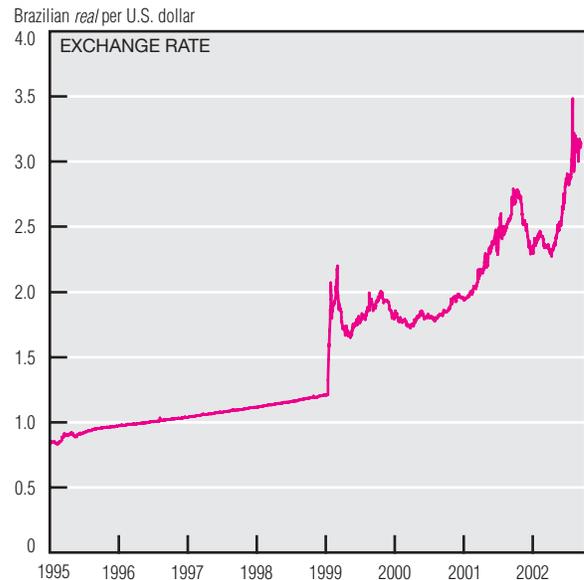
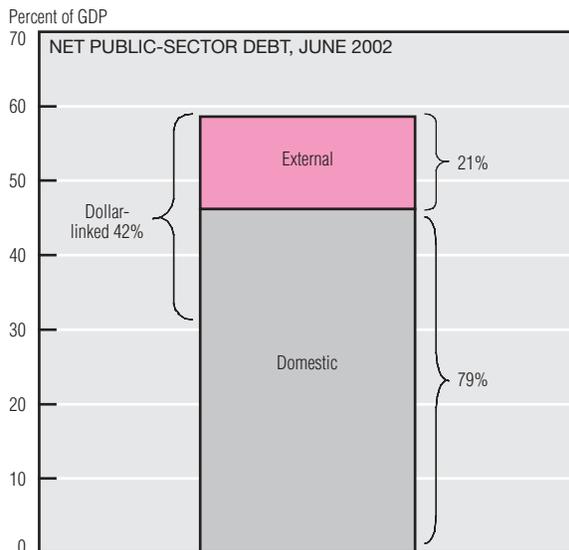
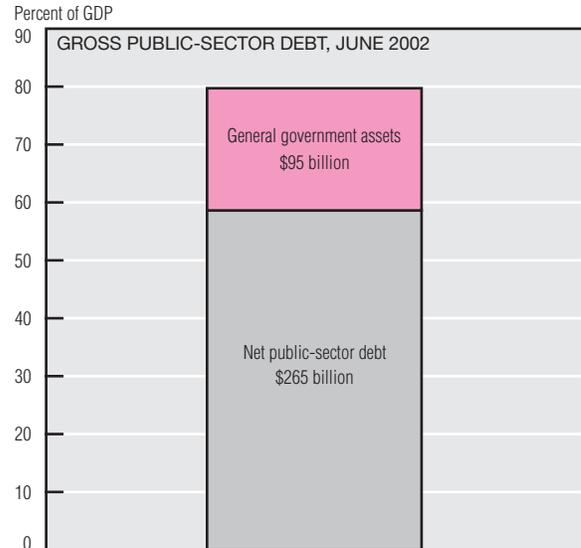
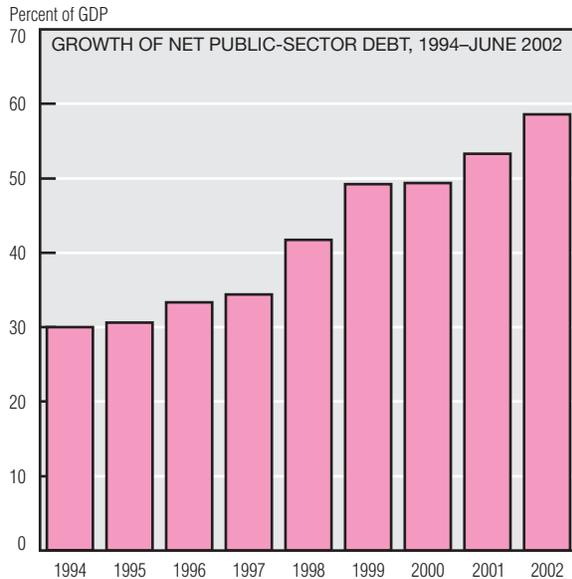


## Brazil's Public-Sector Debt



SOURCES: International Monetary Fund; Ilan Goldfajn, "Are There Reasons to Doubt Fiscal Sustainability in Brazil?" Central Bank of Brazil, *Technical Notes 25* (July 2002); and John Williamson, "Is Brazil Next?" Institute for International Economics, *International Economics Policy Briefs*, no. PB 02-7.

