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Paraguay: Selected Issues and Statistical Appendix

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PARAGUAY

Selected Issues and Statistical Appendix

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Approved by the Western Hemisphere Department

January 21, 2000

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Paraguay: Basic Data

I. Social and Demographic Indicators

Area (thousand sq. km)	397,500 km2	Health		
		Population per physician (1991)		1,231.0
Population (1998)		Population per hosp. bed (1989)		762.0
Total (in millions)	5.2			
Rate of increase (percent a year)	2.6	Access to safe water (percent		
Density (per sq. km.)	13.1 per km2	of population, 1995)		
Unemployment (Asuncion, 1996)	8.2 percent	Total		39.0
		Urban		70.0
Population characteristics (1996)		Rural		6.0
Life expectancy at birth (years)	70.7			
Crude birth rate (per thousand)	29.8	Education (in percent, 1994)		
Crude death rate (per thousand)	4.8	Adult literacy rate		92 percent
Infant mortality (per thousand live births)	23.8	Primary school enrollment		89 percent
		Secondary scholl enrollment		33 percent
Income distribution (1995)				
By highest 20 percent of households	46 percent	GDP (1998)	G	23,437
By lowest 20 percent of households	6 percent		US$	8,505
		per capita	US$	1,722

II. Economic Indicators, 1995-99

	1995	1996	1997	1998	Est. 1999
	(Percentage change)				
National accounts and prices					
GDP at constant 1982 market prices	4.7	1.3	2.6	-0.4	-0.8
Agriculture and mining	11.5	1.1	5.8	0.7	4.2
Manufacturing	3.0	-2.2	-0.2	1.0	-4.4
Commerce and finance	1.6	-1.0	0.2	-4.2	-3.5
Consumer price index (end of period)	10.5	8.2	6.2	14.6	5.4
	(In percent of GDP)				
Gross investment	23.9	23.4	23.6	22.9	21.8
Private consumption	71.6	73.4	69.4	68.2	69.7
Public consumption	9.2	9.9	10.5	11.1	10.5
Gross national saving	20.8	18.2	21.1	21.7	20.3
	(In billions of guaranies)				
Public Sector finances					
Revenue	3,677.0	3,949.0	4,391.7	5,323.0	5,563.5
Current expenditure	2,298.0	2,741.0	2,994.8	3,694.1	3,970.0
Capital expenditure	941.9	877.6	1,565.3	1,802.9	1,969.6
Current balance (deficit -)	1,379.1	1,208.0	1,396.9	1,628.9	1,593.6
Overall balance (deficit -)	437.2	330.4	-168.4	-174.1	-376.1
Memorandum items:					
Current balance (percent of GDP)	7.8	6.1	6.7	7.0	6.4
Overall balance (percent of GDP)	2.5	1.7	-0.8	-0.7	-1.5
Money					
Money	1,539.4	1,570.7	1,789.1	1,922.3	1,911.8
Quasi-money	1,288.0	1,634.0	1,648.3	1,419.6	1,315.9
Net domestic assets	1,846.6	2,442.4	3,722.3	3,405.6	2,727.0
Credit to the public sector	-627.3	-992.9	-678.1	-834.5	-2,014.9
Credit to the private sector	3,742.7	4,588.4	5,159.9	5,015.2	4,741.9

Paraguay: Basic Data

	1995	1996	1997	1998	Est. 1999
	(In millions of U.S. dollars)				
Balance of payments					
Trade balance	-193.6	-502.8	-206.9	-114.0	-100.3
Exports, f.o.b.	4,295.5	3,880.4	3,980.0	3,824.0	2,701.0
Imports, f.o.b.	4,489.1	4,383.2	4,186.9	3,938.0	2,801.3
Current account	-279.1	-495.2	-238.2	-106.8	-114.4
Capital account	184.4	51.7	585.1	274.8	580.9
Overall balance	62.4	-44.2	-216.4	28.9	149.2
Memorandum items:					
Current account (as percent of GDP)	-3.1	-5.2	-2.5	-1.3	-1.5
External debt outstanding (as percent of GDP)	15.6	14.6	15.1	18.8	28.0
International reserves (millions of US dollars)	1,106.5	1,062.3	845.8	874.8	1,024.0
Real effective exchange rate (1995=100)	100.0	104.6	109.2	99.8	...

IMF data (as of August 31, 1999)	
Membership status	Article VIII
Intervention currency and rate	U.S. dollar (G 3,317/dollar)
Quota	SDR 99.9 million
Fund holdings of local currency	SDR 78.43 million
Fund holdings as percent of quota	78.5
Reserve position in the Fund	SDR 21.5 million
As percent of quota	21.5
Total Fund credit	None

Sources: Paraguayan authorities; and Fund staff estimates.

I. Overview of Paraguay's Banking Crisis[1]

A. Introduction

A major banking crisis erupted in Paraguay in mid 1995. During the subsequent four years, 15 of the 19 locally owned banks were either closed or absorbed by stronger institutions. Unlike many other banking crises, Paraguay's was not triggered by a recession. However, the uncertainty and repeated disruptions of the payments system caused by the crisis adversely affected economic activity, and GDP growth declined from an average 3 percent per annum during 1990–94, to half that rate during 1995–99. Losses attributable to the crisis are estimated at about 10 percentage points of GDP[2], borne mainly by the public sector in the form of lost deposits of public sector entities and the cost of honoring deposit guarantees. By end 1999 bank ownership had become predominantly foreign and, overall, the system seemed to be in a less fragile position than it was in 1995. Nevertheless, weaknesses remain that, if not addressed, could lead to renewed instability.

B. Background[3]

The Paraguayan financial system began to weaken in the late 1980s. Relatively lax entry requirements led to the proliferation of new banks and finance companies. Many of these were undercapitalized and, given the size of the financial market, frequently operated at levels that did not permit them to take advantage of scale economies ([5,1995] pp.58–59). By March 1995, ten of the system's thirty-four banks presented capital deficiencies under existing regulations ([5,1996] p.13). Lobbying by bank-owners defeated attempts by the Banking Superintendency to curb the number of intermediaries and to impose stricter capital requirements. Subsequently, the central bank adopted schemes that provided greater flexibility to intermediaries to comply with existing rules, which ultimately implied lowering effective capitalization standards ([5,1995] pp.59–61).

Inadequate banking practices, particularly (but not exclusively) among locally owned banks, were common. Risk evaluation was poor and credit to related enterprises widespread and difficult to curb. Existing legislation did not require registered (as opposed to bearer) shares in bank ownership, effectively precluding the identification of related parties ([5,1995] p.61). The deregulation of interest rates and bank lending, and the elimination of rediscounts and directed credit mechanisms at the beginning of the decade, was not generally accompanied by improvements in liquidity management ([6,1991] p.44). Losses were not readily acknowledged and were often deferred or deliberately hidden from supervisors. Furthermore,

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[1] Prepared by Juan Carlos Jaramillo.

[2] Not including those associated with the slowdown of economic activity. See Section IV below.

[3] For more details on the origins of Paraguay's banking crisis, see [1], [2], [5] and [6].

as discussed below, to circumvent both prudential and macroeconomic regulations, some intermediaries resorted to off-the-books transactions, with and without the knowledge of clients creating, in fact, a parallel financial system ([2] p.30). Poor banking practices were partly the result of the rapid growth of the sector that did not encounter a commensurate increase in qualified managerial and financial capacities ([7] p.24). To a large extent, the developments were tolerated through lax supervisory practices.

Financial supervision was weak. The banking superintendency lacked sufficient personnel to oversee an excessive number of financial institutions. Furthermore, political considerations frequently played a role in shaping the final outcome of the superintendency's decisions. The legal and regulatory frameworks were poor ([3] pp.32–33) and, during the first half of the 1990s, the authorities postponed their overhaul. Banks resisted external audits, and existing legislation did not allow the banking superintendency to make them compulsory ([5,1995] p.60). The authorities were aware of the precarious financial condition of many intermediaries, as a result of both their own analyses[4], and of reports prepared by international organizations[5].

C. Stages and Development of the Crisis

The first wave of bank closures (1995)

Given the circumstances described above, the intervention in May 1995 of Paraguay's second and third largest private banks, when they failed to meet their clearing obligations, did not come as a surprise. Liquidity had deteriorated in the two failed banks to an extent that could no longer be handled through regulatory forbearance. Their negative cash flow impeded their continued operation, and the authorities refused to provide further financial assistance because their owners repeatedly failed to live up to their capitalization commitments. In the course of the next few weeks, two other banks (and several minor financial institutions), also were intervened. The four failed banks held about 15 percent of the system's total assets.

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[4] As noted in [5,1996] p.13, "Already in 1989 the Bank Superintendency had assessed that about a third of the banking system was insolvent".

[5] As far back as 1991 the World Bank's CEM for Paraguay noted that "some private banks are clearly bankrupt...three...have a negative net worth, but others may also be in trouble" ([6,1991] p.46). It then added that "...as of end 1990, at least 15 of 23 banks [are] in noncompliance [with minimum capital requirements] ([6,1991] p. 46). In the same vein, the 1994 Fund RED noted that "...institutions representing over ten percent of the banking system...remain in financial distress and may face intervention, merging or liquidation." ([5, 1994] p.17). That same year's Article IV Staff Report noted that "...the re-capitalization of banks with solvency problems is a priority..." ([4,1994] p.7). It then recommended that "The authorities ... should ... vigorously enforce adequate minimum capital, loan classification, and provisioning rules on the banks" ([4,1994] p.9).

To avoid a panic-induced bank-run, and prevent the collapse of the payments system, the Government decided to honor deposits in the intervened banks. There was no deposit guarantee scheme in place, but the Central Bank of Paraguay (BCP) extended credit as needed to meet depositor's withdrawal demands from intervened, and some nonintervened, banks. In the process, the central bank spent approximately 4.7 percent of that year's GDP, providing loans in an attempt to avoid a larger financial collapse[6]. A special credit facility was created within the BCP to provide longer term resources to banks in what were denominated 'rehabilitation programs', with a view of providing time to ailing institutions to restructure and capitalize. By March 1998 loans within this program reached G.337 billion (about US$120 million). Despite its cost, the effectiveness of this program would prove to be almost nil, as most of the banks that made use of it subsequently lost these resources and were eventually closed.

The behavior of depositors was affected by the authorities' and Congress' initial handling of the crisis. Throughout the first wave some local banks, at the time generally perceived as the most vulnerable segment of the system, surprisingly increased their deposit market share relative to sounder banks (mostly foreign owned) by raising interest rates. The authorities' attempt to bestow calm on the markets by announcing that all deposits would be honored, granted a de-facto guarantee to deposits held in the intervened institutions. This reinforced the widespread perception that deposits in the financial system were risk free[7]. In this context, there was no flight to quality and it was possible for risky banks to continue attracting deposits by raising interest rates.

The bank interventions disclosed the widespread practice of parallel accounting. The authorities uncovered the existence of unreported loans, particularly to related enterprises, as well as the presence of large volumes of undisclosed liabilities. It soon became evident that many financial institutions were handling large volumes of off-the-record accounts to circumvent regulations ([5,1996] p.13). Many depositors were unaware that their claims were not duly recorded in the bank's official books. Off the books deposits whose authenticity could be backed by bank documents and correspondence were dubbed 'gray deposits', while those lacking such proof were referred to as 'black deposits'. The holders of both types insisted that their claims were as legitimate as formal deposits[8]. The authorities

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[6] During 1995 alone, the Central Bank of Paraguay spent close to G.700 billion (US$ 360 million – 4 percent of GDP) in its efforts to avoid the propagation of the crisis, an amount about equal to currency in circulation at the outset of the first wave.

[7] This perception stemmed, by and large, from the fact that only two institutions had ever been intervened and closed in Paraguay despite banking practices such as those mentioned in the previous section.

[8] The practice of parallel accounting also was widespread in nonintervened institutions. The publicity surrounding the discovery of parallel accounts, as well as pressure from regulators,

(continued...)

agreed to honor only the claims of 'gray' depositors, but Congress initiated passage of a law (Ley 814/96) ordering the restitution of 'black' deposits as well. A veto by the Executive was overridden, and finally the Supreme Court ruled against the Executive's appeal. The law established that the Government should reimburse black and gray deposits up to about the equivalent of US$15,000 per depositor. A total of G.41 billion (0.2 percent of GDP) were eventually reimbursed.

Despite the large costs incurred during the first wave of bank closures, and notwithstanding improvements in supervision, the financial system remained weak. Extremely fragile institutions were permitted to continue operating. Throughout 1995 and 1996, the system's capital base deteriorated further, the proportion of impaired loans increased sharply, and although provisions grew at a stepped-up pace, their coverage of doubtful loans did not keep up, particularly during 1996 (Table 1 and Figure 1). To some extent this reflected more transparent accounting, including the normalization of off-the-books accounts, but, as events would later prove, many problems remained unresolved. During the second half of 1995 and during 1996, several small finance houses were either intervened or voluntarily liquidated, but no major institution would be closed again until 1997.

The Second Wave (1997)

In May 1996 Congress approved a new banking law. Drafts of this legislation had been before Congress since 1994, but legislators only considered them in earnest after the first wave of bank closures. The law granted increased powers to the banking superintendency to intervene and close financial institutions, to require annual external audits, and to restrict operations of institutions in noncompliance with limits on lending to related parties or with minimum capital requirements. It fixed limits on lending to any single borrower, and required disclosure of share ownership so that bank owners could be fully identified. It also provided

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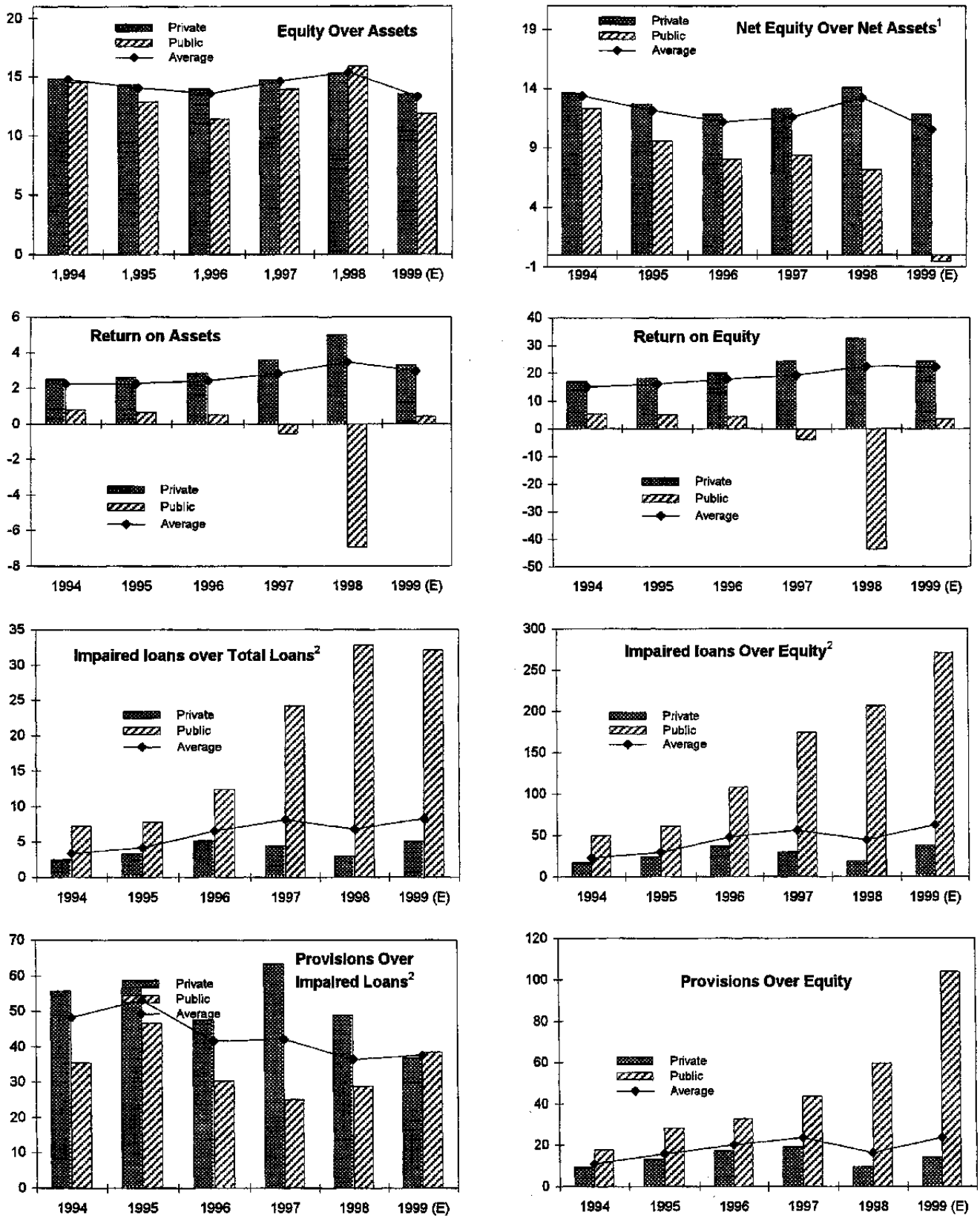
led both depositors and managers of nonintervened institutions to formalize deposit holdings. To some extent this explains the increase in deposits observed during the second half of 1995 in several banks.

Figure 1. Paraguay: Indicators of Bank Soundness

(In percent)



1/ Net assets: assets minus provisions. Net equity: equity minus provisions

2/ Impaired loans: non-performing plus restructured loans.

Source: Paraguayan authorities and Fund staff estimates.

Table 1. Paraguay: Indicators of Bank Soundness

(In percent)

	1994	1995	1996	1997	1998	1999 Sep
Equity over assets						
Private	14.8	14.3	14.0	14.7	15.3	13.5
Public	14.6	12.9	11.4	13.9	15.9	11.9
Average	14.8	14.0	13.5	14.6	15.4	13.3
Net equity over net assets 1/						
Private	13.6	12.7	11.8	12.3	14.1	11.9
Public	12.3	9.6	8.0	8.4	7.1	-0.5
Average	13.4	12.1	11.1	11.6	13.2	10.5
Return on assets						
Private	2.5	2.6	2.8	3.6	5.0	3.3
Public	0.8	0.7	0.5	-0.6	-6.9	0.4
Average	2.2	2.2	2.4	2.8	3.4	2.9
Return on equity						
Private	16.9	18.2	20.2	24.3	32.6	24.3
Public	5.4	5.2	4.5	-4.0	-43.6	3.5
Average	14.9	16.0	17.8	19.2	22.4	22.1
Impaired loans over equity 2/						
Private	17.0	23.3	36.9	30.0	19.1	37.8
Public	49.9	60.8	108.3	174.0	206.2	270.7
Average	22.5	29.6	48.0	55.7	44.3	62.1
Impaired loans over total loans 2/						
Private	2.5	3.3	5.2	4.4	2.9	5.1
Public	7.3	7.8	12.4	24.2	32.8	32.1
Average	3.3	4.2	6.5	8.1	6.8	8.3
Provisions over equity						
Private	9.5	13.2	17.6	19.0	9.3	14.0
Public	17.6	28.3	32.9	43.7	59.5	104.0
Average	10.9	15.7	19.9	23.4	16.1	23.4
Provisions over impaired loans 2/						
Private	55.8	56.6	47.6	63.4	48.8	36.9
Public	35.3	46.6	30.3	25.1	28.9	38.4
Average	48.2	53.1	41.6	42.0	36.3	37.6

Sources: Paraguayan authorities and Fund staff estimates.

1/ Net assets: assets minus provisions. Net equity: equity minus provisions

2/ Impaired loans: non-performing plus restructured loans.

for the creation of a centralized credit bureau. Finally, the Law limited deposit insurance to the equivalent of ten minimum wages (about US$ 2,200 per account). Although the new legislation enhanced the instruments at its disposal, the Superintendency's capacity to carry out its duties remained impaired by its lack of adequate resources. Also, the new law did not distinguish between institutions where liquidity and solvency problems were due to normal adverse developments in their portfolios, from those where the cause was the noncompliance with the regulatory framework or even outright fraud ([5,1997] p.7).

In 1996 and the first half of 1997, as a result of the Executive's reluctance to intervene any more banks, there were no major bank closings, but the crisis lingered on with the central bank providing ample financial assistance to troubled institutions. The Government's stance forced concerned parties (regulators, depositors, shareholders), to consider options for keeping ailing banks alive. During this period, the plight of four medium-to-small sized banks—Desarrollo, CORFAN, BUSAIF and BIPSA—became the center of attention in Paraguay's financial markets. All four were medium sized banks with extremely high levels of nonperforming loans. They entered into highly publicized 'rehabilitation programs' with the BCP, whose financial assistance rapidly became the major source of their funding. The Social Security Institute (IPS) was then induced to provide financial support by increasing its deposit holdings in these banks, especially in Desarrollo and BIPSA[9]. In January 1997 IPS was persuaded to capitalize Banco de Desarrollo by transforming G.26 billion of its deposits into equity, supposedly to avoid the bank's failure. This support notwithstanding, the bank continued to falter and was finally closed in September 1998. IPS did not recover its deposits, nor its equity investment. CORFAN avoided closure in 1996 through a merger with Banco Nacional de los Trabajadores (BNT), a publicly owned bank, capitalized periodically with contributions from workers[10]. However, as noted below, BNT would in turn be closed in 1998. In the same vein, the bank employees pension fund decided to capitalize BUSAIF, creating a potential moral hazard situation in which the owners of one bank were the employees of competitive banks. In any event, BUSAIF would also be closed in the second half of 1998. Despite continued efforts through 1996, BIPSA found no buyer and was intervened and closed in 1997 at the time of the collapse of Banco Union (see below).

