 percent increase in the public sector debt-to-GDP ratio.

V. CONCLUSIONS AND RECOMMENDATIONS

Paraguay's public sector experienced a very difficult half-decade up to 2002. An environment of low growth, regional uncertainties and financial sector crises contributed to compounding payments problems. Continued growth in spending by the central administration, particularly on current expenditures, led to growing deficits, peaking at 4 ½ percent of GDP in 2001. Underlying these trends was an economy with a narrow tax base, a public sector with a long legacy of patronage and discretionary practices in the budgeting and implementation stages, inefficient public enterprises and low investment capacity.

within these government institutions, the full implementation of the tax and customs laws, which will take years to consolidate, may be thwarted.

Non-tax revenues as a percent of GDP are high and compare favorably to non-tax revenues from countries with abundant natural resources. While external transfers are small, transfers from other entities of the government are unpredictable and are illustrative of the discretionary practices surrounding transfers across all levels of government. The government has taken some recent welcomed measures during the last year to break this cycle through a new cash flow system. In general the government needs to improve the predictability of cash flows and minimize requests for supplemental funds in Congress, thereby enabling the ministries to improve their planning, but the deeper cause of the problem relates back to the distorted incentives involved in the budget process, which will be discussed in the following chapter.

Spending on wages and salaries is not high for regional standards, however, the bulk of current spending of the central administration goes to wages and salaries and to the *Caja Fiscal*, and spending growth of these categories has been prominent. Wages and salaries of the public sector as a whole amount to about 10 percent of GDP (less than 2 percent in the enterprises), so they are not particularly high. Nonetheless, some branches of government, in particular the legislative and judicial, have more discretion than others in the decision to spend on personnel, therefore more transparency in the budget process may help alleviate this situation. It is unclear whether the roster of employees is 'too large', but there is clear evidence that many civil servants on the payroll have vague job descriptions and contribute minimally to the public sector activities.

The recent reform of the *Caja Fiscal* will have important long-term effects, however, eventually the benefits system will need to be equalized across regimes and with other national pension systems (such as the IPS and the smaller public pension funds), which in turn need to be reformed. In particular, IPS contributors will need to be able to transfer their pension contributions from one job to the next, as well as into- and out of the *Caja Fiscal*.

There is insufficient expenditures on goods and services and high-quality capital investments in the public sector, and this has been attributed to a slow rate of project

execution, insufficient know-how in project managers and a lack of national long-term planning. The largest components of investment are public works, the health and education sectors receive somewhat adequate amounts of investment, but minimal amounts go to social programs for the poorest people. The government should improve the association between indebtedness and investment, prioritize its choice of projects to accord with its development needs, and include these investments in a medium-term framework that ensure that the funds are appropriated in the budget every year and the corresponding funds are available. Foreign technical assistance could be better coordinated to accelerate the pace of project implementation.

The largest public enterprises, *ANDE*, *COPACO*, *ESSAP* and *PETROPAR* have all made recent investments in technologies to improve their efficiency and increase revenue collections, welcome steps, but none have as of yet undertaken badly-needed restructuring (although most have formed commissions and undertaken audits to examine the issue). Management of *COPACO* and *ESSAP*, which are structured as corporations, have rightly stressed the necessity of attracting some private capital to revamp their companies. While all of the enterprises will need to rethink their business plan in the medium term, there is less urgency in the case of the better-run *ANDE*. Since 2003 their financial situation of the public enterprises has improved markedly, in large part due to the positive effects of the appreciating exchange rate on their net revenues. Thus, in Paraguay there is a clear link between macroeconomic stability and the financial situation of the public sector.

The mechanism for adjusting prices of utilities and fuels in Paraguay is erratic and highly politicized. This has created serious cash problems for *PETROPAR*, in particular, and adds increasing uncertainty for the decision-making of the enterprises, which cannot set a longer planning horizon. There is also some room for improvement in the governance of *PETROPAR*. The government should consider making a one-time adjustment of diesel prices to equalize to marginal costs, and follow through thereafter with a firm automatic adjustment mechanism of the regulated prices of diesel to respond to the changes in costs, thus de-linking the price from public policy decisions. This could be considered an intermediate step towards price deregulation.

Paraguay's public debt is expected to remain below 40 percent of GDP under current policies, and even under the assumption of adequate increases in public investment (a moderate increase compared to the levels in the early 1990s, to about 7 percent of GDP), the primary balance is expected to remain under 3 percent of GDP and the debt-to-GDP ratio will continue on a downward trend, reaching over 30 percent of GDP in 2010.