In 1997 bank closures were re-ignited with the intervention of Banco Union, the country's largest private local bank. Union had received loans from the central bank since 1995 to attend deposit withdrawals associated with the contagion effect of the closures of other institutions. Assistance reached G.36 billion by May 1997, despite which the bank and its affiliates continued to falter, while potential buyers pondered a possible acquisition. When the bank's savings and loan affiliate—Ahorros Paraguayos—was intervened by the

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[9] In both these banks IPS soon became the most important depositor. By end 1996 ninety eight percent of deposits at Banco de Desarrollo belonged to IPS.

[10] Since IPS also held a large portion of its deposits at BNT, after the merger, BNT's holdings of IPS deposits reached G. 230 billion, almost half of the Institute's liquid assets at the time.

government, Banco Union had to enter into a "rehabilitation program" with the central bank, and received G.85 billion in fresh resources. Even with this assistance, the bank failed to meet its obligations and was intervened in June. Attempts by the authorities to induce re-capitalization by existing or new shareholders, failed during the second half of the year, and in early 1998 it was finally decided to liquidate Banco Union ([2] p.37). As noted, BIPSA, which had also been in search of a buyer failed to obtain fresh capital and depositors withdrew their deposits. It was intervened by the banking Superintendency soon after Banco Union, and was subsequently closed. CORFAN ceased as a separate entity when it was absorbed by BNT.

During the second wave of bank closures, the BCP became less eager to provide unlimited financial assistance to intervened banks than it had been in 1995. The new banking law limited to ten monthly minimum wages the guarantee on financial sector deposits, but pressure soon mounted to increase the coverage of deposit insurance. The new wave of bank closures, which had not been met with full guarantee of deposits, drew enormous protests and led Congress to consider legislation to increase deposit coverage in failed banks. Although full deposit coverage had backers, it did not gain widespread support. However, proposals to increase the deposit insurance coverage from the Banking Law's 10 monthly minimum wages, to 20, 50 or 100 monthly minimum wages did receive serious consideration, based on the argument the Government shared the blame for bank closures. In the end Congress passed Law 1186 of 1997 increasing the limit to 100 monthly minimum wages, (approximately US$24,000)[11]. Whatever the merits of the arguments favoring the fairness of the new limit, the debate served to underscore within public opinion that, in the future, the availability of full deposit insurance would no longer exist. To an extent, this eliminated an element of moral hazard by reminding depositors that their holdings in the financial system were not without risk.[12]

The new wave of bank closings triggered a systemic run on deposits. In contrast to what was observed during the first wave, on this occasion depositors' behavior was governed by 'flight to quality' considerations. The limit imposed on implicit deposit insurance, as well as the extended debate over its level, contributed to this outcome. During this process, foreign owned banks, which were perceived as less risky than locally owned banks, increased their share of deposits by almost 12 percentage points. Interestingly, the flight to quality was not entirely 'nationality' blind: the more solid locally owned banks, —the ones which in time would survive the crisis—did not see their market share significantly affected: it dropped by less than 1 percentage point. In contrast, those local banks that were eventually closed, suffered the brunt of the run on deposits, with their share declining by over 12 percentage

[11] BCP was authorized to space payments beyond the first 20 monthly minimum wages for up to one year, as needed for monetary stability.

[12] Elements of moral hazard remained, as bank owners were not forced to pay for the deposit insurance scheme.

points. Increased transparency of banking statistics, as evidenced, for example, by the publication of CAMEL rating exercises, most likely contributed to depositor's more discriminating behavior.

The third wave (1998)

Political resistance to deal forcefully with the still insolvent institutions remained strong. Rather than decidedly taking action to force the restructuring of viable institutions, or to close insolvent ones, the authorities chose further regulatory forbearance and accounting flexibility, coupled by central bank support, 'rehabilitation programs', and the transfer of public sector deposits to weak banks. Under these conditions, the banking system lingered-on, but the fragility of several of its banks—some with a negative net worth—would not be overcome. Moreover, the delay in taking action increased the total cost of the financial sector clean-up, and concentrated these costs in the public sector. In August 1997, the Banco de los Trabajadores entered into a rehabilitation program with the Central Bank, an omen of things to come. By May 1998, total financial assistance provided by the BCP to BNT reached G.92 billion, while IPS deposits in the bank surpassed G.230 billion (1.1 percent of GDP).

In June 1998 the banking superintendency intervened BNT. This was the country's fourth largest bank at the time, with 6.4 percent of the system's assets. Although over 90 percent of the bank's loan portfolio was overdue, BNT claimed cumulative losses of only G.16 billion and a capital base of G. 91 billion. However, examination of the bank by auditors from the superintendency revealed an alarming lack of liquidity, an almost complete dependency on public sector deposits, and actual losses of almost G. 220 billion. Under the circumstances, the superintendency decided it had no option but to close the bank and criminal charges were brought against the bank's administrators, the outcome of which is still pending before the Courts ([2], p.44).

Among the measures adopted to support ailing banks was the massive transfer of public sector deposits to weak institutions. The largest holder of deposits in the system, the Social Security Institute (IPS), was seen as instrumental in this approach. By October 1997, IPS held 15 percent of the banking system's deposits. Of these, almost 60 percent were either in intervened banks (Union, BIPSA, Corfan, Mercantil), or in banks that would close their doors within the following 12 months, including, as discussed above, Banco Desarrollo and BNT. In all, the Social Security Institute lost in excess of G. 620 billion (US$ 265 million or 3 percent of GDP) to banks that were liquidated between 1997 and 1998. The government agreed to absorb G. 525 billion of these losses through a long term bond yielding a 1 percent annual real interest rate[13]. Recovery by IPS of the remaining G. 94 billion is, at best, unclear. Furthermore, by end September 1999, an additional G.188 billion of IPS deposits were being

[13] This yield, according to IPS administrators, is well below the average yield on IPS's other financial holdings.

held at the financially fragile National Development Bank (BNF), currently the only remaining public bank in Paraguay.

D. An Estimation of the Direct Costs of the Crisis

Progress towards the final liquidation of closed banks, as well as new information, permits an improved estimation of the cost of the crisis. The cumulative fiscal cost, from 1995 to 1998, was previously estimated at a maximum of 13 percent of annual GDP.[14] Since then, there has been significant progress towards the final liquidation of the closed financial institutions: loans have been collected, assets have been sold or otherwise negotiated by the intervention officials, liabilities have been reduced and better valuation of existing assets have been made. On the basis of more recent numbers, a new tentative loss calculation is presented in this section.

New estimates of the components of the losses, presented in Table 2 , suggest that the probable value of direct losses associated with the banking crisis may be in the vicinity of G.2,000 billion (US$ 900 million calculated at each year's exchange rate, or about 10 percent of GDP). The losses were distributed over the four years during which the crisis took place. The date of closure of each financial institution was chosen as the criterion for assigning the losses of that institution to a particular year. Losses associated with first wave of bank closures were imputed to 1995, those of the second wave to 1997 and finally, those of the third wave to 1998. Ratios of the costs of the crisis to GDP and costs expressed in U.S. dollar terms used the GDP and exchange rate corresponding to each year. Using this methodology yields the loss distribution presented in Table 3.

The cost of Paraguay's banking crisis is at an intermediate level compared with those in other countries. Venezuela's crisis in the early 1990's cost some 18 percent of GDP; estimates of the recent banking crisis in Ecuador reach as high as 15 percent of GDP, and probably rising; Colombia's recent crisis might cost as much as 6–7 percent of GDP; losses in the Nordic countries in 1991–92 were around 6 percent of GDP; the costs associated with the savings and loan crisis in the late 1980's in the United States were about 3–4 percent of GDP.

The losses in Paraguay will, by and large, be borne by the public sector, while private depositors will loose relatively small amounts. Noncovered private deposits are about G.278 billion (US$ 84 million). This would represent about 15 percent of total losses. The remaining 85 percent of the costs would be absorbed by the public sector (Government and the Central Bank)[15].

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[14] See [5,1998] p.18 and p.44. The estimate, G.2,859 billion, provided a an **upper bound** to possible losses, as it explicitly did not include forecasts of asset recuperation in failed banks.

[15] The imbalance is in fact even larger, because an unidentified portion of the uncovered deposits belong to public entities at different levels of government.

Table 2. Paraguay: Components of the Direct Costs of the Financial Crisis 1/

(In billions of Guaraníes)

Net Worth Closed Institutions as of Sept/99					Zero Coupon Bonds	Lower bound of losses
1st Wave Banks (E)	2nd & 3rd Wave Banks w/o BNT	BNT	Finance Houses (E)	Total		
-628	-488	-173	-101	-1,389	-343	-1,732

Lower bound of losses	50 percent of non performing loans	100 percent of office goods and equipment	Balance sheet provisions	10 percent of loans & other credits	20 percent of BNT assets	Probable level of losses
-1,732	-119	-71	21	-14	-56	-1,972

Probable level of losses	2nd 50 percent of non performing loans	90 percent of loans & other credits	60 percent of BNT assets	100 percent of investments	100 percent of credit to financial institutions	Upper bound of losses
-1,972	-119	-122	-168	-177	-60	-2,619

(E): estimated

Source: Central Bank of Paraguay, Banking Superintendency and Fund staff estimates.

1/ With no further assets to liquidate in the four banks closed in 1995, and with almost all depositors paid-off, the negative net worth of these banks may be approximated by their outstanding loans with BCP, which at end September 1999 stood at G.628 billion. Furthermore, according to valuations made by the banking superintendency, as of September 1999, liabilities of banks and finance houses closed during the second and third waves of the crisis, exceeded their corresponding assets by G.762 billion, and the central bank and the government incurred jointly in 343 billion in losses on loans advanced to failed banks and finance houses in 1995 and 1996. Together, these figures provide a lower bound of the loss estimate, assuming full recovery of the assets still carried in the books as of September 1999: G.1,732 billion. However, full recovery of assets seems optimistic. Consequently making some assumptions about a reasonable recovery of assets results in a most probable loss estimate of G.1,973 billion. Finally if it is assumed that the only assets to be recovered were currently held cash, deposits and government securities, total losses would be in the vicinity of to G.2,450.

Table 3. Paraguay: Estimates of the Direct Costs of the Financial Crisis

	1995	1996	1997	1998	Total
		In billions of Guaraníes			
Lower bound	-996	-25	-234	-477	-1,732
Probable value	-996	-25	-345	-605	-1,972
Upper bound	-996	-25	-709	-888	-2,619
		In millions of US$			
Lower bound	-508	-12	-108	-175	-802
Probable value	-508	-12	-158	-222	-900
Upper bound	-508	-12	-326	-326	-1,171
		In percent of GDP			
Lower bound	-5.6	-0.1	-1.1	-2.0	-8.9
Probable value	-5.6	-0.1	-1.6	-2.6	-10.0
Upper bound	-5.6	-0.1	-3.4	-3.7	-12.9

Source: Table 2.

E. Remaining Weaknesses

By end 1999, the financial system had finally overcome the series of bank crises that began in 1995, although fragility persists. Currently all remaining private banks in the system are deemed viable by the Banking Superintendency. Foreign owned banks, which held about 40 percent of the market before the onset of the crisis, increased their share to 80 percent. No new bank interventions have taken place over the past 15 months and no new banks have entered into 'rehabilitation programs. However, given the sharp downturn in economic activity, indicators of bank soundness have deteriorated since 1998, and it is probable that a few smaller size banks and finance houses may have to merge with larger institutions. Impaired loans rose rapidly throughout 1999 as a result of the recession, although it is likely that initiatives to grant relief to debtors being discussed by both Congress and the executive branch may have induced borrowers to delay the servicing of their obligations[16]. The authorities' practice of relaxing regulations to assist particular sectors or solve particular problems is perhaps the single most important weakness in the system and provides an unfortunate signal at a moment when the need to strengthen confidence in the system requires otherwise.

[16] Central Bank officials have publicly referred to this issue as fact.

The only remaining public bank, the (BNF), still is in financial distress. By end September 1999, past due loans at BNF had reached over 63 percent of its loan portfolio, in contrast with less than 9 percent for the rest of the banking system. Although expectations of generalized debt restructuring and write-offs most likely had some bearing on this result, the bank's loan portfolio had been deteriorating already since 1996. It is estimated that BNF has lost its capital several times over, and schemes currently being considered by the Government to refinance and subsidize farmers and small entrepreneurs will surely generate additional losses. The Government intends to re-capitalize and fully restructure the bank and, according to proposed legislation on the reform of the public banks, BNF is to be combined with several other financial entities into a new development finance institution. The proposed legislation would remove nonperforming assets from the BNF and pass them to a trust that would manage their liquidation. It would also provide the new bank with the double role of a first and second tier institution, and would grant it several prerogatives, such as a monopoly on deposits of the public sector.

The Banking Superintendency remains weak and subject to political interference. Despite noteworthy improvements implemented since the crisis erupted in 1995, the Banking Superintendency's human resources are still over-stretched. The size of its staff is not commensurate with the increased innovations in banking operations and products and with the number of financial institutions it must oversee. Bank closures, which are politically difficult in many countries, are an extremely charged issue in Paraguay[17]. Had the decisions related to the final wave of closures come earlier, central bank losses, and those associated with the Social Security Institute would have been much smaller. Consequently, it seems safe to say that if more autonomy is provided to the Banking Superintendency, especially to apply its sanctioning powers, and more weight is given to technical considerations in the Superintendency's decisions, the probability of a new crisis will be significantly lower in the future.

The crisis increased the perceived risk of bank lending in Paraguay which contributes to explain the high domestic interest rates. During 1998–99, despite the recession, nominal interest rates on Guaraní denominated loans remained unchanged in the face of a sharp decline in the inflation rate. This led to very high **ex-post** real interest rates on loans. In turn, the persistence of such high rates for long periods of time can weaken the financial sector and impair efficient allocation of financial resources (adverse selection).

Finally, there is the issue of macro-financial stability. No matter how adequate regulations and the supervisory agencies may be, and irrespective of the quality of risk management, and overall banking practices, banks will become more vulnerable if the economy becomes more unstable. As noted, Paraguay has recently confronted a deep recession that led the economy to contract for two years in a row, which has again put strains on the system. Furthermore, investors have been weary of holding Guaraní denominated assets, and as a result

[17] See ([1], [2], [4], [5] and [6].

international reserves have steadily declined. Only the disbursement of an extraordinary loan from Taiwan Province of China temporarily changed this trend and replenished the central bank's external asset holdings. However, over the past few months reserves have again declined. If this trend continues, it will increase the perception of risk by depositors and will accentuate the vulnerabilities of the still ailing financial sector.

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[3] International Monetary Fund, "Programa de Reforma para el sector Financiero", Washington, D.C., May 1990.

[4] _____, "Paraguay - Staff Report for the 1994 Article IV Consultation", Washington, D.C., April 1994.

[5]_____, "Paraguay: Recent Economic Developments", Washington, D.C., 1994, 1 95, 1 96, 1997 and 1998.

[6] World Bank, "Paraguay: Country Economic Memorandum", Washington D.C., 1991, 1994, 1998 (draft).

[7] _____, "Paraguay: Macroeconomic Policies to Reactivate Growth", Washington, D.C., October 1998.

II. The Informal Sector in Paraguay [1]

A. Introduction

This note provides some estimates of the size and evolution of the informal sector in Paraguay and examines the extent to which the national accounts capture informal activity, or measures accurately actual economic activity in general.

The most common definition of informality sets it equal to illegality, which includes any activity failing to adhere to official regulation and standards.[2] However, such a definition seems not practical in the case of Paraguay where official regulations often are not observed, yet the underlying activity takes place in the formal economy. An obvious example of this is provided by estimates of tax evasion. A study by FAD reports levels of tax evasion (for 1997) that, according to the above definition, would imply that some 47 percent of total output is produced informally (Table 4).[3] Yet it is clear that the criterium of failure to adhere to official regulations, such as not observing tax obligations, would likely overestimate informality, simply because taxes, in part, also are evaded on formal activities.

Table 4. Informality Suggested by Tax Evasion, 1997

(In percent)

Sectors	Manufacturing	Construction	Trade	Transport and Communication	Services and Utilities	Agriculture and Mining	Total
GDP share	13.9	5.3	20.6	4.8	27.7	27.7	100
Incidence of tax evasion	60.6	93.8	57.7	26.2	43.5	29.6	
"informal" GDP share	8.3	4.8	11.9	1.3	12.0	8.2	46.6

Source: National Accounts, FAD, and own calculations.

Thus, to obtain a more accurate gauge of informality, a more narrowly-focused estimation method will be used. In particular, informality will be proxied by estimating the level of output produced by unregistered urban small-scale enterprises and the self-employed—sometimes referred to in Paraguay as the "traditional" informal sector—together with value-added obtained in the reexport sector, centered in and around Ciudad del Este on the border

[1] Prepared by Eva Jenkner.

[2] See Alejandro Portes, "The Informal Economy – Perspectives from Latin America", in S. Pozo, ed., "Exploring the Underground Economy", W.E. Upjohn Institute, 1996.

[3] "Paraguay: Estrategia de la Reforma del Sistema Tributario", IMF FAD, March 1999.

with Brazil.[4] Given the relative importance of the latter, it will be scrutinized first. Its contribution to total GDP will then be included in the global estimation.

B. The Reexport Sector

Reexports, or tourist trade, refer to the retailing activities realized in several towns on the border with Argentina and Brazil. Goods are imported into Paraguay, say from Brazil, net of Brazilian sales or value-added taxes, and are then resold to traders (the "tourists") from the neighboring country. The "tourists", from Brazil in this case, do not need to declare taxes on their imports from abroad, up to a certain limit, and thus may obtain some products at lower cost in Paraguay than buying them domestically. On the Paraguayan side, while the retailing activity itself is not illegal, little or no Paraguayan taxes are paid on these trades and a large share of the activity goes unrecorded.

Nevertheless, the Central Bank of Paraguay (BCP) has devised some methods to incorporate border trading into the balance of payments and the national accounts statistics. A first method is based on a comparison of official trade data and direction of trade statistics as reported by Paraguayan trade partners. From this, the BCP calculates the value of reexports, assuming a certain amount of domestic consumption and 15 percent value added[5] as its GDP contribution. This yields a peak value of 5 percent of GDP for 1995, declining subsequently to 3.3 percent of GDP by 1998.

A second approach developed in a Central Bank study[6] arrives at the reexport sector's contribution to GDP using micro-data. First, the total value of reexports from Ciudad del Este is determined by multiplying the number of tourists and foreign bulk-buyers by their estimated average value of purchases (the latter figure obtained through spot-checking and surveys). Subsequently, assuming a value added on these purchases of 15 percent, the contribution to GDP by Ciudad del Este alone is derived. Finally, taking into consideration that Ciudad del Este makes up about 73 percent of all border trade, the total contribution of reexports to GDP is calculated. As can be seen in the figure below, this leads to a peak value of 10.1 percent of GDP for 1994, dropping to 4.9 percent of GDP by 1998. The midpoint estimate between the two methods, also shown in Figure 2, ranges between 7.4 percent of GDP for 1994 and 1995 and 4.5 percent of GDP for 1998.

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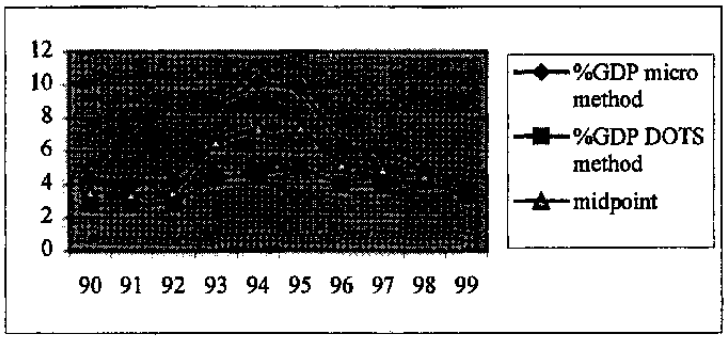
[4] A sizable part of the Paraguayan informal sector may also be made up of illegal activities such as contraband or smuggling. Since due to their very nature little reliable information is available, they are left out of the calculations.

[5] Comprehensive surveys arrive at this level as the average income generated for Paraguayan nationals.

[6] Movimiento Comercial y Financiero de Ciudad de Este, BCP, Noviembre 1998.

Figure 2. Estimates of Value Added in Reexport Activity



Source: Central Bank of Paraguay; and staff calculations.

The initial rise and subsequent decline of the tourist trade appears to be caused by a number of external factors: to start, Brazil first increased the legal maximum of undeclared imports in 1992, and lowered it again in 1995 and 1996. Also, demand had been fuelled by a strong currency and an economic boom in Brazil in the middle of the decade. Subsequently, regional integration and the harmonization of external tariffs within the Mercosur framework gradually eroded the relative cost advantage of Paraguayan reexports, a process which is likely to continue as the common external tariff (CET) is being implemented incrementally. Finally, and more recently, the economic downturn in Brazil and Argentina since mid-1998, and the loss of competitiveness vis-à-vis Brazil after the devaluation of the *real,* have intensified this trend.

C. The Size of the Informal Sector: Data from Household Surveys

Tourist trade is, however, only one part of informal activity in Paraguay. Employment and income data from recent household surveys allow an approximation of the total size of the informal sector, including the reexport sector's contribution derived above.[7] Since the household surveys contain data that are disaggregated by type of activity, they allow an alternative estimation of GDP from the production-side. This alternative measure of GDP can then be compared to the official national accounts data to estimate any measurement error in the official data, potentially caused by informal activities.

In the household surveys, the Paraguayan Statistical Office estimates that 46.4 percent of persons in the urban workforce was employed in the informal sector (L_i)[8] in 1996, and 45.6

[7] Other approaches to estimate the size of the informal sector in an economy include money-demand measures, or indicators of physical activity. Schneider and Enste (1998) for example estimate the informal sector at 27 percent of GDP for Paraguay in 1989–90. (Schneider and Enste, "Increasing shadow economies all over the world – fiction or reality?", Linz, 1998).

[8] Studies generally define the urban informal sector as consisting of workers in and owners of enterprises with less than 6 employees, as well as self-employed or unpaid family workers.

percent in 1997–98.[9] This information, together with data on the total labor and capital income (y) received by these "informal" workers, permit an estimate of national income generated in the informal economy:

$$Y_i = yL_i$$

Data on employment in the formal economy, when combined with information on average monthly wages paid in the formal sector,[10] also allow for an alternative estimate of national income (as compared with official national accounts data) in the formal economy. To arrive at this alternative estimate, income can be inferred by using a Cobb-Douglas production function:

$$Y_f = AK^{\alpha} L_f^{1-\alpha}$$

Assuming that labor is paid its marginal product, formal output can be calculated as:

$$Y_f = \frac{w_f L_f}{(1-\alpha)},$$

where $(1-\alpha)$ is the labor share in income. Since data are available on wages and employment in the urban areas by main sectors of economic activity, and since the labor share in income is not uniform across sectors, we estimated formal urban income as the sum of the sectoral results. Moreover, to capture income earned in the formal non-urban, or rural, sectors, the primary sector (agriculture, mining and fishing), as well as secondary and tertiary output produced in rural areas, were also added.[11] Tables 2 and 3 present the results for 1996 and 1997–98, respectively.

For 1996 the chosen production function yielded a nominal GDP figure of 124 percent of official GDP, and for 1997–98 of 131 percent. The informal sector contributed 15.6 percent (1996) and 14.6 percent (1997–98) to total output (formal plus informal), or 19 percent of

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[9] Trabajadores en el Sector Informal Urbano, Encuesta de Hogares 1996, DGEEC, Paraguay, 1997, and Trabajadores en el Sector Informal Urbano, Encuesta de Hogares 1997–98, DGEEC, Paraguay, 1999, first draft. The latter survey was conducted between July 1997 and July 1998. To simplify the analysis, its results are here compared with data for 1998, which may lead to slight underestimations.

[10] For the formal sector only information on average monthly salaries is available. This information is published in the BCP's Informe Economico.

[11] Around 30 percent of secondary and 20 percent of tertiary activities are rural and hence make up an important part of formal economic activity.

official GDP in both years. These estimates of informal activity are somewhat smaller than those suggested in other studies, and they do not vary significantly over time.[12] Moreover,

Table 5. Nominal GDP 1996

(In billions of Guaranies)

	Manufacturing	Construction	Trade	Transport	Services	Total
Differentiated Production Function	**a=1/3**	**a=1/5**	**a=1/10**	**a=1/5**	**a=1/10**	
Contribution to total GDP 1/	2,342.1	1,033.5	3,891.4	1,236.9	10,844.1	24,463.5
Contribution to informal GDP	409.7	405.5	2,216.1	288.7	49.6	3,819.6
Informal share in total GDP (percent)	17.5	39.2	56.9	23.3	4.6	**15.6**
Total GDP as % of official GDP						**123.5**
Informal sector as % of official GDP						**19.3**

Sources: Cuentas Nacionales, Informal Sector Surveys, BCP: Informe Economico, Septiembre 1999.
1/ Formal plus informal GDP.

Table 6. Nominal GDP 1997–98

(In billions of Guaranies)

	Manufacturing	Construction	Trade	Transport	Services	Total
Differentiated Production Function	**a=1/3**	**a=1/5**	**a=1/10**	**a=1/5**	**a=1/10**	
Contribution to total GDP 1/	2,774.2	1,065.8	4,838.7	1,813.7	14,691.5	30,613.5
Contribution to informal GDP	628.9	350.0	2,481.8	359.0	649.7	4,469.4
Informal share in total GDP (percent)	22.7	32.8	51.3	19.8	4.4	**14.6**
Total GDP as % of official GDP						**130.6**
Informal sector as % of official GDP						**19.1**

Sources: Cuentas Nacionales, Informal Sector Surveys, BCP: Informe Economico, Septiembre 1999.
1/ Formal plus informal GDP.

[12] This partially contradicts anecdotal evidence, which suggests that informality has increased in recent years with rising rates of unemployment (The sum of formal and hidden unemployment has grown from 7.8 percent in 1995 to 14.9 percent in 1998) and continuing rigidities in the labor market. However, one needs to bear in mind that our results are based on employment data which indicated a *decrease* in the informal sector share in employment in the first place.

since household survey data are likely to contain some under-reporting of income and activity, the measurement error of official GDP may extend beyond the gap estimated here.

D. A Third Alternative Estimate of GDP—Based on Consumption

The 1997–98 household survey also allows an alternative calculation of GDP from the expenditure side, based on data on families' average income and consumption and information on the other main expenditure categories. Contrasting the household survey data on consumption with the official figures can provide some further insights as to whether and by how much official GDP is underestimating actual GDP. As can be seen in Table 7, multiplying average yearly consumption expenditure, as obtained in the household survey, by the number of families[13] yields a higher consumption figure than what is implied in the official GDP calculation.

To this, we add government consumption from fiscal data, net exports as calculated by the BCP (which includes informal reexports) and investment. Thus, all expenditure categories of GDP with exception of investment are calculated from independent sources.[14] This leads to the result that actual GDP may be up to 119 percent of official GDP, a finding that is close to that found in Part C. Moreover, the increment to official GDP as obtained by the consumption-based GDP calculation is nearly equal to the informal sector GDP contribution.

While the two alternative GDP estimates presented above provide very similar results overall, it would still appear difficult to disentangle how much of official activity, or alternatively, how little of informal activity, is captured in the official income accounts.

Table 7. Nominal GDP 1997–98, Calculated by Expenditures

(In billions of current Guaranies)

	Private Consumption Expenditure	Total GDP	Adjustment: % of official GDP	Adjustment: % of actual GDP
National Accounts	15,250.5	23,436.9		
Estimate I 1/	19,002.7	27,189.1	16	14
Estimate II 1/	19,682.3	27,868.7	19	16

Sources: "Cuentas Nacionales, BCP, Determinacion del Ingreso Familiar: EIH 1997-98", DGEEC.

1/ The two estimates vary slightly based on different population data in the national accounts and the most recent household surveys.

[13] Average household size was 4.75 in the survey.

[14] Investment figures are taken from the national accounts. However, they seem reasonably firm and easy to reproduce; Paraguay imports almost all of its capital equipment, and construction volumes are captured reasonably accurately.

Indeed, it cannot be concluded that "formal" activity appears to be captured in full, whereas informal activity is left out completely in the official accounts. For instance, reexports, or at least the lower-bound estimate derived from official statistics, are included by the Central Bank in the official national accounts calculation. Also, the category "other services" in the official national accounts may be capturing part of the "traditional" informal sector. At the same time, illegal activities such as contraband and drug-trafficking are not included in official figures by the BCP, nor are they likely to be declared in the household surveys on income, but they could be influencing the consumption-based calculation. Finally, enterprises included in the formal sector may be under-declaring their output in order to evade taxes.[15] Therefore, while the above calculations suggest that that official GDP may be underestimated by between 15–24 percent, this estimate probably reflects a combination of underreporting and informal activity.

E. Conclusion

A conservative estimate of the size of the informal sector, derived from information contained in household surveys, indicates that it amounts to around 19 percent of official GDP (or about 15 percent of total GDP). However, given the basis of this estimate, namely a narrow definition of informal employment, and the fact that people might be under-declaring their income in the household surveys, this might indeed be a lower bound.

The relative size of the informal sector does not seem to have varied much in recent years. Future developments will depend on employment opportunities in the formal sector, labor market deregulation and tax policy. Within the overall informal sector, the reexport sector experienced a boom through the mid–1990s, but has been declining gradually since then, albeit not yet to below historical levels. This development mainly reflects economic conditions in Brazil and Argentina, and Brazilian import policies, as well as the gradual implementation of a common tariff policy in the Mercosur.

With respect to the national accounts, the fact that the alternative calculations of GDP yielded figures for 1996 and 1997–98 between 119 and 131 percent of official GDP could be taken as an indication that total output may be underestimated by this amount. Given our estimates of the informal sector, however, and taking into consideration the BCP's calculation methodology, it is noteworthy that not only part of informal sector activity may be escaping official documentation. Other omissions might be attributable to contraband and underreporting of formal activity. In any event, the general result that almost half of the urban workforce, engaged in informal activity, is producing less than one sixth of total output seems to corroborate concerns about inefficiencies which need to be addressed.

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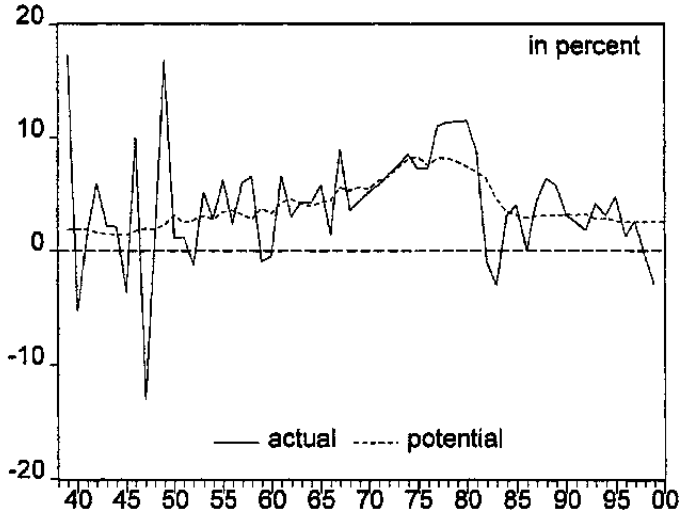
[15] A recent study found that a comparison of export data and national accounts statistics imply that 253.3 percent of all clothing or 418.9 percent of all vegetable oil produced are being exported. (Competitividad de las Actividades Industriales, Ramiro Rodriguez Alcala, mimeo).

III. Potential Output [1]

This note derives estimates of potential output and total factor productivity in Paraguay by examining trends in output, investment and population growth.

Figure 3 shows a historical time series of real GDP growth, together with an estimate for potential output that is derived below. The figure illustrates the stagnation during the politically unstable period that followed on the Chaco war (1932–38) and led up to the civil war of 1947/48, which is marked by a pronounced recession. Growth recovers towards the end of the 1950s, accelerates during the 1960s, and culminates in the boom of the late 1970s. This boom was related to the construction of the Itaipú hydroelectric dam on the border with Brazil. During the 1980s, the country slides into a prolonged recession, and since then, Paraguay has experienced virtually no growth in per-capita income.

Figure 3. Actual and Potential GDP Growth in Paraguay, 1938–99



A. The Input Method

Assume that the supply side of the model is given by a Cobb-Douglas production function:

$$Y = AK^{\alpha}N^{1-\alpha}$$

where Y is output, A is total factor productivity, K is capital and N is labor. Alternatively, with lower-case letters denoting logs,

$$y = a + \alpha k + (1-\alpha)n$$

[1] Prepared by Benedikt Braumann.

Data permitting, potential output can be calculated as the sum of inputs and total factor productivity. Rather long time series are available on population and real GDP by expenditure for Paraguay. A World Bank country study[2] contains real GDP numbers dating back to the end of the Chaco war in 1938. Population data are available in the Fund's *International Financial Statistics* since 1945 and can be extrapolated to earlier years, as the growth rate was quite stable. There are, however, no data on the capital stock. The strategy of this paper is to calculate potential GDP as follows: (1) a capital stock series is constructed, (2) capital and labor inputs are subtracted from actual GDP to obtain total factor productivity, and (3) a Hodrick-Prescott filter is applied to productivity to extract a trend. Trend productivity is then added back onto the inputs to obtain potential GDP.

B. Estimating the Capital Stock

With a long time series on investment at hand, it is possible to estimate the capital stock with a sufficient degree of precision. The approach that will be used is known as the *perpetual-inventory method.* A time series of the capital stock is constructed from real investment data plus two assumptions concerning the initial capital stock and the rate of depreciation.[3] In general, the capital stock evolves according to:

$$K_{t+1} = (1-\delta)\, K_t + I_t$$

If the capital stock of the year 1938 and the depreciation rate δ were known, then constructing the time series would just mean adding net investment to the initial capital stock. However, both need to be estimated. The assumption about the initial value is less critical, since this value completely depreciates within 10–20 years. As one moves to later years, the capital stock series is driven mainly by new investment. The series is more sensitive with regards to the choice of the depreciation rate. For industrialized countries, a value of 5 percent per year is generally used. It is often argued, however, that depreciation in developing countries is higher, because the structure of their economies is changing more rapidly. In Paraguay, a benchmark estimate of 10 percent per year will be used. The reasons for this choice will be discussed below in conjunction with the behavior of the Solow

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[2] World Bank (1992): Informe Económico de Paraguay.

[3] This approach goes back to the growth accounting literature of the 1960. A recent description can be found in Barro and Sala-i-Martin (1995): *Economic Growth*, Cambridge University Press, p. 384.

residual. The initial capital stock is constructed by using the fact that over the long run (in the steady state), the growth rates of output and capital tend to be equal:

$$g_K = g_Y$$

Combining this with the equation on capital accumulation yields the steady-state relation

$$K^* = I^* / (g_Y + \delta)$$

where a star denotes steady state values. For g_Y, the average growth rate of 4.2 percent per year during the period 1938–99 will be used.

As Figure 4 shows, investment as a percent of GDP remained fairly low until the mid 1950s, reflecting the pronounced political instability that characterized the aftermath of the Chaco war. After the situation calmed down, the investment ratio began to climb and peaked at almost 30 percent of GDP in 1981, as construction at Itaipú—the world's largest hydroelectric plant—was completed. In the mid–1980s, the investment ratio fell back to around 20 percent, with a declining trend in the late 1990s.

Figure 4. Investment in Percent of GDP

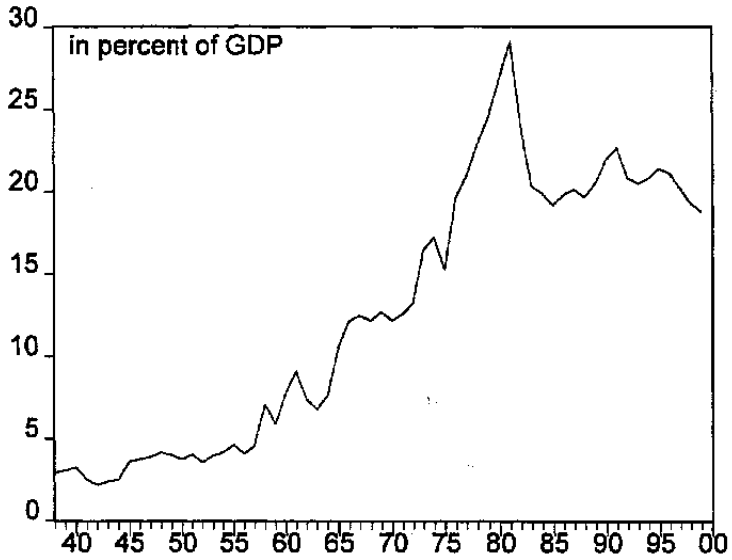
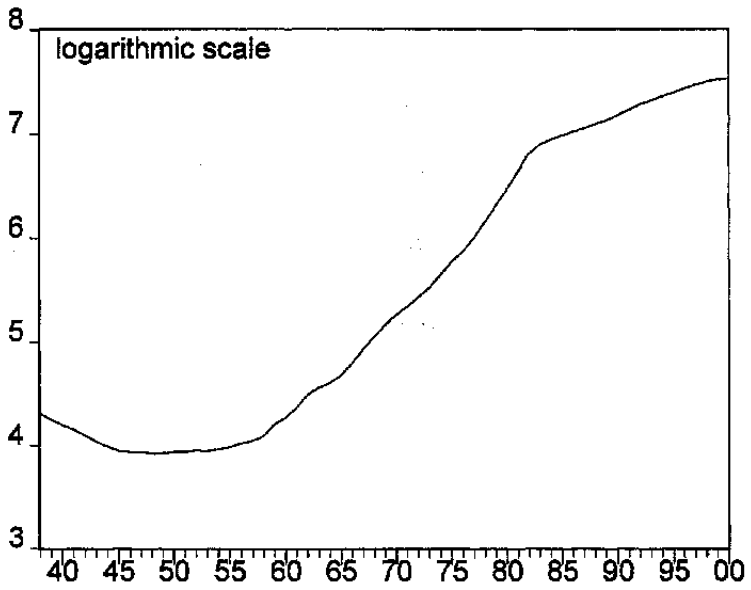


Figure 5 shows the resulting capital stock series for Paraguay in billions of 1982 guaranies (in logs). As a result of very low investment, the capital stock declined during the 1940s and early 1950s. Then, growth resumed and capital increased at an accelerating rate until the early 1980s, when Itaipú was completed. Subsequent capital accumulation continued at a slower pace, contributing to the disappointing growth performance of the last two decades. The capital-labor ratio has remained approximately constant since 1983, suggesting that there was almost no capital deepening in the economy.

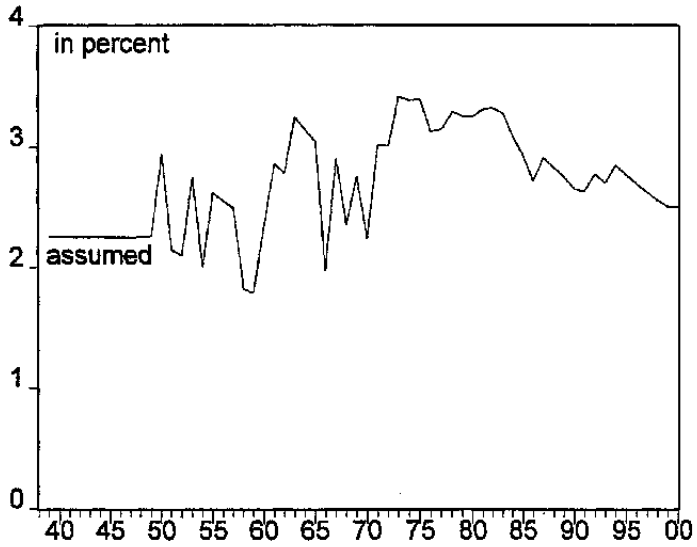
Figure 5. Capital Stock of Paraguay, 1938–99



C. Population Growth

Figure 6 shows the growth rate of population, which is taken as a proxy for the growth of labor. This variable reaches a maximum of 3½ percent during the late 1970s and early 1980s, after which it slowly declines to 2.6 percent in 1999.

Figure 6. Population Growth in Paraguay, 1938–99



D. The Solow Residual

By subtracting capital and labor from real GDP, a time series for factor productivity can be obtained. However, an assumption has to be made about the income shares of labor and capital (1-α and α, respectively) in the production function. Household surveys show that around 85 percent of average income are wages and salaries, and 15 percent originate from capital.[4] This is consistent with data from national accounts statistics: the share of dependent labor in national income was 37 percent in 1998. 58 percent of income was produced in small and family-run businesses. Assuming that at least 80 percent of the latter corresponds to labor and adding it to the 37 percent of wage income, confirms a total labor share of around 0.85.[5]

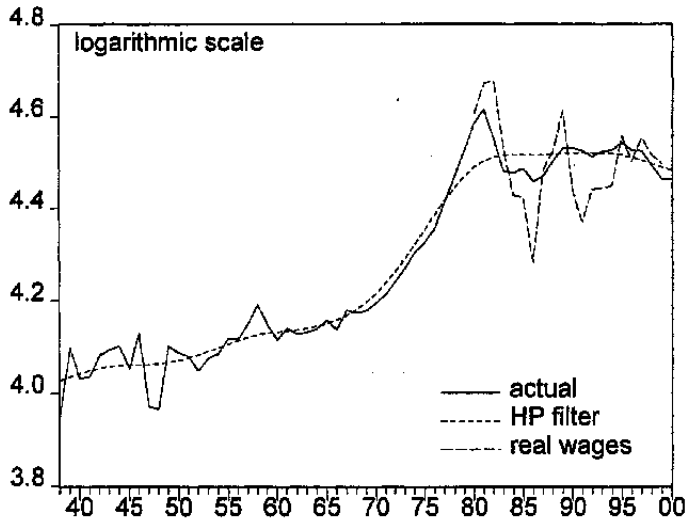
Figure 7 shows the resulting time series for factor productivity a, and a Hodrick-Prescott smoothing. It is worrisome to find factor productivity on a slow decline during the last two decades, by an overall 4 percent between 1980 and 1999. This stands in marked contrast to the experience of other countries with a similar record of macroeconomic stability as Paraguay. Independent confirmation of this trend comes from labor market data. Real wages (expressed in producer prices) followed a similar decline of around 4 percent over the same period of time, which suggests that the economy leveled off at a low steady state. In a steady state, real wages grow at roughly the same pace as factor productivity, and the ratio of capital to labor is constant. Both phenomena are observed in Paraguay since 1982, highlighting the shortcomings of the country's present growth model, which is based on raw input expansion

[4] See also the study on the informal sector in Section II.