Despite all the institutional problems of the public sector, Paraguay is fortunate to have the prospects of a relatively sustainable debt with interest payments that are not a burden, assured income from the hydroelectric dam, Itaipú, and the possibility that the reforms in the public sector could have considerably higher payoffs than in other countries in the region. The current government and its team understand better than anyone that the situation is unlikely to last unless the reform process is deepened, which needs to come hand in hand with an increase in the quality and quantity of public investment and an environment conducive to growth. This by itself will cement the political support for further reforms.

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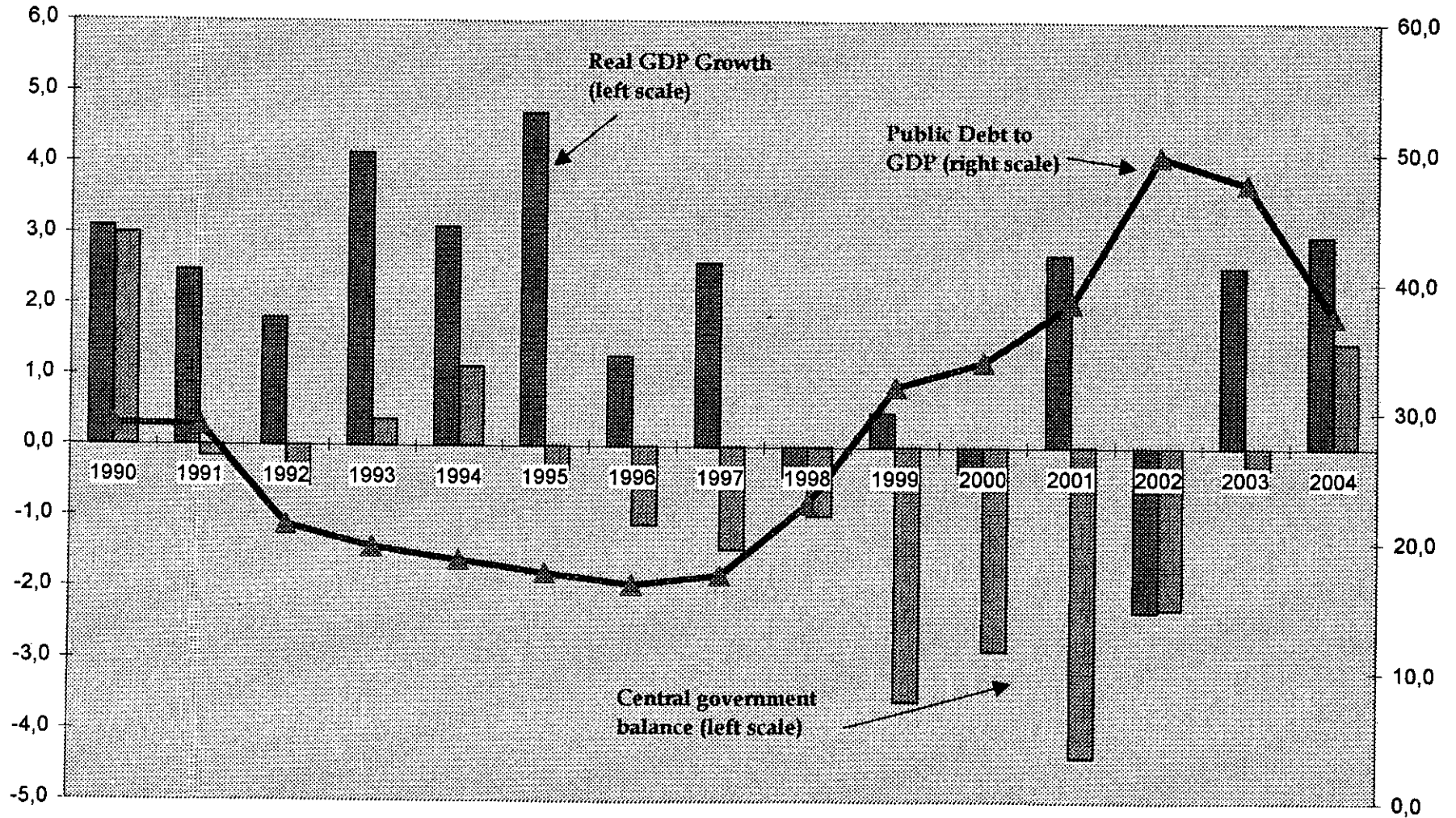
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Fig1

Figure 1. Paraguay: Real GDP Growth, Central Government Balance and Public Debt to GDP, 1990-2004





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