[5] Part of wages and salaries are remuneration for human capital services. However, this section limits its discussion to only two factors of production.

only. Owing to a scarcity of infrastructure and human capital, and to problems in governance and the judicial system, total factor productivity has not grown in line with basic inputs. Paraguay is thus beginning to experience diminishing returns on raw labor and physical capital, the factors that were the traditional engines of growth.

Figure 7. Total Factor Productivity (the Solow Residual) in Paraguay



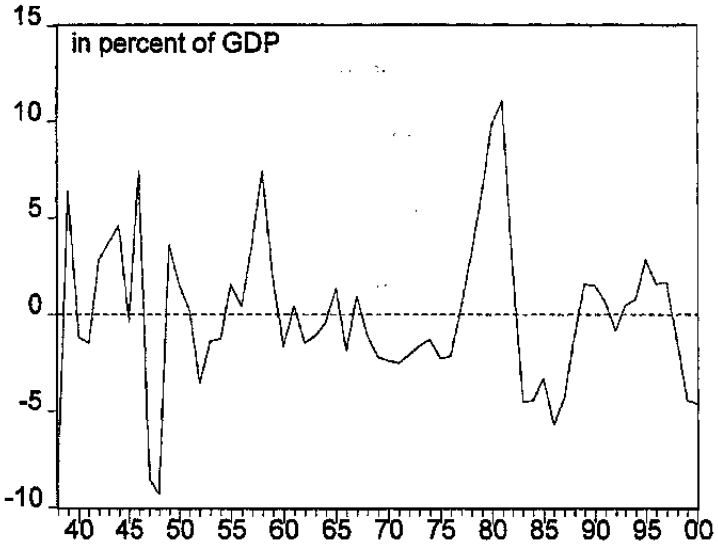
The disappointing productivity performance warrants more detailed scrutiny. To gauge the effects of data deficiencies, sensitivity analyses were conducted with respect to investment and GDP data, as well as to the parametric assumptions. As noted in section 3 of this report, official numbers might underestimate true GDP by between 15 and 24 percent, due to the presence of unidentified informal activities. However, as shown in the same section, the relative size of the informal sector seems to be constant over time. As long as investment data are accurate and the process of capital accumulation is captured adequately, this bias does not affect the trend of productivity. It only leads to a parallel downward shift in the level of the Solow residual. The situation would be different if investment data have large measurement errors or if the assumption on depreciation is inappropriate. An over-estimation of investment could mean that some productivity growth is not identified. However, in the national accounts statistics of Paraguay, investment is probably the most reliable and easiest to derive category. Since the country imports basically all its capital equipment, the time series can easily be reconstructed by adding capital imports to the volume of construction. Thus, the measurement error appears not to be large. On the other hand, a lower estimate for depreciation (say, 7.5 percent) would lead to an even stronger decline in productivity. By referring to the behavior of real wages mentioned above, the choice of 10 percent for the depreciation rate seems defensible. Finally, the trend in total factor productivity is sensitive to the choice of the parameter α. A higher labor share leads to faster productivity growth. The chosen value of 0.85 may already be on the high side, being slightly above common estimates for industrialized countries.

To sum up, the case for stagnating or even declining productivity in Paraguay is quite robust. Likely reasons for this decline include the neglect of infrastructure, education and health, but also the weak judiciary system and pervasive governance problems. This creates a climate of uncertainty about basic property rights and important disincentives to invest.

E. Potential Output and the Output Gap

Adding together the capital stock, population and trend factor productivity gives an estimate for potential output. The growth rate of potential GDP has averaged 2.6 percent per year during the 1990s, or slightly less than the rate of population growth. Figure 8 shows the output gap obtained with this estimate for potential output. The output gap is defined as the percentage deviation of actual from potential output. The figure shows the recession of the mid–1980s, which followed an unsustainable boom towards the completion of Itaipú. The economy recovered during the early 1990s, and overheated in the mid–1990s on account of a boom in the financial sector and busy border trade around Ciudad del Este. The banking crisis put an end to this expansion, and a severe regional terms-of-trade shock pushed Paraguay to more than 4 percent below potential in 1999.

Figure 8. The Output Gap in Paraguay



F. Summing Up

After the end of the construction boom of Itaipú in the early 1980s, the traditional growth model of Paraguay appears exhausted and the country has stagnated in terms of income per-capita. Most worrisome is the absence of growth in factor productivity. This may be linked to deficiencies in education, health and infrastructure, but also to a weak judiciary and governance problems. Potential GDP growth has averaged only 2.6 percent over the 1990s, or just about the rate of population growth. In recent years, a financial crisis and a severe deterioration of the terms-of-trade have pushed the country to several points below this potential.

Table 8. Historical Data on the Production Function

	Actual GDP 1/	Growth 2/	Potential GDP 1/	Growth 2/	Output gap 2/	Capital Stock 1/	Population 3/
1938	104.4		112.8		-7.8	74.4	1.06
1939	122.4	17.2	114.8	1.8	6.3	69.9	1.09
1940	115.9	-5.3	117.0	1.9	-1.2	66.6	1.11
1941	117.7	1.6	119.2	1.9	-1.5	63.7	1.14
1942	124.6	5.9	121.1	1.6	2.8	60.2	1.16
1943	127.3	2.2	122.9	1.4	3.7	56.9	1.19
1944	130.0	2.1	124.6	1.4	4.6	54.2	1.22
1945	125.3	-3.6	126.3	1.4	-0.4	52.0	1.24
1946	137.7	9.9	128.5	1.7	7.5	51.3	1.27
1947	119.7	-13.1	130.9	1.9	-8.5	51.2	1.30
1948	121.0	1.1	133.4	1.9	-9.3	50.7	1.33
1949	141.4	16.9	136.4	2.2	3.6	50.7	1.36
1950	143.0	1.1	140.7	3.1	1.5	51.2	1.40
1951	144.7	1.2	144.1	2.4	0.3	51.4	1.43
1952	142.9	-1.2	147.9	2.6	-3.6	52.0	1.46
1953	150.2	5.1	152.3	3.0	-1.4	51.8	1.50
1954	154.4	2.8	156.5	2.7	-1.3	52.5	1.53
1955	164.0	6.2	161.8	3.4	1.6	53.7	1.57
1956	167.9	2.4	167.6	3.6	0.4	55.8	1.61
1957	177.9	6.0	172.8	3.1	3.4	57.0	1.65
1958	189.5	6.5	177.5	2.7	7.4	59.3	1.68
1959	187.7	-1.0	184.1	3.7	1.9	66.8	1.71
1960	186.8	-0.5	190.0	3.2	-1.7	71.1	1.75
1961	199.1	6.6	198.0	4.2	0.4	78.5	1.80
1962	205.0	3.0	206.9	4.5	-1.5	88.8	1.85
1963	213.7	4.2	215.5	4.1	-1.1	95.1	1.91
1964	222.6	4.2	223.9	3.9	-0.4	100.0	1.97
1965	235.4	5.8	233.4	4.2	1.3	107.0	2.03
1966	238.7	1.4	243.6	4.4	-1.9	120.9	2.07
1967	259.9	8.9	257.1	5.6	0.9	137.8	2.13
1968	269.0	3.5	270.7	5.3	-1.1	156.4	2.18
1969	280.7	4.3	285.9	5.6	-2.2	173.5	2.24
1970	295.2	5.2	301.3	5.4	-2.4	191.7	2.29
1971	312.2	5.8	319.9	6.2	-2.5	208.5	2.36
1972	333.1	6.7	340.8	6.5	-2.1	226.8	2.43
1973	358.0	7.5	365.6	7.3	-1.6	248.3	2.51
1974	388.5	8.5	395.2	8.1	-1.3	282.3	2.60
1975	416.5	7.2	427.7	8.2	-2.3	321.0	2.69
1976	446.7	7.3	459.8	7.5	-2.2	352.4	2.77
1977	495.7	11.0	497.2	8.1	0.3	404.5	2.86

Table 8. Historical Data on the Production Function

	Actual		Potential		Output	Capital	Population 3/
	GDP 1/	Growth 2/	GDP 1/	Growth 2/	gap 2/	Stock 1/	
1978	551.8	11.3	537.6	8.1	3.1	467.9	2.95
1979	614.4	11.3	579.9	7.9	6.2	547.3	3.05
1980	684.8	11.5	622.6	7.4	9.8	643.4	3.15
1981	744.4	8.7	665.8	6.9	11.1	762.7	3.25
1982	737.1	-1.0	707.8	6.3	2.9	903.3	3.36
1983	714.9	-3.0	740.3	4.6	-4.5	989.8	3.47
1984	736.9	3.1	765.8	3.4	-4.5	1,036.0	3.58
1985	766.2	4.0	789.7	3.1	-3.3	1,078.9	3.68
1986	766.2	0.0	812.0	2.8	-5.7	1,117.9	3.78
1987	799.4	4.3	836.7	3.0	-4.3	1,157.6	3.89
1988	850.2	6.4	862.6	3.1	-1.1	1,202.9	4.00
1989	899.5	5.8	889.1	3.1	1.6	1,249.5	4.11
1990	927.3	3.1	916.7	3.1	1.5	1,309.3	4.22
1991	950.2	2.5	945.6	3.2	0.7	1,381.8	4.33
1992	967.3	1.8	975.9	3.2	-0.8	1,459.0	4.45
1993	1,007.4	4.1	1,003.2	2.8	0.5	1,514.7	4.57
1994	1,038.5	3.1	1,031.1	2.8	0.8	1,569.7	4.70
1995	1,087.4	4.7	1,057.8	2.6	2.9	1,628.7	4.83
1996	1,101.2	1.3	1,084.0	2.5	1.6	1,698.5	4.96
1997	1,129.7	2.6	1,111.0	2.5	1.7	1,761.2	5.09
1998	1,125.0	-0.4	1,138.5	2.5	-1.2	1,813.8	5.22
1999	1,115.9	-3.0	1,166.8	2.5	-4.5	1,849.8	5.35
2000	1,141.6		1,196.0	2.5	-4.6	1,869.8	5.48

1/ In billions of Guaranies of 1982.
2/ In percent.
3/ In millions.

IV. Fiscal Impulse in Paraguay[1]

This note estimates the direction and size of the *fiscal impulse* on the economy of Paraguay. The fiscal impulse measures the extent of discretionary changes in fiscal policy, after filtering out cyclical effects. These cyclical effects—the so-called *automatic stabilizers*—make the public sector balance a poor indicator of the overall direction of fiscal policy. A deterioration of the fiscal balance, e.g., might not always be expansionary. During a recession, automatic stabilizers widen the deficit naturally, as tax receipts fall and unemployment benefits rise. The calculations below show that most of the recent deterioration in the public finances of Paraguay was due to cyclical effects. The fiscal impulse has been close to zero since 1998.

A. Measuring the Cycle: Potential vs. Actual Output

Potential output grew at an average rate of 2.6 percent per year during the 1990s, which was slightly below the increase in population. Actual GDP grew above potential during the mid–1990s, but experienced a significant downturn after 1997. Negative growth in both 1998 and 1999 has resulted in an output gap of some estimated 4½ percent of GDP (see Figure 5 in Section III).

B. Isolating Automatic Stabilizers: The Cyclically Passive Balance

The benchmark for an assessment of the fiscal impulse is the *cyclically neutral, or passive, balance*. Such a balance would result from allowing only the automatic stabilizers to play. To proxy this situation, discretionary expenditures are maintained as an unchanged proportion of long-run GDP (potential output), while tax rates are left constant. In other words, imagine a government that takes its hands off from fiscal policy, making the resulting balance endogenous to the cycle. The fiscal impulse can be derived by comparing the balance that results in this passive scenario to the actual outcome.[2] In particular, taxes are frozen as a ratio of *actual* GDP. This way, tax receipts will vary with the cycle. The same treatment is given to the operating surplus of public enterprises, since the sales of these entities are also sensitive to the cycle. Because there is no unemployment insurance and very few welfare programs, the cyclically sensitive expenditures are minimal in Paraguay and will be ignored.

All other expenditures are assumed to be insensitive to the cycle, and to follow a constant proportion of potential GDP. This captures the notion that the government has to meet a demand for public goods that follows trend growth. On the other hand, two revenue items in

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[1] Prepared by Benedikt Braumann.

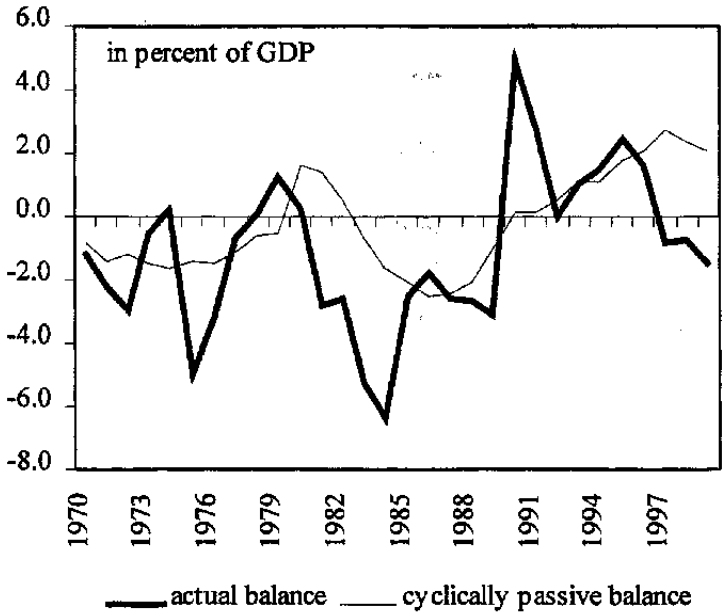
[2] Cyclical fiscal analysis takes no view of the underlying structural balance. The approach thus has clear limitations in the medium run. For this reason, we shall later concentrate our attention to the 1990s only.

Paraguay are neither cyclically sensitive nor under the direct control of the state. Interest payments follow a pattern that is determined by past public debt obligations, and nontax revenues consist mainly of royalties from the hydroelectric plant of Itaipú. Power generation in turn depends on the amount of rainfall in the upper reaches of the Paraná, and is exogenous. These two components are taken at their actual value for the calculation of the cyclically passive balance. The assumptions can be summarized in the following equation:

$$d^* = t_b y - g_b y^* + z$$

where d^* is the cyclically passive deficit, t_b and g_b are tax and expenditure ratios frozen at the base year level, in which actual and potential output are deemed to be equal. y is actual output, y^* is potential output and z are exogenous factors, such as interest costs and royalties.

Figure 9. Actual and Cyclically Passive Balance of the Public Sector in Paraguay.



An important question is the choice of the base year. This determines the levels at which tax rates and expenditures are frozen. Ideally, the base year has output close to potential, with fiscal policy on a sustainable path. For recent years in Paraguay, 1993 has the smallest output gap with 0.4 percent. Public finances—defined as the balance of the nonfinancial public sector—recorded a small surplus and the structure of the budget was quite representative for the 1990s.[3] Figure 9 shows the actual and the cyclically adjusted deficit for Paraguay over the period 1970–99.

[3] During the banking crisis of 1995-98, the central bank of Paraguay is estimated to have incurred quasi-fiscal costs of up to 2½ percent of GDP per year. The system of multiple

(continued...)

A particular problem concerns the measurement of the deficit on an accrual or cash basis. In Paraguay, the public sector often incurs arrears, which drive a wedge between the accrual and cash deficit. This section will mainly draw on accrual data, because a continuous time series exists since 1970. However, a comparison with the cash deficit (which is available only since 1995) shows that the qualitative differences are not very large.

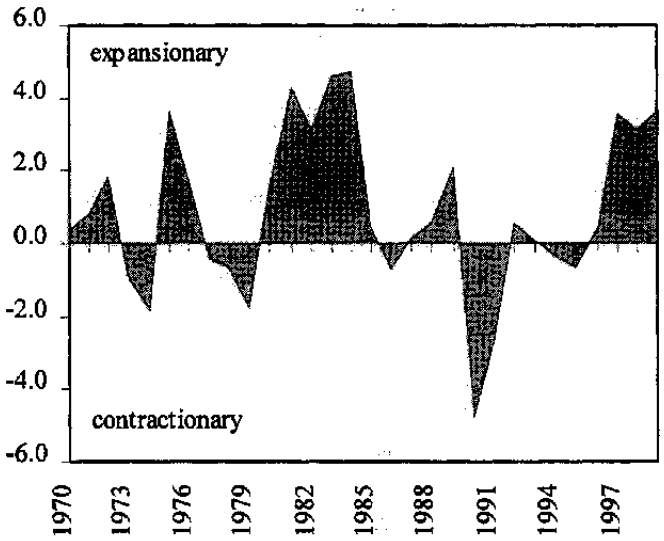
C. Fiscal Stance and Fiscal Impulse

The *fiscal stance* is defined as the difference between the cyclically passive and the actual balance. A positive sign is identified with a lax, a negative sign with a tight fiscal stance. In equation form:

$$STANCE = d_t^* - d_t$$

Figure 10 shows the fiscal stance for the period 1970–99.

Figure 10. The Fiscal Stance in Paraguay, 1970–99, in Percent of GDP



A strong expansion in 1997 has resulted in a positive fiscal stance over the most recent years. The public sector balance has worsened below the cyclically passive benchmark. A further relaxation of the fiscal stance should be considered risky, as it limits the flexibility of fiscal

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exchange rates in the late 1980s is also likely to have caused quasi-fiscal costs. In principle, these costs should be included in the calculations of the fiscal impulse. However, since the data record on quasi-fiscal activities is sketchy and short, this paper concentrates on the non-financial public sector.

policy over the longer term and eventually calls for a retrenchment. Such a retrenchment could happen during a recession, when the overall balance is worst, causing destabilizing procyclical effects. However, for several reasons, the fiscal stance is not an ideal gauge of fiscal policy. First, it is sensitive to the choice of the base year. A different base year can lead to a vertical shift of the time series in Figure 10. Second, the structure of the budget may change over long time intervals, according to changes in relative prices and shifting demands for public goods. Third, the ease of accessing debt financing and the relation between real interest rates and GDP growth can lead to a changing "sustainable" deficit over time. Therefore, the fiscal stance (or the structural deficit) does not necessarily suggest a "correct" level of the public sector deficit. It is a static concept that serves well as an intermediate step in calculating the fiscal impulse.

The *fiscal impulse* is defined as the first difference of the fiscal stance. It is independent of the choice of base year. A positive sign means that fiscal policy is becoming more expansionary, a negative sign means it is becoming more contractionarys The fiscal impulse is measured in percentage points of GDP and can be understood as the dynamic shock that fiscal policy sends to the rest of the economy. In equation form, the fiscal impulse can be written as:

$$IMPULSE = \Delta\, STANCE = (d_t^* - d_t) - (d_{t-1}^* - d_{t-1})$$

Figure 11 shows the fiscal impulse for Paraguay for the 1990s.

Figure 11. Fiscal Impulse in Paraguay, 1990–99

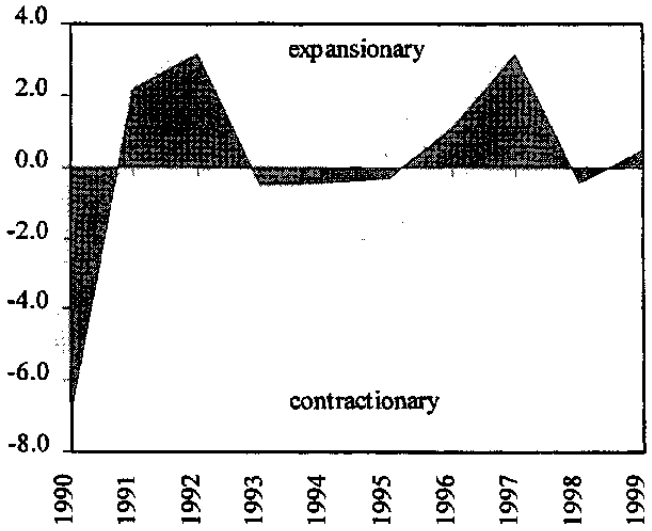


Figure 11 shows clearly the marked adjustment of 1990, a year after the transition of Paraguay to democracy. The country's foreign debt burden had become unsustainable at over 50 percent of GDP, and forced the government to pursue fiscal surpluses. The data also

suggest the establishment of an electoral cycle. The fiscal impulse is most expansionary in 1992 and 1997, the years that preceded presidential elections. In both cases, the impulse turns contractionary right after the elections. Although the actual deficit widened further in 1998 and 1999, this was primarily a consequence of the recession and not of a further relaxation of policies. The fiscal impulse of the last two years was roughly neutral.

D. An Analytical Breakdown of the Fiscal Impulse

Figure 12 breaks down the fiscal impulse by sector. A pronounced swing in the finances of public enterprises was at the heart of the large adjustment of 1990. For the first time since 1970, public enterprises recorded an overall surplus. The following relaxation was caused mainly by the central government, which was expansionary in six out of ten years. In contrast, the social security system was contractionary in six of ten years, due to the young demographics of Paraguay which ensure a large excess of contributors over beneficiaries. A notable exception to this trend were the years 1997 and 1998, when the system suffered losses from a failed investment strategy. Temporarily, the stance of the central government tightened in 1998, as tax collections improved and current expenditures were kept under firm control. Tax collections slackened again in 1999, leading to renewed expansion.

Figure 12. Breakdown of the Fiscal Impulse by Public Entities, 1990–99

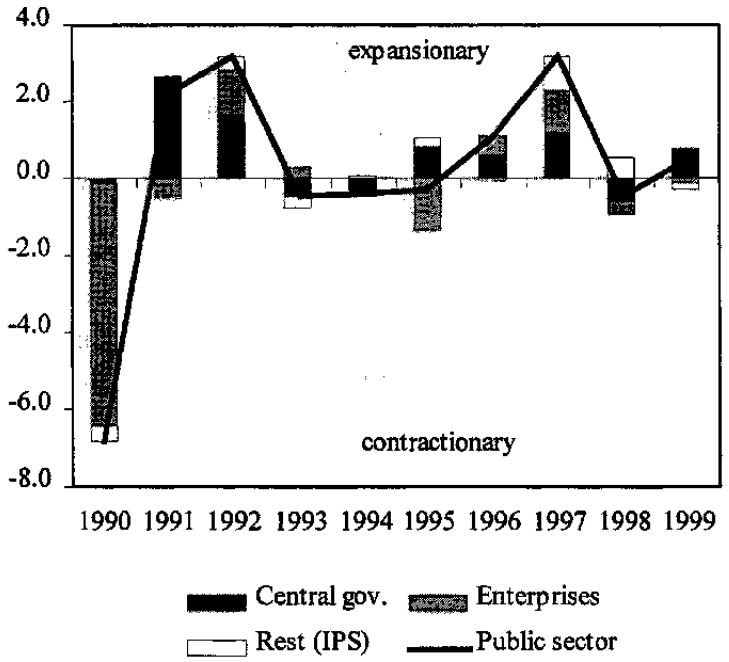
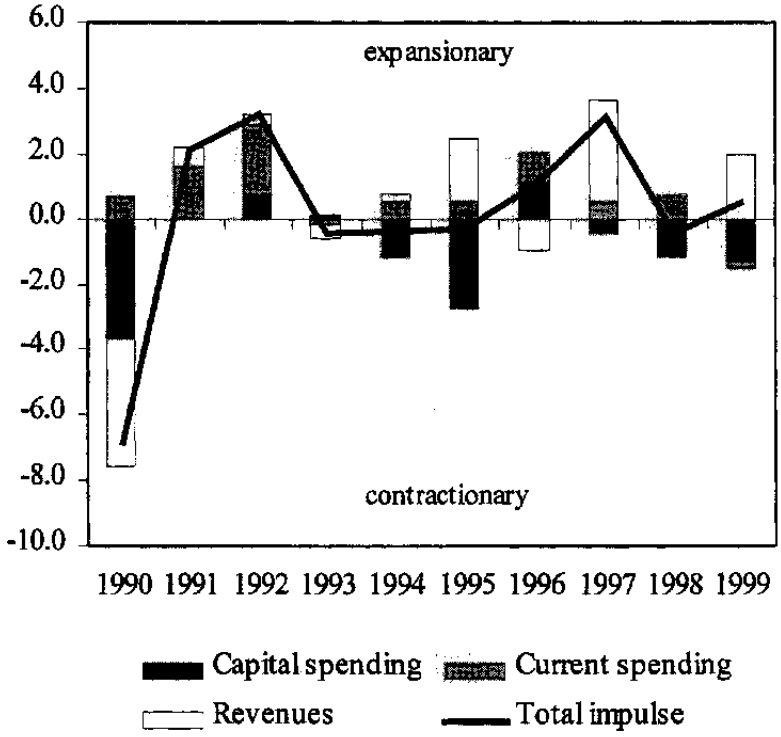


Figure 13 examines the fiscal impulse according to economic classification. It can be seen that the improvement in the finances of public enterprises—the driving force behind the adjustment of 1990—was achieved by a combination of tariff increases and cuts in investment. Most of the following expansion was due to increases in current spending in the

central government, as wage outlays doubled in percent of GDP between 1990 and 1999. In contrast, capital spending contributed a negative impulse in five out of ten years. Investment was often treated as a residual in the process of budgetary resource allocation, leading to an increasingly inefficient mix of public sector output, and to persisting deficiencies in public infrastructure.

Figure 13. Fiscal Impulse by Economic Classification, 1990–99



The fiscal impulse methodology filters out cyclical effects from public finances and measures deliberate changes in fiscal policy. Calculations for Paraguay show a sizeable fiscal expansion in 1997, before the last presidential elections. In contrast, the deterioration of the public sector balance during 1998–99 was mainly driven by a cyclical downturn, as the fiscal impulse remained roughly neutral.

Table 1. Paraguay: National Accounts at Current Prices

	1995	1996	1997	1998	Staff Est. 1999
	(In billions of guaranies)				
GDP at market prices	**17,698.6**	**19,804.8**	**20,934.4**	**23,437.0**	**24,853.7**
Consumption expenditure	**14,305.3**	**16,496.5**	**16,718.3**	**18,578.7**	**19,939.2**
Private sector	12,675.5	14,529.4	14,528.6	15,972.5	17,331.0
Public sector	1,629.8	1,967.0	2,189.7	2,606.2	2,608.1
Gross domestic investment	**4,234.6**	**4,635.1**	**4,930.1**	**5,373.8**	**5,418.1**
Private sector	3,396.7	3,763.7	3,928.0	4,171.3	3,448.5
Public sector	941.9	877.6	1,565.3	1,802.9	1,969.6
Fixed capital formation	4,082.8	4,478.4	4,749.1	5,168.2	5,175.1
Changes in inventories	151.8	156.7	181.0	205.6	243.0
Gross domestic expenditure	**18,539.9**	**21,131.6**	**21,648.4**	**23,952.5**	**25,357.3**
Net exports	**-841.3**	**-1,326.8**	**-714.0**	**-515.5**	**-503.6**
Exports of goods and nonfactor service	9,453.8	9,048.0	9,871.5	11,885.3	10,289.1
Imports of goods and nonfactor service	-10,295.1	-10,374.8	-10,585.6	-12,400.8	-10,792.7
	(In percent of GDP)				
GDP at market prices	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Consumption expenditure	**80.8**	**83.3**	**79.9**	**79.3**	**80.2**
Public sector	9.2	9.9	10.5	11.1	10.5
Private sector	71.6	73.4	69.4	68.2	69.7
Gross domestic investment	**23.9**	**23.4**	**23.6**	**22.9**	**21.8**
Private sector	19.2	19.0	18.8	17.8	13.9
Public sector	5.3	4.4	7.5	7.7	7.9
Fixed capital formation	23.1	22.6	22.7	22.1	20.8
Changes in inventories	0.9	0.8	0.9	0.9	1.0
Gross domestic expenditure	**104.8**	**106.7**	**103.4**	**102.2**	**102.0**
Net exports	**-4.8**	**-6.7**	**-3.4**	**-2.2**	**-2.0**
Exports of goods and nonfactor service	53.4	45.7	47.2	50.7	41.4
Imports of goods and nonfactor service	-58.2	-52.4	-50.6	-52.9	-43.4

Sources: Central Bank of Paraguay; and Fund staff estimates.

Table 2. Paraguay: National Accounts at Constant Prices

	1995	1996	1997	1998	Staff Est. 1999
	(In millions of 1982 guaranies)				
GDP at market prices	**1,087.4**	**1,101.2**	**1,129.7**	**1,124.9**	**1,115.9**
Consumption expenditure	**1,034.0**	**1,059.3**	**1,091.7**	**1,084.5**	**1,004.2**
Private sector	928.2	942.9	973.0	964.9	892.3
Public sector	105.8	116.3	118.7	119.5	111.9
Gross domestic investment	**254.6**	**254.3**	**249.1**	**237.5**	**224.0**
Private sector	204.2	206.6	197.8	181.1	166.1
Public sector	50.4	47.7	51.3	56.4	57.9
Fixed capital formation	232.7	232.5	228.8	217.4	204.0
Change in inventories	21.9	21.8	20.3	20.1	20.0
Gross domestic expenditure	**1,288.6**	**1,313.6**	**1,340.8**	**1,322.0**	**1,228.2**
Net exports	**-201.2**	**-212.4**	**-211.1**	**-197.0**	**-112.3**
Exports of goods and nonfactor service	427.4	377.9	355.6	330.0	274.2
Imports of goods and nonfactor service	-628.6	-590.3	-566.7	-527.0	-386.5
	(Percentage change)				
GDP at market prices	**4.7**	**1.3**	**2.6**	**-0.4**	**-0.8**
Consumption expenditure	**3.5**	**2.4**	**3.1**	**-0.7**	**-7.4**
Private sector	2.6	1.6	3.2	-0.8	-7.5
Public sector	12.1	10.0	2.0	0.7	-6.4
Gross domestic investment	**7.1**	**-0.1**	**-2.0**	**-4.7**	**-5.7**
Private sector	19.2	1.2	-4.2	-8.5	-8.3
Public sector	-24.2	-5.3	7.5	10.0	2.6
Fixed capital formation	7.7	-0.1	-1.6	-5.0	-6.1
Changes in inventories 1/	0.0	0.0	-0.1	0.0	0.0
Gross domestic expenditure	**4.2**	**1.9**	**2.1**	**-1.4**	**-7.1**
Net exports 1/	**-0.3**	**-1.0**	**0.1**	**1.2**	**7.5**
Exports of goods and nonfactor service	16.9	-11.6	-5.9	-7.2	-16.9
Imports of goods and nonfactor service	11.4	-6.1	-4.0	-7.0	-26.7

Sources: Central Bank of Paraguay; and Fund staff estimates.

1/ Contribution to GDP growth.

Table 3. Paraguay: Savings-Investment Balance

(In percent of GDP)

	1995	1996	1997	1998	Staff Est. 1999
GDP at market prices	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Domestic expenditure	**104.8**	**106.7**	**103.4**	**102.2**	**102.0**
Consumption	**80.8**	**83.3**	**79.9**	**79.3**	**80.2**
Private sector	71.6	73.4	69.4	68.2	69.7
Public sector	9.2	9.9	10.5	11.1	10.5
Gross domestic investment	**23.9**	**23.4**	**23.6**	**22.9**	**21.8**
Private sector	19.2	19.0	18.8	17.8	13.9
Public sector	5.3	4.4	7.5	7.7	7.9
Gross national savings	**20.8**	**18.2**	**21.1**	**21.7**	**20.3**
Private sector	13.0	12.1	14.4	14.7	13.9
Public sector 1/	7.8	6.1	6.7	7.0	6.4
Current account balance	**-3.1**	**-5.2**	**-2.5**	**-1.3**	**-1.5**
Private savings-investment balance	-5.6	-6.8	-1.7	-0.5	0.0
Public sector overall balance	2.5	1.7	-0.8	-0.7	-1.5

Source: Central Bank of Paraguay; and Fund staff estimates.

Table 4. Paraguay: GDP by Sector of Origin at Current Prices

	1995	1996	1997	1998	Staff Est. 1999
	(In billions of guaranies)				
GDP at market prices	**17,698.6**	**19,804.8**	**20,934.4**	**23,437.0**	**24,853.7**
Primary sector	**4,446.1**	**5,115.5**	**5,217.8**	**5,795.9**	**7,156.8**
Agriculture	2,754.1	3,331.8	3,201.5	3,492.4	4,365.2
Livestock	1,072.2	1,106.7	1,278.4	1,470.1	1,951.4
Forestry	540.4	587.1	640.8	725.0	686.0
Hunting and fishing	20.3	23.0	25.3	28.8	34.6
Mining	59.2	67.0	71.8	79.5	119.6
Secondary sector	**4,585.7**	**5,149.3**	**5,487.0**	**6,213.4**	**6,175.9**
Manufacturing	2,769.7	3,062.6	3,193.1	3,631.5	3,385.3
Construction	1,053.7	1,199.3	1,308.2	1,433.1	1,291.7
Utilities	762.4	887.4	985.7	1,148.9	1,498.9
Services	**8,666.8**	**9,540.0**	**10,229.6**	**11,427.6**	**11,521.1**
Transport and communications	650.6	729.4	808.1	913.9	1,216.0
Commerce and finance	5,217.2	5,598.1	5,787.4	6,309.9	5,772.8
General Government	774.6	930.2	1,065.4	1,181.8	1,454.3
Real estate and housing	377.7	427.1	466.2	515.8	686.0
Other services	1,646.7	1,855.1	2,102.6	2,506.2	2,392.0
	(In percent of GDP)				
GDP at market prices	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Primary sector	**25.1**	**25.8**	**24.9**	**24.7**	**28.8**
Agriculture	15.6	16.8	15.3	14.9	17.6
Livestock	6.1	5.6	6.1	6.3	7.9
Forestry	3.1	3.0	3.1	3.1	2.8
Hunting and fishing	0.1	0.1	0.1	0.1	0.1
Mining	0.3	0.3	0.3	0.3	0.5
Secondary sector	**25.9**	**26.0**	**26.2**	**26.5**	**24.8**
Manufacturing	15.6	15.5	15.3	15.5	13.6
Construction	6.0	6.1	6.2	6.1	5.2
Utilities	4.3	4.5	4.7	4.9	6.0
Services	**49.0**	**48.2**	**48.9**	**48.8**	**46.4**
Transport and communications	3.7	3.7	3.9	3.9	4.9
Commerce and finance	29.5	28.3	27.6	26.9	23.2
General Government	4.4	4.7	5.1	5.0	5.9
Real estate and housing	2.1	2.2	2.2	2.2	2.8
Other services	9.3	9.4	10.0	10.7	9.6

Sources: Central Bank of Paraguay; and Fund staff estimates.

Table 5. Paraguay: GDP by Sector of Origin at Constant Prices

	1995	1996	1997	1998	Staff Est. 1999
	(In millions of 1982 guaranies)				
GDP at market prices	**1,087.4**	**1,101.2**	**1,129.7**	**1,124.9**	**1,115.9**
Primary sector	**293.1**	**296.9**	**312.4**	**313.2**	**321.3**
Agriculture	174.6	176.6	186.8	188.1	196.0
Livestock	81.9	83.3	87.9	87.2	87.6
Forestry	30.1	30.4	31.0	31.1	30.8
Hunting and fishing	1.4	1.5	1.5	1.6	1.6
Mining	5.1	5.1	5.2	5.4	5.4
Secondary sector	**276.6**	**278.2**	**280.7**	**283.9**	**277.3**
Manufacturing	161.3	157.8	157.5	159.0	152.0
Construction	58.0	59.8	60.4	61.0	58.0
Utilities	57.2	60.7	62.9	63.9	67.3
Services	**517.7**	**526.0**	**536.5**	**527.8**	**517.3**
Transport and communications	50.9	52.2	54.2	55.8	54.6
Commerce and finance	282.6	279.8	280.3	268.5	259.2
General Government	55.2	60.7	64.9	63.6	65.3
Real estate and housing	29.2	30.0	30.6	31.3	30.8
Other services	99.9	103.4	106.5	108.6	107.4
	(Percentage change)				
GDP at market prices	**4.7**	**1.3**	**2.6**	**-0.4**	**-0.8**
Primary sector	**8.0**	**1.3**	**5.2**	**0.3**	**2.6**
Agriculture	11.5	1.1	5.8	0.7	4.2
Livestock	3.1	1.7	5.5	-0.8	0.5
Forestry	3.1	1.0	2.0	0.2	-0.9
Hunting and fishing	2.4	2.9	3.0	2.0	0.0
Mining	2.9	1.5	2.0	2.5	0.0
Secondary sector	**5.4**	**0.6**	**0.9**	**1.1**	**-2.3**
Manufacturing	3.0	-2.2	-0.2	1.0	-4.4
Construction	4.0	3.0	1.0	1.0	-4.9
Utilities	14.7	6.1	3.6	1.6	5.4
Services	**2.6**	**1.6**	**2.0**	**-1.6**	**-2.0**
Transport and communications	3.5	2.5	3.8	3.0	-2.1
Commerce and finance	1.6	-1.0	0.2	-4.2	-3.5
General Government	7.0	10.0	7.0	-2.0	2.6
Real estate and housing	3.0	3.0	2.0	2.0	-1.4
Other services	2.5	3.5	3.0	2.0	-1.1

Sources: Central Bank of Paraguay; and Fund staff estimates.

Table 6. Paraguay: National Income at Current Prices

	1993	1994	1995	1996	1997	1998
	(In millions of guaranies)					
GDP at market prices	**11,991.7**	**14,960.1**	**17,698.6**	**19,804.8**	**20,934.4**	**23,437.0**
Depreciation of capital	930.7	1,161.0	1,378.1	1,549.9	1,639.2	1,835.0
Indirect taxes	814.5	1,130.2	1,525.8	1,602.7	1,772.6	1,910.9
minus: subsidies	-0.2	-0.2	-0.3	-0.4	-0.4	-0.5
GDP at factor cost	**10,246.7**	**12,669.1**	**14,795.0**	**16,652.5**	**17,523.0**	**19,691.5**
Factor income paid to the world (net)	-43.0	-78.8	-158.8	-145.1	-221.7	-304.5
National income	**10,289.7**	**12,747.9**	**14,953.8**	**16,797.6**	**17,744.6**	**19,996.0**
Compensation of employees	3,583.4	4,632.5	5,769.8	6,443.0	6,610.5	7,360.3
Income of family-run businesses	6,202.6	7,463.8	8,371.9	9,485.2	10,247.2	11,661.5
Profit income of corporations	251.5	326.9	388.1	397.1	385.9	425.6
Direct taxes on enterprises	125.6	209.2	278.2	303.3	294.8	325.1
Profits of public enterprises	128.0	117.1	160.4	179.6	216.6	239.4
minus: interest on internal public debt	-1.4	-1.5	-14.6	-10.5	-10.3	-15.9
	(In percent of GDP)					
Depreciation of capital	5.8	4.6	3.9	3.5	3.3	3.0
Compensation of employees	29.9	31.0	32.6	32.5	31.6	31.4
Income of family-run businesses	51.7	49.9	47.3	47.9	48.9	49.8
Profits	3.2	3.0	3.1	2.9	2.9	2.8

Source: Central Bank of Paraguay, Cuentas Nacionales.

Table 7. Paraguay: National Income at Constant Prices

	1993	1994	1995	1996	1997	1998
	(In millions of 1982 guaranies)					
GDP at market prices	**1,007.4**	**1,038.5**	**1,087.4**	**1,101.2**	**1,129.7**	**1,124.9**
Depreciation of capital	100.7	103.9	108.7	110.1	113.0	112.5
Indirect taxes	80.5	92.6	110.3	105.5	109.1	105.3
minus: subsidies	0.0	0.0	0.0	0.0	0.0	0.0
GDP at factor cost	**826.2**	**842.1**	**868.4**	**885.6**	**907.7**	**907.1**
Factor income paid to the world (net)	-3.3	-5.6	-11.0	-7.9	-12.4	-13.9
National income	**829.5**	**847.7**	**879.4**	**893.5**	**920.0**	**921.1**
Compensation of employees	355.5	364.7	375.6	382.0	392.0	391.1
Income of family-run businesses	423.9	430.9	445.6	454.3	472.6	475.4
Profit income of corporations	20.1	21.7	22.8	21.3	19.3	19.1
Direct taxes on enterprises	12.4	17.1	20.1	20.0	18.1	17.9
Profits of public enterprises	17.8	13.5	16.3	16.6	18.7	18.5
minus: interest on internal public debt	-0.1	-0.1	-1.1	-0.7	-0.7	-0.9
	(Percentage change)					
GDP at market prices	**4.1**	**3.1**	**4.7**	**1.3**	**2.6**	**-0.4**
National income	**4.6**	**2.2**	**3.7**	**1.6**	**3.0**	**0.1**
Compensation of employees	3.6	2.6	3.0	1.7	2.6	-0.2
Income of family-run businesses	5.8	1.6	3.4	2.0	4.0	0.6
Profits	-0.5	-7.2	11.2	-3.2	0.4	-1.1

Source: Central Bank of Paraguay, Cuentas Nacionales.

Table 8. Paraguay: Volume of Agricultural Production 1/

	1993	1994	1995	1996	1997	1998
			(1982 = 100)			
Wheat	598.6	528.6	293.5	764.6	563.4	327.4
Corn	266.2	279.9	494.8	396.5	639.5	167.8
Rice	247.7	259.4	289.5	281.4	301.5	154.4
Manioc	59.5	56.4	68.4	61.7	77.7	174.0
Soybeans	324.7	325.1	400.5	433.6	483.5	174.0
Sugarcane	149.7	149.0	145.6	154.6	157.0	380.8
Cotton	196.9	177.8	215.9	154.4	65.7	150.0
Oranges	77.4	74.2	74.6	75.0	82.0	87.5
Tomatoes	139.7	128.2	132.1	136.4	141.6	80.9
Beans	25.4	25.6	35.7	35.0	44.8	142.1
Bananas	81.9	69.0	63.5	60.8	64.0	66.0
			(Percentage change)			
Memorandum items						
Wheat	29.5	-11.7	-44.5	160.5	-26.3	-42.7
Corn	-2.3	5.1	76.8	-19.9	61.3	-17.2
Soybeans	10.9	0.1	23.2	8.3	11.5	4.6
Cotton	7.5	-9.7	21.4	-28.5	-57.4	0.2

Sources: Central Bank of Paraguay; and Fund Staff estimates.

1/ Agricultural years; for example, 1991 refers to the 1990/91 agricultural year.

Table 9. Paraguay: Value of Agricultural Production 1/

	1992	1993	1994	1995	1996	1997	1998
	(In billions of guaraníes)						
Total production	**1,628.1**	**2,067.6**	**2,447.5**	**3,030.9**	**3,586.3**	**3,479.9**	**3,796.3**
Wheat	67.3	88.1	78.5	54.4	156.4	77.2	47.8
Corn	127.8	144.5	194.8	334.2	429.8	350.5	315.2
Rice	18.4	22.0	30.7	41.3	34.9	36.0	41.1
Manioc	274.2	302.8	380.2	574.2	667.4	530.0	640.2
Soybeans	377.3	557.8	635.7	663.7	1,022.1	1,321.7	1,416.4
Cotton	165.9	257.9	296.7	433.5	238.7	128.2	201.4
Other	597.2	694.5	830.9	929.6	1,037.0	1,036.3	1,134.2
	(Percentage distribution)						
Total production	100.0	100.0	100.0	100.0	100.0	100.0	100
Wheat	4.1	4.3	3.2	1.8	4.4	2.2	1.3
Corn	7.8	7.0	8.0	11.0	12.0	10.1	8.3
Rice	1.1	1.1	1.3	1.4	1.0	1.0	1.1
Manioc	16.8	14.6	15.6	18.9	18.6	15.2	16.9
Soybeans	23.2	27.0	26.0	22.0	28.5	38.0	37.3
Cotton	10.2	12.5	12.1	14.3	6.7	3.7	5.3
Other	36.8	33.5	33.8	30.6	28.9	29.8	29.9

Sources: Central Bank of Paraguay; and Fund staff estimates.

1/ Agricultural years; for example, 1991 refers to the 1990/91 agricultural year.

Table 10. Paraguay: Production, Area Cultivated and Yields of Selected Crops 1/2/

(Production in metric tons; area in thousands of hectares; yields in kg/hectare)

	1993	1994	1995	1996	1997	1998
Corn						
Production	439,145	461,665	816,166	654,074	1,055,661	873,900
Area	249	218	331	325	384	356
Yield	1,763	2,114	2,466	2,015	2,749	2,458
Cotton						
Production	420,772	379,877	461,239	329,751	139,096	222,000
Area	421	381	332	307	111	202
Yield	999	997	1,389	1,075	1,253	1,099
Manioc						
Production	2,655,962	2,517,970	3,054,394	2,757,358	3,155,000	3,300,000
Area	184	174	211	191	220	237
Yield	14,448	14,448	14,448	14,448	14,341	13,942
Rice						
Production	78,125	81,809	91,293	88,747	94,858	100,386
Area	24	24	26	27	29	29
Yield	3,237	3,387	3,497	3,252	3,271	3,464
Soybeans						
Production	1,793,544	1,795,792	2,212,109	2,394,794	2,670,003	2,355,742
Area	635	694	736	833	940	1,086
Yield	2,825	2,587	3,008	2,875	2,840	2,169
Sugarcane						
Production	2,811,460	2,799,318	2,576,000	2,736,000	2,795,000	2,800,000
Area	56	56	56	57	58	58
Yield	50,258	50,314	46,000	48,000	48,190	48,276
Tobacco						
Production	8,471	8,520	6,945	8,156	14,024	13,700
Area	5	5	5	5	8	8
Yield	1,872	1,878	1,534	1,631	1,753	1,756
Wheat						
Production	425,421	375,679	208,617	543,435	400,189	229,173
Area	192	175	172	221	224	201
Yield	2,213	2,149	1,209	2,454	1,787	1,142

Sources: Ministry of Agriculture; and Fund staff estimates.

1/ Agricultural years; for example, 1991 refers to the 1990/91 agricultural year. Data include seeds.

2/ Data may not fully agree with those in Table 8 because of differences in sources and methodology.

Table 11. Paraguay: Value-Added in Manufacturing

	1993	1994	1995	1996	1997	1998
	(In billions of 1982 guaranies)					
All industries	**154.3**	**156.6**	**161.3**	**157.7**	**157.5**	**159.0**
Light consumer industries	**86.3**	**91.4**	**95.3**	**95.1**	**98.9**	**100.8**
Of which: Foodstuffs	49.8	53.2	54.1	55.1	56.9	59.1
Beverages	13.8	15.2	16.7	16.6	17.5	16.9
Shoes	2.5	1.9	2.0	2.2	2.2	2.1
Handicrafts	10.5	10.8	11.5	10.2	10.2	10.3
Printing and publishing	6.6	7.1	7.8	8.1	9.0	9.2
Others	3.2	3.2	3.2	2.9	3.1	3.2
Intermediate products	**65.9**	**63.9**	**64.6**	**61.3**	**58.6**	**58.2**
Of which: Wood and lumber	21.0	23.2	24.5	23.5	24.7	23.5
Textiles	10.2	9.2	10.2	8.1	4.9	6.6
Leather and hides	5.9	5.6	6.1	7.3	7.1	7.0
Petroleum derivatives	8.6	8.8	6.4	5.0	4.1	3.8
Nonmetallic mineral products	6.4	6.0	6.9	6.9	6.7	6.6
Metallic products	1.8	1.0	1.0	1.0	1.0	1.0
Others	12.1	10.0	9.5	9.3	10.1	9.7
Machinery, appliances and transport	**2.0**	**1.4**	1.4	**1.4**	**1.4**	**1.4**
	(Percentage change)					
All industries	**2.0**	**1.5**	**3.0**	**-2.2**	**-0.1**	**1.0**
Light consumer industries	**-0.9**	**5.8**	**4.3**	**-0.3**	**4.0**	**1.9**
Of which: Foodstuffs	-4.4	6.7	1.7	1.8	3.3	3.9
Beverages	14.4	10.7	9.7	-0.2	5.4	-3.4
Shoes	-19.2	-24.7	4.8	10.0	0.0	-4.5
Handicrafts	-4.0	2.7	6.4	-11.5	0.0	1.0
Printing and publishing	20.0	8.6	10.3	3.9	11.1	2.2
Others	-9.1	-1.3	0.8	-10.8	6.9	3.2
Intermediate products	**7.1**	**-3.1**	**1.1**	**-5.2**	**-4.4**	**-0.7**
Of which: Wood and lumber	5.6	10.7	5.8	-4.1	5.1	-4.9
Textiles	0.3	-9.7	10.8	-20.3	-39.5	34.7
Leather and hides	25.2	-5.1	9.3	18.9	-2.7	-1.4
Petroleum derivatives	-19.2	2.3	-27.7	-21.2	-18.0	-7.3
Nonmetallic mineral products	3.8	-6.1	15.2	0.5	-2.9	-1.5
Metallic products	-17.4	-42.2	1.8	-0.8	0.0	0.0
Others	54.0	-17.2	-5.1	-1.6	8.6	-4.0
Machinery, appliances and transport	**-21.2**	**-31.6**	**-0.9**	**0.0**	**-0.9**	**-0.9**
	(Percentage distribution)					
All industries	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Light consumer industries	**56.0**	**58.3**	**59.1**	**60.3**	**62.8**	**63.4**
Of which: Foodstuffs	32.3	34.0	33.5	34.9	36.1	37.2
Beverages	8.9	9.7	10.3	10.6	11.1	10.6
Shoes	1.6	1.2	1.2	1.4	1.4	1.3
Handicrafts	6.8	6.9	7.1	6.4	6.5	6.5
Printing and publishing	4.3	4.6	4.9	5.2	5.7	5.8
Others	2.1	2.0	2.0	1.8	2.0	2.0
Intermediate products	**42.7**	**40.8**	**40.1**	**38.8**	**37.2**	**36.6**
Of which: Wood and lumber	13.6	14.8	15.2	14.9	15.7	14.8
Textiles	6.6	5.9	6.3	5.2	3.1	4.2
Leather and hides	3.8	3.6	3.8	4.6	4.5	4.4
Petroleum derivatives	5.6	5.6	3.9	3.2	2.6	2.4
Nonmetallic mineral products	4.2	3.8	4.3	4.4	4.3	4.2
Metallic products	1.1	0.6	0.6	0.6	0.6	0.6
Others	7.8	6.4	5.9	5.9	6.4	6.1
Machinery, appliances & transport	**1.3**	**0.9**	**0.9**	**0.9**	**0.9**	**0.9**

Sources: Central Bank of Paraguay; and Fund staff estimates.

Table 12. Paraguay: Consumer Price Movements in Asunción 1/

(Annual percentage change)

	Food	Housing	Clothing	Other	All Items
Weights	37.0	27.7	9.0	26.3	100.0
		I. Average			
1992	14.9	14.7	10.9	17.3	15.5
1993	17.3	18.5	12.4	21.5	18.3
1994	20.4	20.2	14.2	23.1	20.6
1995	13.8	14.3	13.7	12.2	13.4
1996	6.3	13.8	6.4	13.2	9.8
1997	4.4	9.1	3.5	9.8	7.0
1998	11.6	9.8	5.8	13.9	11.6
		II. End-of-Period			
1992	19.1	16.4	10.4	19.4	17.8
1993	21.0	17.9	14.3	23.0	20.4
1994	18.2	19.1	13.9	19.1	18.3
1995	7.4	14.3	10.9	12.6	10.5
1996	5.6	11.3	4.6	10.7	8.2
1997	4.2	8.0	3.5	8.4	6.2
1998	15.1	11.1	8.5	17.5	14.6
1993					
March	17.4	17.6	9.9	21.9	18.0
June	16.7	20.2	13.2	22.1	18.6
September	13.9	18.2	13.9	20.3	16.6
December	21.0	17.9	14.3	23.1	20.4
1994					
March	23.4	21.3	15.4	23.8	22.4
June	20.9	19.6	13.7	23.8	20.9
September	21.6	20.0	13.5	22.6	20.9
December	18.2	19.1	13.9	19.1	18.3
1995					
March	15.5	13.6	15.8	12.7	14.3
June	16.8	15.2	14.9	12.3	15.0
September	11.5	15.3	12.6	11.4	12.3
December	7.4	14.3	10.9	12.6	10.5
1996					
March	6.4	17.5	7.0	15.2	11.1
June	5.9	13.6	6.0	13.5	9.6
September	7.2	11.8	5.9	13.3	9.8
December	5.6	11.3	4.6	10.7	8.2
1997					
March	7.2	10.0	4.0	10.8	8.6
June	6.5	9.7	2.5	9.9	7.9
September	2.8	8.4	2.5	8.7	5.9
December	4.1	7.8	2.9	8.6	6.2
1998					
March	4.0	7.9	1.4	10.6	6.6
June	9.6	10.1	4.9	15.3	10.8
September	16.0	11.1	7.8	17.9	15.0
December	15.1	11.1	8.5	17.5	14.6
1999					
March	7.5	6.2	9.1	13.3	9.3
June	0.0	3.8	5.6	9.9	4.4
September	0.5	5.8	5.2	9.0	4.7

Source: Central Bank of Paraguay.

1/ Refers to the metropolitan area, including Asunción and 14 other municipalities.

Table 13. Paraguay: Producer Prices

	Domestic Products	Imported Products	Total
	I. Index		
1995			
December	100.0	100.0	100.0
1996			
March	107.7	104.7	106.8
June	108.3	105.6	107.5
September	110.2	106.2	109.0
December	109.0	106.6	108.3
1997			
March	107.3	107.0	107.2
June	107.8	108.1	107.9
September	107.8	108.8	108.1
December	109.5	111.9	110.2
1998			
March	115.1	119.1	116.3
June	123.5	124.0	123.6
September	133.8	126.8	131.7
December	131.8	126.5	130.1
1999			
March	125.2	127.6	125.9
June	123.4	135.3	127.0
September	127.1	145.8	132.8
	II. Annual percentage change		
1997			
March	-0.4	2.2	0.4
June	-0.5	2.4	0.4
September	-2.2	2.4	-0.8
December	0.5	5.0	1.8
1998			
March	7.3	11.3	8.5
June	14.6	14.7	14.6
September	24.1		
December	20.4		
1999			
March	8.8	7.1	8.3
June	-0.1	9.1	2.8
September	-5.0	15.0	0.8

Source: Central Bank of Paraguay.

Table 14. Paraguay: Labor Market Indicators 1/

	1993	1994	1995	1996	1997	1998
I. Wage Indices, End-of-Period						
(1980 = 100)						
Nominal wage indices						
Wages	1,299.7	1,600.8	1,893.7	2,100.1	2,249.6	2,476.6
Private sector minimum wage	1,325.0	1,641.7	1,891.0	2,126.2	2,393.3	2,632.6
Real wage indices 2/						
Wages	99.3	103.4	110.6	113.4	114.4	109.9
Real private sector minimum wage	109.2	112.2	114.1	116.7	122.8	121.1
(Percentage change)						
Nominal wage indices						
Wages	19.9	23.2	18.3	10.9	7.1	10.1
Private sector minimum wages	13.8	23.9	15.0	12.4	12.6	10.0
Real wage indices 2/						
Wages	-0.4	4.1	7.0	2.5	0.9	-4.0
Private sector minimum wage	-3.8	2.8	1.7	2.3	5.2	-1.4
II. Labor Market Indicators, Midyear						
(In percent)						
Employment growth	2.8	4.1	2.5	4.5	1.7	0.1
Unemployment rate	9.0	9.4	8.1	8.2	7.1	7.2
Underemployment rate	15.9	16.9	18.2	20.7	23.0	21.4

Sources: Technical Planning Secretariat; Central Bank of Paraguay; and Fund staff estimates.

1/ Refers to greater Asuncion.
2/ Using the consumer price index as the deflator.

Table 15. Paraguay: Operations of the Consolidated Public Sector

	1993	1994	1995	1996	1997	1998	Est. 1999
	(In billions of Guaranies)						
Revenue	**1,983.0**	**2,624.5**	**3,677.0**	**3,949.0**	**4,391.7**	**5,323.0**	**5,563.5**
Tax revenue	1,120.6	1,593.6	2,152.6	2,285.2	2,463.5	2,729.1	2,785.3
Nontax revenue and grants	672.2	825.9	1,032.4	1,212.1	1,389.8	1,661.4	1,817.4
Public enterprises' operating surplus	174.4	196.8	457.0	425.6	482.5	892.1	915.1
Capital revenue	15.7	8.3	35.0	26.1	55.9	40.4	45.8
Current expenditure	**1,467.3**	**1,886.6**	**2,298.0**	**2,741.0**	**2,994.8**	**3,694.1**	**3,970.0**
Wages and salaries	807.2	1,041.2	1,307.5	1,591.3	1,781.3	2,134.1	2,270.1
Goods and services	207.3	241.8	322.4	375.7	408.4	472.1	338.0
Interest payments	93.4	100.1	129.1	96.5	101.7	170.4	187.8
Transfers	334.1	384.9	514.8	647.8	674.6	801.5	1,044.6
Other	25.4	118.6	24.3	29.7	28.8	116.0	129.5
Capital expenditure	**387.5**	**516.8**	**941.9**	**877.6**	**1,565.3**	**1,802.9**	**1,969.6**
Total capital expenditure	395.6	543.3	988.1	925.4	1,588.7	1,821.5	1,988.0
minus: capital transfers from CG	-8.0	-26.4	-46.3	-47.8	-23.4	-18.5	-18.4
Current account balance	**515.6**	**737.9**	**1,379.1**	**1,208.0**	**1,396.9**	**1,628.9**	**1,593.6**
Primary balance	**221.5**	**321.2**	**566.3**	**426.9**	**-66.7**	**-3.7**	**-188.3**
Overall balance	**128.1**	**221.1**	**437.2**	**330.4**	**-168.4**	**-174.1**	**-376.1**
Financing	**-132.0**	**-414.4**	**-38.7**	**-329.2**	**483.1**	**369.1**	**456.0**
External financing	-34.1	54.2	-26.8	25.1	134.6	157.6	1,556.5
Internal financing	-94.0	-275.3	-410.4	-355.6	33.8	11.3	-1,180.4
Change in arrears (increase -)	-3.9	-193.3	398.5	1.2	314.7	195.0	79.9
	(In percent of GDP)						
Revenue	**16.5**	**17.5**	**20.8**	**19.9**	**21.0**	**22.7**	**22.4**
Tax revenue	9.3	10.7	12.2	11.5	11.8	11.6	11.2
Nontax revenue and grants	5.6	5.5	5.8	6.1	6.6	7.1	7.3
Public enterprises' operating surplus	1.5	1.3	2.6	2.1	2.3	3.8	3.7
Capital revenue	0.1	0.1	0.2	0.1	0.3	0.2	0.2
Current expenditure	**12.2**	**12.6**	**13.0**	**13.8**	**14.3**	**15.8**	**16.0**
Wages and salaries	6.7	7.0	7.4	8.0	8.5	9.1	9.1
Goods and services	1.7	1.6	1.8	1.9	2.0	2.0	1.4
Interest payments	0.8	0.7	0.7	0.5	0.5	0.7	0.8
Transfers	2.8	2.6	2.9	3.3	3.2	3.4	4.2
Other	0.2	0.8	0.1	0.1	0.1	0.5	0.5
Capital expenditure	**3.2**	**3.5**	**5.3**	**4.4**	**7.5**	**7.7**	**7.9**
Current account balance	**4.3**	**4.9**	**7.8**	**6.1**	**6.7**	**7.0**	**6.4**
Primary balance			**3.2**	**2.2**	**-0.3**	**0.0**	**-0.8**
Overall balance	**1.1**	**1.5**	**2.5**	**1.7**	**-0.8**	**-0.7**	**-1.5**
Financing	**-1.1**	**-2.8**	**-0.2**	**-1.7**	**2.3**	**1.6**	**1.8**
External financing	-0.3	0.4	-0.2	0.1	0.6	0.7	6.3
Internal financing	-0.8	-1.8	-2.3	-1.8	0.2	0.0	-4.7
Change in arrears (increase -)	0.0	-1.3	2.3	0.0	1.5	0.8	0.3

Sources: Ministry of Finance; and Fund staff estimates.

Table 16. Paraguay: Operations of the Central Government

	1993	1994	1995	1996	1997	1998	Est. 1999
	(In billions of Guaranies)						
Total Revenue	**1,565.1**	**2,084.0**	**2,774.7**	**2,979.6**	**3,299.0**	**3,795.2**	**4,011.2**
Tax revenue	1,120.6	1,593.6	2,152.6	2,285.2	2,463.5	2,729.1	2,785.3
Social security contributions	104.3	133.9	171.5	210.8	227.3	244.6	272.5
Income taxes	174.5	298.5	399.5	440.9	428.7	474.4	538.4
Taxes on goods and services	637.8	870.5	1,089.1	1,189.4	1,325.6	1,483.5	1,562.4
Excise taxes	131.0	171.5	212.0	275.7	272.6	302.7	381.8
Value added tax	410.0	595.3	772.3	814.3	951.3	1,063.7	1,086.6
Stamp tax	65.2	74.3	64.9	68.3	75.1	76.1	81.0
Other	31.6	29.4	39.8	31.0	26.6	41.0	12.9
Taxes on international transactions	204.0	290.6	492.6	444.1	481.8	526.6	412.1
Import duties	204.0	290.6	492.6	444.1	481.8	526.6	412.1
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nontax revenue	437.1	482.5	591.6	668.6	792.8	1,028.7	1,191.5
Itaipu	283.3	326.2	346.0	369.3	528.8	749.6	859.6
Other (incl. grants)	153.9	156.4	245.6	299.3	264.0	279.1	331.9
Capital revenue	7.3	7.9	30.5	25.8	42.7	37.4	34.4
Current expenditures	**1,334.3**	**1,705.7**	**2,062.7**	**2,449.3**	**2,665.0**	**3,199.7**	**3,480.4**
Wages and salaries	713.4	923.7	1,149.7	1,386.4	1,551.1	1,818.0	1,961.5
Goods and services	173.3	191.8	257.1	300.0	307.5	332.2	207.3
Interest payments	93.0	100.0	127.9	96.5	101.7	170.4	187.8
Transfers	333.6	385.5	511.4	644.5	686.6	774.9	1,008.1
Other	21.0	104.8	16.6	22.0	18.1	104.1	115.7
Capital expenditures	**230.9**	**359.5**	**762.3**	**685.0**	**936.5**	**822.5**	**1,125.4**
Capital formation	166.1	262.6	564.6	532.8	747.8	728.0	898.3
Capital transfers	64.8	96.9	171.2	132.9	140.3	94.3	227.1
Other	0.0	0.0	26.4	19.3	48.4	0.3	0.1
Current account balance	**230.9**	**378.3**	**712.0**	**530.3**	**634.0**	**595.5**	**530.8**
Primary balance	**93.0**	**118.8**	**77.7**	**-58.2**	**-200.8**	**-56.7**	**-406.9**
Overall balance	**-0.1**	**18.9**	**-50.2**	**-154.7**	**-302.5**	**-227.1**	**-594.6**
Financing	-4.6	-228.4	216.2	16.5	289.0	518.5	586.0
External financing	-100.1	19.1	118.6	67.8	147.0	108.3	1,437.1
Internal financing	100.1	-37.9	-68.4	86.9	155.5	118.8	-842.5
Change in arrears (increase -)	-4.7	-209.5	166.0	-138.2	-13.5	291.4	-8.6
	(In percent of GDP)						
Total Revenue	**13.1**	**13.9**	**15.7**	**15.0**	**15.8**	**16.2**	**16.1**
Tax revenue	9.3	10.7	12.2	11.5	11.8	11.6	11.2
Social security contributions	0.9	0.9	1.0	1.1	1.1	1.0	1.1
Income taxes	1.5	2.0	2.3	2.2	2.0	2.0	2.2
Taxes on goods and services	5.3	5.8	6.2	6.0	6.3	6.3	6.3
Taxes on international transactions	1.7	1.9	2.8	2.2	2.3	2.2	1.7
Nontax revenue	3.6	3.2	3.3	3.4	3.8	4.4	4.8
Itaipu	2.4	2.2	2.0	1.9	2.5	3.2	3.5
Other (incl. grants)	1.3	1.0	1.4	1.5	1.3	1.2	1.3
Capital revenue	0.1	0.1	0.2	0.1	0.2	0.2	0.1
Current expenditures	**11.1**	**11.4**	**11.7**	**12.4**	**12.7**	**13.7**	**14.0**
Wages and salaries	5.9	6.2	6.5	7.0	7.4	7.8	7.9
Goods and services	1.4	1.3	1.5	1.5	1.5	1.4	0.8
Interest payments	0.8	0.7	0.7	0.5	0.5	0.7	0.8
Transfers	2.8	2.6	2.9	3.3	3.3	3.3	4.1
Other	0.2	0.7	0.1	0.1	0.1	0.4	0.5
Capital expenditures	**1.9**	**2.4**	**4.3**	**3.5**	**4.5**	**3.5**	**4.5**
Current account balance	**1.9**	**2.5**	**4.0**	**2.7**	**3.0**	**2.5**	**2.1**
Primary balance	**0.8**	**0.8**	**0.4**	**-0.3**	**-1.0**	**-0.2**	**-1.6**
Overall balance	**0.0**	**0.1**	**-0.3**	**-0.8**	**-1.4**	**-1.0**	**-2.4**
Financing	**0.0**	**-1.5**	**1.2**	**0.1**	**1.4**	**2.2**	**2.4**
External financing	-0.8	0.1	0.7	0.3	0.7	0.5	5.8
Internal financing	0.8	-0.3	-0.4	0.4	0.7	0.5	-3.4
Change in arrears (increase -)	0.0	-1.4	0.9	-0.7	-0.1	1.2	0.0

Source: Ministry of Finance; and Fund staff estimates.

Table 17. Paraguay: Operations of IPS

	1993	1994	1995	1996	1997	1998	Est. 1999
	(In billions of Guaranies)						
Revenues	**229.7**	**334.4**	**428.3**	**527.8**	**588.3**	**622.7**	**616.5**
Social security contributions	193.3	268.0	332.0	388.0	434.6	505.0	546.5
Current transfers from the central government	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other current revenue	33.9	66.4	96.3	139.8	150.9	114.7	59.3
Capital revenue	2.6	0.0	0.0	0.0	2.8	3.0	10.7
Of which : transfers from the central governmen	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current expenditures	**129.0**	**172.7**	**223.6**	**278.5**	**321.0**	**483.7**	**470.0**
Wages and salaries	47.3	57.7	80.0	108.6	125.3	204.0	190.1
Goods and services	26.4	35.7	49.6	56.6	81.3	116.9	106.4
Interest payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transfers	52.5	67.7	88.5	108.3	106.3	152.3	160.9
Of which : transfers to the central government	0.0	0.0	0.0	0.0	2.3	2.6	1.8
Other	2.9	11.6	5.4	5.0	8.1	10.5	12.7
Capital expenditures	**3.4**	**3.7**	**12.0**	**10.4**	**137.4**	**168.8**	**52.7**
Current account balance	**100.7**	**161.7**	**204.7**	**249.3**	**267.3**	**139.0**	**146.6**
Overall balance	**97.3**	**158.0**	**192.7**	**238.9**	**129.9**	**-29.8**	**93.9**
Financing	**-92.3**	**-150.9**	**-183.8**	**-214.4**	**43.4**	**-273.3**	**-290.0**
External financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Internal financing	-97.3	-158.0	-192.7	-238.9	-129.9	29.8	-93.9
Change in arrears (increase -)	5.0	7.1	8.9	24.5	173.3	-303.1	-196.1
	(In percent of GDP)						
Revenues	**1.9**	**2.2**	**2.4**	**2.7**	**2.8**	**2.7**	**2.5**
Current expenditure	**1.1**	**1.2**	**1.3**	**1.4**	**1.5**	**2.1**	**1.9**
Wages and salaries	0.4	0.4	0.5	0.5	0.6	0.9	0.8
Goods and services	0.2	0.2	0.3	0.3	0.4	0.5	0.4
Interest payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transfers	0.4	0.5	0.5	0.5	0.5	0.6	0.6
Other	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Capital expenditure	**0.0**	**0.0**	**0.1**	**0.1**	**0.7**	**0.7**	**0.2**
Current account balance	**0.8**	**1.1**	**1.2**	**1.3**	**1.3**	**0.6**	**0.6**
Overall balance	**0.8**	**1.1**	**1.1**	**1.2**	**0.6**	**-0.1**	**0.4**
Financing	**-0.8**	**-1.0**	**-1.0**	**-1.1**	**0.2**	**-1.2**	**-1.2**
External financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Internal financing	-0.8	-1.1	-1.1	-1.2	-0.6	0.1	-0.4
Change in arrears (increase -)	0.0	0.0	0.1	0.1	0.8	-1.3	-0.8

Sources: Ministry of Finance; and Fund staff estimates.

Table 18. Paraguay: Rest of General Government (IBR, UNA)

	1993	1994	1995	1996	1997	1998	Est. 1999
	(In billions of Guaranies)						
Revenues	**66.7**	**96.3**	**141.0**	**169.0**	**155.9**	**161.4**	**171.2**
Current transfers from central government	46.8	64.1	80.2	99.4	111.7	119.5	120.9
Other current revenues	11.9	13.9	18.4	22.7	21.8	24.6	31.8
Capital revenues	8.0	18.3	42.4	46.9	22.4	17.2	18.4
Current expenditures	**56.0**	**76.5**	**96.9**	**118.2**	**128.4**	**139.8**	**148.3**
Wages and salaries	46.6	59.9	77.8	96.4	104.9	112.1	118.5
Goods and services	7.5	14.2	15.7	19.1	19.6	22.9	24.4
Interest payments	0.4	0.1	1.2	0.0	0.0	0.0	0.0
Transfers	0.0	0.0	0.0	0.0	1.2	3.4	4.4
Other	1.5	2.2	2.3	2.7	2.6	1.3	1.0
Capital expenditures	**6.6**	**17.3**	**45.7**	**23.1**	**22.4**	**22.5**	**17.8**
Current account balance	**10.7**	**19.8**	**44.1**	**50.8**	**27.5**	**21.6**	**22.9**
Overall balance	**4.1**	**2.5**	**-1.6**	**27.7**	**5.1**	**-0.9**	**5.0**
Financing	**-0.4**	**-28.4**	**-30.3**	**9.8**	**21.3**	**-21.6**	**-5.0**
External financing	0.0	0.0	0.0	-0.3	0.0	0.0	0.0
Internal financing	-4.1	-2.5	1.6	-27.4	-5.1	-4.3	-5.0
Change in arrears (increase -)	3.7	-25.9	-31.9	37.5	26.4	-22.5	0.0

Source: Ministry of Finance.

Table 19. Paraguay: Operations of the Public Enterprises

	1993	1994	1995	1996	1997	1998	Est. 1999
	(In billions of guaranies)						
Revenues	**1,163.6**	**1,270.4**	**1,537.6**	**1,711.6**	**1,994.2**	**2,294.2**	**2,502.0**
Sales of goods and services	1,152.6	1,257.8	1,524.3	1,704.7	1,977.4	2,286.0	2,495.4
Current transfers from central government	5.2	4.1	5.0	5.7	5.4	6.9	5.9
Capital revenue	5.8	8.5	8.4	1.1	11.4	1.3	0.7
Current expenditures	**982.1**	**1,065.9**	**1,073.2**	**1,286.1**	**1,502.8**	**1,402.9**	**1,590.2**
Wages and salaries	181.8	214.3	250.8	301.5	408.6	461.5	490.5
Goods and services	651.1	634.3	631.8	799.0	927.5	721.7	839.8
Interest payments	34.0	49.4	35.1	34.4	25.2	27.6	54.3
Transfers	75.3	109.1	134.7	138.7	11.2	34.6	47.9
Other	39.8	58.9	20.8	12.4	130.4	157.5	157.7
Capital expenditures	**154.7**	**162.7**	**168.1**	**206.9**	**492.3**	**807.6**	**792.1**
Current account balance	**181.4**	**204.5**	**464.4**	**425.5**	**491.4**	**891.3**	**911.7**
Overall balance	**26.8**	**41.8**	**296.3**	**218.6**	**-1.0**	**83.7**	**119.7**
Financing	**-34.7**	**-6.7**	**-40.8**	**-141.1**	**129.4**	**145.5**	**152.0**
External financing	66.0	35.1	-145.5	-42.4	-12.4	49.3	119.4
Internal financing	-92.8	-76.9	-150.8	-176.2	13.3	-133.0	-239.0
Change in arrears (increase -)	-7.9	35.1	255.5	77.5	128.4	229.2	271.7
	(In percent of GDP)						
Revenues	**9.7**	**8.5**	**8.7**	**8.6**	**9.5**	**9.8**	**10.1**
Current expenditures	**8.2**	**7.1**	**6.1**	**6.5**	**7.2**	**6.0**	**6.4**
Wages and salaries	1.5	1.4	1.4	1.5	2.0	2.0	2.0
Goods and services	5.4	4.2	3.6	4.0	4.4	3.1	3.4
Interest payments	0.3	0.3	0.2	0.2	0.1	0.1	0.2
Transfers	0.6	0.7	0.8	0.7	0.1	0.1	0.2
Other	0.3	0.4	0.1	0.1	0.6	0.7	0.6
Capital expenditures	**1.3**	**1.1**	**0.9**	**1.0**	**2.4**	**3.4**	**3.2**
Current account balance	**1.5**	**1.4**	**2.6**	**2.1**	**2.3**	**3.8**	**3.7**
Overall balance	**0.2**	**0.3**	**1.7**	**1.1**	**0.0**	**0.4**	**0.5**
Financing	**-0.3**	**0.0**	**-0.2**	**-0.7**	**0.6**	**0.6**	**0.6**
External financing	0.6	0.2	-0.8	-0.2	-0.1	0.2	0.5
Internal financing	-0.8	-0.5	-0.9	-0.9	0.1	-0.6	-1.0
Change in arrears (increase -)	-0.1	0.2	1.4	0.4	0.6	1.0	1.1

Source: Ministry of Finance; and Fund staff estimates.

Table 20. Paraguay: Accounts of the Financial System

(In billions of guaranies)

	End of period						
	1993	1994	1995	1996	1997	1998	June 1999
I. Financial System							
Net foreign assets	**1,671.9**	**2,362.8**	**2,354.5**	**2,651.6**	**2,143.0**	**3,006.6**	**4,284.3**
Assets	1,838.8	2,590.3	3,197.1	3,092.7	2,781.0	3,661.4	4,620.0
Liabilities	-167.0	-227.5	-842.6	-441.0	-638.0	-654.9	-335.7
Net domestic assets	**2,640.7**	**2,874.0**	**3,236.9**	**4,317.2**	**5,856.0**	**4,830.7**	**3,894.1**
Net claims on public sector	542.3	92.5	-246.2	-504.7	85.4	17.9	-663.1
General government	438.5	12.4	-281.8	-478.7	-29.2	-129.6	-793.5
Rest of the public sector	103.8	80.2	35.7	-26.0	114.6	147.5	130.4
Credit to nonfinancial private sector	2,921.8	4,029.9	4,801.5	5,843.0	6,726.9	6,515.8	6,757.0
o.w. foreign currency							
Net unclassified assets	-823.4	-1,248.4	-1,318.4	-1,021.0	-956.3	-1,703.0	-2,199.8
Net intra-financial float	**39.0**	**58.0**	**689.5**	**531.7**	**803.4**	**852.2**	**953.5**
Medium & long term external liabiliti	**-286.8**	**-189.0**	**-208.2**	**-208.0**	**-167.6**	**-207.4**	**-229.4**
Capital and reserves	**-893.6**	**-1,141.3**	**-1,352.0**	**-1,602.1**	**-2,235.9**	**-1,819.9**	**-1,869.6**
Official	-548.2	-663.1	-831.3	-945.7	-1,392.1	-991.4	-1,056.5
Private	-345.4	-478.2	-520.7	-656.5	-843.8	-828.5	-813.1
Liabilities to private sector (M3)	**3,171.1**	**3,964.6**	**4,720.6**	**5,690.4**	**6,398.9**	**6,662.1**	**7,032.9**
Currency in circulation	635.8	800.5	956.0	961.8	1,122.9	1,264.1	964.0
Local currency deposits	1,130.1	1,636.7	2,208.5	2,661.1	2,853.4	2,306.6	2,312.7
Demand deposits	324.9	472.1	583.4	608.9	666.2	658.2	541.5
Time and savings deposits	623.9	953.0	1,211.9	1,529.6	1,582.0	1,149.1	1,167.7
Certificates of deposit	181.2	211.6	413.2	522.6	605.2	499.3	603.5
Foreign currency deposits	1,156.6	1,333.8	1,375.2	1,926.7	2,421.6	3,089.5	3,747.1
Trust Funds 1/	248.7	193.6	180.9	140.9	1.0	2.0	9.1

Table 20. Paraguay: Accounts of the Financial System

(In billions of guaranies)

	End of period						
	1993	1994	1995	1996	1997	1998	June 1999
	II. Central Bank						
Net foreign assets	**1,271.8**	**2,000.4**	**2,215.2**	**2,257.0**	**1,989.7**	**2,520.0**	**3,396.0**
Assets	1,289.1	2,016.6	2,346.4	2,346.8	2,107.7	2,590.1	3,409.0
Liabilities	-17.4	-16.2	-131.1	-89.8	-118.0	-70.1	-13.0
Net domestic assets	**418.1**	**183.8**	**-281.6**	**-378.2**	**768.1**	**123.6**	**-790.8**
Net claims on public sector	957.6	797.4	615.6	669.1	995.7	611.7	-55.1
General government	783.1	633.7	465.1	520.1	731.2	334.9	-354.8
Rest of the public sector	174.5	163.7	150.4	149.0	264.5	276.7	299.7
Net credit to the private sector	6.3	6.6	7.2	11.8	14.7	18.4	17.2
Net unclassified assets	-545.8	-620.2	-904.3	-1,059.1	-242.4	-506.5	-752.9
Medium & long term external liabilities	**-98.3**	**-97.0**	**-93.5**	**-92.4**	**-94.4**	**-105.6**	**-117.6**
Net position with fin. intermediaries	**-651.7**	**-954.9**	**-507.7**	**-448.7**	**-184.1**	**-431.1**	**-690.0**
Credit to banks	102.8	98.1	761.7	926.1	1,211.6	1,092.2	1,006.0
Credit to rest of fin. System	16.2	15.6	44.4	128.0	200.8	221.9	204.5
Deposits from commercial banks	-673.8	-863.0	-965.2	-1,059.5	-1,117.1	-1,325.1	-1,386.3
Deposits from rest of financial system	-25.6	-42.7	-97.3	-80.6	-78.1	-75.4	-71.2
Bank and BNF holdings of LRM	8.0	35.5	206.8	258.9	335.3	395.3	305.9
Rest of FS holdings (-) of LRM or LRM f	-16.6	-128.8	-378.4	-489.2	-605.6	-594.9	-611.8
Bank vault cash	-62.7	-69.6	-79.7	-132.3	-130.8	-145.1	-137.1
Capital and reserves	**-304.1**	**-331.9**	**-376.5**	**-376.0**	**-1,356.5**	**-842.8**	**-833.7**
Official	-304.1	-331.9	-376.5	-376.0	-1,356.5	-842.8	-833.7
Private	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private sector currency holdings	**635.8**	**800.5**	**956.0**	**961.8**	**1,122.9**	**1,264.1**	**964.0**

Table 20. Paraguay: Accounts of the Financial System

(In billions of guaranies)

	End of period						
	1993	1994	1995	1996	1997	1998	June 1999
	III. Commercial Banks						
Net foreign assets	**400.1**	**362.5**	**139.3**	**393.3**	**137.3**	**457.4**	**863.3**
Assets	549.7	573.7	850.7	744.5	657.2	1,048.2	1,188.7
Liabilities	-149.6	-211.3	-711.5	-351.3	-519.9	-590.8	-325.4
Net domestic assets	**1,607.6**	**2,154.6**	**2,679.9**	**3,080.9**	**3,873.2**	**4,176.8**	**4,214.6**
Net claims on public sector	-415.3	-704.9	-861.7	-1,173.8	-910.4	-593.8	-608.0
General government	-344.6	-621.3	-747.0	-998.8	-760.4	-464.5	-438.7
Rest of the public sector	-70.7	-83.6	-114.8	-175.1	-150.0	-129.2	-169.3
Credit to private sector	2,315.4	3,164.9	3,742.7	4,596.5	5,166.0	5,015.2	5,295.6
Of which: foreign currency	580.9	949.8	1,284.6	1,611.2	2,329.1	2,552.2	2,953.8
Net unclassified assets	-292.4	-305.4	-201.1	-341.8	-382.4	-244.6	-472.9
Medium & long term external liabilitie	**-120.1**	**-28.4**	**-53.8**	**-50.0**	**-5.6**	**-22.8**	**-25.4**
Net position with rest of fin. system	**929.6**	**1,124.0**	**1,500.4**	**1,908.6**	**1,959.7**	**1,835.0**	**2,080.8**
Vault cash	62.7	69.6	79.7	132.3	130.8	145.1	137.1
Credit to (deposits in) Central Bank	744.0	855.5	1,029.9	1,169.0	1,184.1	1,413.0	1,515.2
Deposits (credit) from Central Bank	-102.4	-94.0	-156.4	-346.6	-321.6	-34.0	-86.0
LRMs held by banks	-8.6	-93.3	-171.6	-230.3	-270.4	-199.6	-305.9
Credit to (deposits in) rest of financial s	11.1	11.6	54.3	28.6	52.9	43.3	36.6
Deposits (credit) from rest of fin. syste	-0.9	0.0	-8.4	-1.7	0.0	0.0	0.0
Capital and reserves	**-483.0**	**-719.5**	**-839.8**	**-1,032.0**	**-1,237.8**	**-1,325.4**	**-1,324.3**
Official	-54.3	-75.1	-84.7	-95.6	-112.7	-178.4	-180.9
Private	-428.7	-644.4	-755.1	-936.4	-1,125.1	-1,147.1	-1,143.4
Liabilities to private sector	**2,334.3**	**2,893.1**	**3,426.0**	**4,300.7**	**4,726.9**	**5,120.9**	**5,809.0**
Local currency deposits	929.0	1,365.7	1,871.3	2,243.0	2,314.5	2,077.7	2,101.4
Demand deposits	324.9	472.1	583.4	608.9	666.2	658.2	541.5
Time and savings deposits	432.1	688.0	891.4	1,172.3	1,185.5	1,023.8	1,064.5
Certificates of deposit	171.9	205.6	396.5	461.7	462.8	395.7	495.5
Foreign currency deposits	1,156.6	1,333.8	1,373.7	1,916.9	2,411.3	3,041.2	3,698.5
Trust funds	248.7	193.6	180.9	140.9	1.0	2.0	9.1

Table 20. Paraguay: Accounts of the Financial System

(In billions of guaraníes)

	End of period						
	1993	1994	1995	1996	1997	1998	June 1999
IV. Rest of Financial System							
Net foreign assets	**0.0**	**0.0**	**0.0**	**1.4**	**16.0**	**17.1**	**19.6**
Assets	0.0	0.0	0.0	1.4	16.0	23.1	22.3
Liabilities	0.0	0.0	0.0	0.0	0.0	6.0	2.7
Net domestic assets	**410.4**	**486.4**	**664.0**	**774.0**	**459.0**	**204.3**	**232.1**
Net claims on the public sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General government	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest of the public sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit to nonfinancial private sector	600.1	858.4	1,051.6	1,234.7	1,546.1	1,482.2	1,444.3
Net float	2.8	4.1	1.3	9.7	-1.1	-23.1	-17.8
Net unclassified assets	-192.5	-376.1	-389.0	-470.3	-1,086.0	-1,254.9	-1,194.4
Medium and long term foreign liabilitie	**-68.4**	**-63.6**	**-60.9**	**-65.7**	**-67.7**	**-79.0**	**-86.5**
Net position with banking system	**-34.4**	**-61.9**	**-128.6**	**-87.7**	**-216.6**	**-213.6**	**-193.7**
Vault cash	7.1	15.2	23.5	25.1	29.0	22.9	24.0
Credit to (deposits in) banking system	91.8	158.1	192.8	220.1	150.3	146.7	149.9
Deposits (credit) from rest of banking s	-133.3	-235.2	-344.9	-332.9	-395.9	-383.3	-367.6
Capital and Reserves	**-106.5**	**-89.9**	**-135.8**	**-194.2**	**358.3**	**348.4**	**288.3**
Official	-189.8	-256.1	-370.2	-474.1	77.0	29.8	-41.9
Private	83.3	166.2	234.4	279.9	281.3	318.5	330.2
Liabilities to private sector	**201.1**	**271.0**	**338.7**	**427.9**	**549.2**	**277.2**	**259.9**
Local currency deposits	201.1	271.0	337.2	418.2	538.9	228.9	211.3
Time and savings deposits	191.8	265.0	320.5	357.3	396.5	125.2	103.3
Certificates of deposit	9.3	6.0	16.7	60.9	142.4	103.6	108.0
Foreign currency deposits	0.0	0.0	1.5	9.8	10.3	48.3	48.6

Source: Central Bank of Paraguay.

1/ Letras de regulacion.

2/ Includes bond placements

Table 21. Paraguay: Banking System - Distribution of Credit to the Private Sector 1/ 2/

	1993	1994	1995	1996	1997	1998	June 1999
			(In billions of guaranies)				
Total credit	**1,996.4**	**2,802.8**	**3,502.8**	**4,302.1**	**5,270.2**	**5,967.7**	**6,265.5**
National Development Bank	**339.9**	**413.3**	**504.4**	**608.5**	**1,313.3**	**1,274.4**	**1,212.4**
Agriculture	259.7	276.9	...	357.8	435.3	435.2	338.7
Cattle	13.0	24.4	...	43.5	47.8	46.2	44.0
Industry	51.3	68.8	...	134.4	242.8	283.4	289.7
Commerce	8.3	12.3	...	35.4	255.8	282.9	281.9
Exports	5.6	28.8	...	34.7	19.7	342.9	86.7
Other	2.0	2.1	...	2.7	311.9	183.8	171.3
Commercial banks	**1,656.5**	**2,389.5**	**2,998.4**	**3,693.6**	**3,956.9**	**4,693.3**	**5,053.2**
Agriculture	216.6	235.2	...	218.3	229.7	254.7	306
Cattle	49.4	80.5	...	129.5	69.4	229.3	263
Industry	146.6	192.6	...	409.0	487.7	529.1	617
Commerce	828.6	1,360.5	...	1,847.0	1,742.3	2,000.7	1,894
Exports	205.9	211.7	...	154.5	154.1	116.3	140
Other	209.4	309.0	...	935.3	1,273.7	1,563.2	1,832
			(In percent)				
Total credit	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
National Development Bank	**17.0**	**14.7**	**14.4**	**14.1**	**24.9**	**21.4**	**19.3**
Agriculture	13.0	9.9	...	8.3	8.3	7.3	5.4
Cattle	0.7	0.9	...	1.0	0.9	0.8	0.7
Industry	2.6	2.5	...	3.1	4.6	4.7	4.6
Commerce	0.4	0.4	...	0.8	4.9	4.7	4.5
Exports	0.3	1.0	...	0.8	0.4	0.7	1.4
Other	0.1	0.1	...	0.1	5.9	3.1	2.7
Commercial banks	**83.0**	**85.3**	**85.6**	**85.9**	**75.1**	**78.6**	**80.7**
Agriculture	10.8	8.4	...	5.1	4.4	4.3	4.9
Cattle	2.5	2.9	...	3.0	1.3	3.8	4.2
Industry	7.3	6.9	...	9.5	9.3	8.9	9.9
Commerce	41.5	48.5	...	42.9	33.1	33.5	30.2
Exports	10.3	7.6	...	3.6	2.9	1.9	2.2
Other	10.5	11.0	...	21.7	24.2	26.2	29.2

Source: Central Bank of Paraguay.

1/ Excluding credit to the private sector from the Central Bank.

2/ Data in this table are not equal to the totals shown in Table 18 because of the use of different accounting exchange rates.

Table 22. Paraguay: Banking Soundness Indicators 1/ 2/

	1994	1995	1996	1997	1998	Sept. 1999
	(In billions of guaranies)					
Total loans	2,758.0	3,466.9	4,307.2	5,211.6	5,109.7	5,594.0
Past-due loans	216.8	248.4	499.5	689.1	587.0	801.4
Equity	719.5	839.7	1,040.9	1,238.1	1,325.4	1,290.5
Reserves against past due loans	78.1	132.0	207.6	289.7	213.3	301.4
	(In percent)					
Past-due loans as percent of total loans	7.9	7.2	11.6	13.2	11.5	14.3
Past-due loans as percent of equity	30.1	29.6	48.0	55.7	44.3	62.1
Reserves against past due loans as percent of past-due loans	36.0	53.1	41.6	42.0	36.3	37.6

Source: Central Bank of Paraguay-Banking Superintendency.

1/ Includes private banks and the National Development Bank.
2/ Data in this table are not equal to the totals shown in Table 18 because of the use of different accounting exch

Table 23. Paraguay: Interest Rate Structure

	1993	1994	1995	1996	1997	1998	Sep. 1999
	I. Lending Operations						
Commercial banks							
Agriculture, industry, and exports	28.0	27.0	30.0	26.4	23.6	31.6	25.5
Commercial	32.0	33.0	31.0	27.2	25.6	31.5	26.7
Personal	35.0	37.0	30.0	35.6	31.2	37.1	37.8
National Development Bank							
Agriculture	25.0	29.0	27.0	24.5	24.3	24.2	24.2
Development	25.0	29.0	27.0	24.5	24.3	24.2	24.2
Commercial	33.0	31.0	32.0	26.0	27.1	29.3	25.5
Other institutions							
Cattle Fund	27.0	27.0	28.0	30.7	24.6	...	...
Finance companies	47.0	48.0	44.0	37.7	53.6	37.8	41.7
Paraguayan Institute for Housing and Urbanization/National Housing Board 3/	17.0	17.0	17.0	...	...	...	...
Bank Employees' Pension Fund	27.0	27.0	30.0	29.0	29.1	25.0	29.9
Technical Execution Program Unit	...	26.0	22.6	18.3	16.6	21.0	24.4
	II. Deposits and Other Obligations						
Central Bank							
Central Bank's short term paper (LRM)	21.9	19.7	17.8	12.1	11.7	26.2	14.0
Banks							
Local currency deposits							
Savings deposits	11.0	11.0	10.0	9.0	7.0	7.8	6.9
Fixed deposits							
60 days	18.0	17.0	12.0	12.0	10.1	15.0	10.8
61 to 90 days	18.0	15.0	15.0	11.9	11.1	17.8	18.4
91 to 180 days	15.0	28.0	15.0	17.6	11.2	17.5	23.1
Over 180 days	12.0	...	13.0	9.0	12.0	14.0	19.2
Certificates of deposit 4/	23.0	23.0	20.0	16.4	14.3	15.2	20.7
Foreign currency deposits	5.0	8.0	6.0	5.9	5.4	4.3	2.4
Finance companies							
Promissory notes	28.0	27.0	26.0	21.2	21.6	20.6	26.1
Certificates of deposit	28.0	27.0	26.0	24.4	23.1	21.8	26.7

Source: Central Bank of Paraguay.

1/ Commission rates were applicable one time only.

2/ The Central Bank guarantees 75 percent of these bank loans.

3/ Maximum lending rate permissible is 22 percent, excluding commission. The Paraguayan Institute for Housing and Urbanization was legally abolished in March 1992, with all its assets and liabilities passing to the National Housing Board.

4/ Rates on six-month deposits.

Table 24. Paraguay: Balance of Payments

	1993	1994	1995	1996	1997	1998	Est. 1999
	(In millions of U.S. dollars)						
Current account	**59.2**	**-274.1**	**-363.8**	**-495.2**	**-238.2**	**-106.8**	**-114.4**
Trade balance	79.5	-243.4	-261.9	-502.8	-206.9	-114.0	-100.3
Exports	2,859.1	3,360.1	4,231.2	3,880.4	3,980.0	3,824.0	2,701.0
Exports of domestic products	860.5	942.1	1,237.2	1,327.2	1,465.9	1,444.4	1,014.0
Re-exports	1,998.6	2,418.0	2,994.0	2,553.2	2,514.1	2,379.6	1,687.0
Imports	2,779.6	3,603.5	4,493.1	4,382.2	4,186.9	3,938.0	2,801.3
Services (net)	-154.2	-167.1	-233.4	-140.4	-119.0	-73.1	-52.3
Transport	-264.5	-363.2	-373.6	-319.3	-322.5	-259.1	-186.1
Travel	12.6	3.6	4.0	1.4	-10.9	-30.2	-22.5
Other	97.7	192.5	136.2	177.4	214.4	216.2	156.3
Factor income	55.7	113.8	87.5	102.8	48.0	45.6	-8.3
Transfers	78.2	22.7	60.4	45.2	39.7	34.7	46.5
Capital and financial account	**92.8**	**260.5**	**184.4**	**51.7**	**585.1**	**274.8**	**580.9**
Capital transfers	22.1	8.8	11.8	14.8	8.5	5.4	18.0
Foreign direct investment	75.0	137.1	155.3	245.7	269.5	234.6	352.0
Portfolio investment	0.0	0.0	-0.8	-3.6	4.1	-10.5	-8.0
Other investment	-4.4	114.7	18.1	-205.1	303	45.26	218.9
Assets	-47.2	-89.8	21.4	2	114.7	-63	-223.7
Liabilities	42.8	204.5	-3.3	-207.1	188.3	108.26	442.6
Errors and Omissions	-64.9	359.8	157.0	399.2	-563.3	-139.1	-317.3
Overall balance	**87.0**	**346.3**	**62.4**	**-44.2**	**-216.4**	**28.9**	**149.2**
Memorandum items							
Current account in percent of GDP	0.9	-3.5	-3.1	-5.1	-2.5	-1.2	-1.5
External public debt in percent of GD	17.7	15.8	15.6	14.5	15.1	19.4	27.7
Debt service in months of exports GN	0.8	0.7	0.5	0.5	0.4	0.5	0.9
Exports of goods, volume growth		9.2	34.0	9.3	9.6	6.0	
Imports of goods, volume growth		7.2	15.5	4.0	5.5	1.0	
Reserves in months of imports	2.6	3.0	2.6	2.6	2.3	2.4	3.9

Sources: Central Bank of Paraguay; and Fund staff estimates.

Table 25. Paraguay: Composition of Registered Exports (f.o.b.)

	1993	1994	1995	1996	1997	1998
	(In millions of U.S dollars)					
Total registered exports	**725.2**	**816.8**	**919.3**	**1,043.4**	**1,142.8**	**1,014.1**
Primary products	**500.9**	**521.8**	**602.8**	**647.3**	**698.6**	**659.8**
Agricultural products	397.5	402.1	481.0	551.7	600.8	541.7
Cotton	164.9	170.9	297.2	217.7	97.1	92.2
Coffee	1.8	1.8	0.8	0.8	2.0	0.7
Tobacco	7.0	6.9	6.8	8.8	8.0	8.2
Yerba mate	0.1	0.2	0.2	0.1	0.2	0.3
Soya	223.7	222.3	175.9	324.2	493.6	440.3
Livestock	101.0	118.4	113.4	88.8	91.6	108.3
Meat	47.1	55.4	54.9	46.8	49.2	69.5
Hides	53.9	63.0	58.6	42.0	42.4	38.8
Alcohol	0.1	0.8	2.5	3.1	2.3	0.9
Sugar	2.3	0.5	6.0	3.8	3.9	8.9
Manufactured products	**224.3**	**295.0**	**316.5**	**396.1**	**444.2**	**354.3**
Oils	44.2	69.3	73.1	77.2	69.2	76.4
Coconut	0.0	3.0	0.4	2.3	1.1	1.3
Tung	4.1	4.6	4.0	3.4	7.4	3.5
Soya	32.0	51.6	57.8	58.1	48.0	60.9
Essences	8.2	10.2	10.9	13.4	12.8	10.8
Lumber	63.8	78.6	89.3	94.0	100.7	69.6
Other	116.3	147.1	154.1	224.9	274.3	208.2
	(In percent of total registered exports)					
Total registered exports	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Primary products	**69.1**	**63.9**	**65.6**	**62.0**	**61.1**	**65.1**
Agricultural products	54.8	49.2	52.3	52.9	52.6	53.4
Livestock	13.9	14.5	12.3	8.5	8.0	10.7
Other	0.3	0.2	0.9	0.7	0.5	1.0
Manufactured products	**30.9**	**36.1**	**34.4**	**38.0**	**38.9**	**34.9**
Oils	6.1	8.5	7.9	7.4	6.1	7.5
Lumber	8.8	9.6	9.7	9.0	8.8	6.9
Other	16.0	18.0	16.8	21.6	24.0	20.5
Memorandum items						
International price of soya 1/	626.7	625.7	606.0	754.9	783.1	611.3
International price of cotton 2/	59.9	75.5	98.4	78.2	73.3	68.7

Source: Central Bank of Paraguay.

1/ U.S. cent per bushel, Chicago.
2/ U.S. cent per pound, New York.

Table 26. Paraguay: Composition of Registered Imports (f.o.b.)

	1993	1994	1995	1996	1997	1998
	(In billions of U.S. dollars)					
Total registered imports	**1,477.5**	**2,140.4**	**2,782.2**	**2,850.5**	**3,099.2**	**2,470.8**
Consumer goods	**628.4**	**929.6**	**1,302.8**	**1,272.6**	**1,367.7**	**1,203.3**
Food	66.4	99.0	144.8	172.1	165.0	155.3
Beverage and tobacco	112.2	179.0	325.3	401.7	446.3	429.2
Automobiles	72.7	87.2	123.2	125.2	182.2	139.7
Electronic goods	119.7	180.3	225.6	110.0	64.3	53.0
Other	257.3	384.0	484.0	463.7	510.0	426.0
Intermediate goods	**339.3**	**456.2**	**504.3**	**656.7**	**708.9**	**512.0**
Fuels and lubricants	147.2	159.4	191.6	235.4	311.4	188.7
Chemicals	66.5	84.6	95.8	132.1	148.5	133.7
Other	125.5	212.2	216.9	289.2	249.1	189.6
Capital goods	**509.9**	**754.7**	**975.0**	**921.1**	**1,022.6**	**755.5**
Machinery and motors	339.4	476.2	629.4	625.7	614.3	500.1
Transport equipment	134.0	189.6	235.0	204.7	307.7	200.0
Other	36.5	88.9	110.6	90.7	100.6	55.4
	(In percent of total registered imports)					
Total registered imports	100.0	100.0	100.0	100.0	100.0	100.0
Consumer goods	42.5	43.4	46.8	44.6	44.1	48.7
Intermediate goods	23.0	21.3	18.1	23.0	22.9	20.7
Capital goods	34.5	35.3	35.0	32.3	33.0	30.6

Source: Central Bank of Paraguay.

Table 27. Paraguay: Direction of Trade Structure

(In percent)

	Exports									Imports								
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Western Hemisphere	43.6	47.7	55.5	59.4	65.2	65.6	78.9	74.1	69.5	57.8	60.8	67.5	71.4	69.3	68.8	71.0	72.3	73.1
United States	4.8	5.5	5.1	6.4	9.2	4.7	3.7	3.0	2.7	18.3	20.2	21.5	19.2	22.4	22.2	21.4	19.1	20.2
Argentina	3.6	4.7	8.6	8.6	7.8	10.9	14.6	21.4	25.7	8.8	9.6	14.1	13.2	14.0	14.1	13.9	14.4	15.6
Brazil	29.0	26.0	24.9	32.5	38.5	40.0	48.8	39.1	28.1	22.7	26.7	28.2	35.3	29.7	29.1	31.6	34.2	32.2
Chile	3.5	6.9	8.1	8.0	6.1	4.5	5.6	3.7	4.7	1.4	2.0	2.1	1.8	1.6	1.7	1.6	1.7	1.9
Uruguay	1.3	1.2	1.4	0.8	0.9	1.1	2.0	1.6	1.2	0.4	0.6	0.5	0.6	0.7	0.6	1.2	1.6	2.2
Other	1.5	3.4	7.4	3.1	2.6	4.4	4.1	5.2	7.1	6.1	1.8	1.1	1.3	0.9	1.1	1.4	1.3	1.0
Europe	48.7	43.4	32.3	34.2	28.4	23.6	13.9	14.8	21.6	14.3	11.7	10.9	8.5	9.4	9.7	10.3	10.7	9.4
Belgium-Luxembourg	3.3	4.2	2.6	7.0	6.5	3.4	0.7	0.4	0.9	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1
France	4.2	2.9	4.5	2.2	2.0	1.6	1.4	0.8	1.0	2.8	1.5	1.3	1.0	1.3	0.9	0.9	1.1	0.8
Germany	7.4	7.8	3.7	3.9	3.0	7.4	1.6	1.0	0.4	3.8	2.5	2.3	2.2	2.4	2.3	2.6	2.1	1.7
Greece	0.1	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy	5.8	8.9	7.3	5.9	3.5	3.1	2.8	2.0	2.0	2.0	1.3	1.7	1.1	1.3	1.7	2.5	2.1	2.2
Netherlands	12.0	7.1	4.4	3.8	5.7	3.4	3.5	8.2	15.3	0.5	0.6	0.4	0.6	0.5	0.4	0.4	0.3	0.3
Portugal	5.8	3.1	4.4	0.5	1.6	1.2	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Spain	6.1	6.5	3.4	9.8	4.0	2.5	1.9	1.6	1.6	0.4	0.5	0.5	0.5	0.3	0.7	0.8	1.1	1.2
Switzerland	0.6	1.0	0.5	0.2	0.4	0.3	0.2	0.1	0.1	0.6	0.6	0.7	0.5	0.7	0.6	0.6	0.3	0.7
United Kingdom	1.6	0.3	0.6	0.6	0.6	0.4	0.4	0.5	0.2	3.5	3.6	3.2	2.0	2.1	2.4	2.1	2.7	1.8
Other	1.8	1.0	0.6	0.3	1.2	0.4	0.1	0.1	0.1	0.6	0.7	0.7	0.5	0.5	0.5	0.3	0.7	0.6
Asia	6.8	8.5	10.9	6.0	5.0	10.0	6.5	10.7	7.2	24.8	25.4	20.1	18.2	20.1	21.0	18.2	16.3	15.4
Hong Kong	0.2	0.1	0.3	0.1	0.2	0.5	0.2	0.5	0.3	9.6	9.2	6.3	6.5	8.7	9.4	7.3	5.7	6.9
Japan	0.7	1.1	2.3	4.4	3.3	2.9	3.1	7.0	4.8	7.5	8.0	7.6	7.1	4.8	4.6	2.3	4.5	2.7
Other	5.8	7.2	8.3	1.6	1.5	6.6	3.1	3.2	2.1	7.6	8.3	6.2	4.6	6.5	7.0	8.5	6.1	5.8
Africa	0.4	0.3	1.2	0.4	0.5	0.5	0.5	0.2	0.2	3.0	2.1	1.4	1.9	1.2	0.5	0.4	0.4	0.4
Algeria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.0	2.0	1.2	1.7	0.8	0.4	0.2	0.1	0.1
Other	0.4	0.3	1.2	0.4	0.5	0.5	0.5	0.1	0.2	0.0	0.1	0.2	0.1	0.4	0.2	0.2	0.3	0.3
Other	0.5	0.2	0.1	0.0	0.8	0.3	0.2	0.2	1.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	1.7

Source: *Direction of Trade Statistics, IMF*.