Economic activity in South America remains weak. The immediate prospects depend largely on how Brazil, the region's biggest economy, manages its current public-sector debt problems. A Brazilian default could have major consequences for South America and repercussions for U.S. economic policies.

Brazil's net public-sector debt has burgeoned since 1995. At the end of June 2002, it equaled 58.6% of the country's GDP or roughly

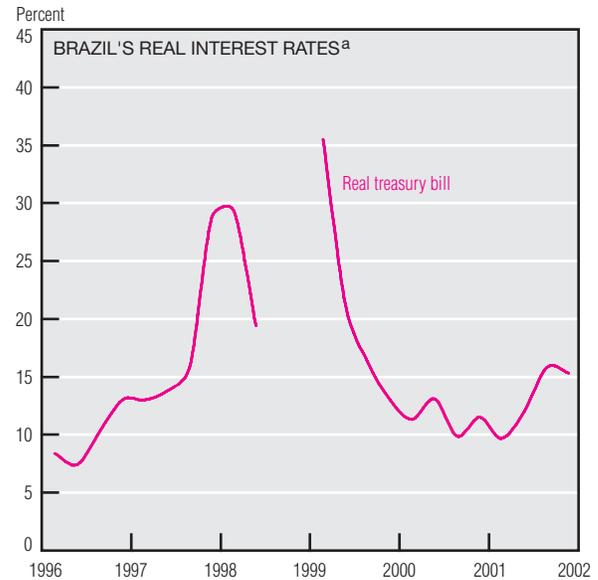
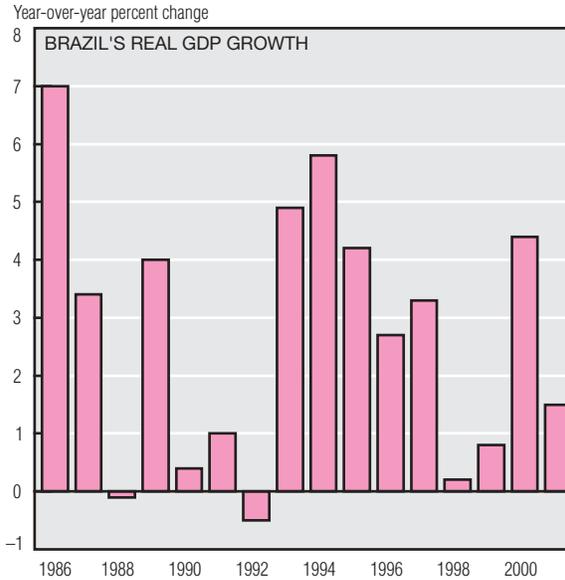
\$265 billion (equivalent), of which foreign investors held approximately 21%. About 42% of Brazil's net public-sector debt is linked to the U.S. dollar, so that movements in the dollar's exchange rate against the Brazilian *real* directly affect the *real* value of the debt.

If the cost of servicing its debt outpaces its ability to raise revenue for that purpose, Brazil's debt-to-GDP ratio will continue to rise. Economists typically measure the

costs of servicing debt by a real (or inflation-adjusted) interest rate and use the nation's real GDP growth as a proxy for its ability to service debt. We do not know how real interest rates and Brazil's economic growth will evolve over the coming years, but we can measure the prospects for its debt-to-GDP ratio under a range of possibilities. In the calculations, these values represent 10-year averages, so the exercise permits some variation, provided that any

(continued on next page)

## Brazil's Public-Sector Debt (cont.)



**Percentage-point Change in Brazil's Debt Ratio, 2002–2010**

Real interest rate	Real growth			
	2.0%	3.0%	3.5%	4.0%
9%	3.3	-2.8	-5.7	-8.4
10%	9.5	2.9	-0.2	-3.2
11%	16.2	9.0	5.7	2.5
12%	23.3	15.6	12.0	8.5
13%	30.9	22.6	18.7	15.0

**Stabilizing Percentage-point Change in Brazil's Primary Surplus, 2002–2010<sup>b</sup>**

Real interest rate	Real growth			
	2.0%	3.0%	3.5%	4.0%
9%	0.5	—	—	—
10%	1.5	0.4	—	—
11%	2.6	1.4	0.8	0.3
12%	3.9	2.5	1.9	1.3
13%	5.3	3.8	3.1	2.4

a. Data for the third and fourth quarters of 1998 are not available.

b. Annual average increase in the primary surplus-to-GDP ratio necessary to stabilize the debt-to-GDP ratio.

SOURCES: International Monetary Fund; Ilan Goldfajn, "Are There Reasons to Doubt Fiscal Sustainability in Brazil?" Central Bank of Brazil, *Technical Notes* 25 (July 2002); and John Williamson, "Is Brazil Next?" Institute for International Economics, *International Economics Policy Briefs*, no. PB 02-7.

deviations from these values are eventually offset.

While the interest rate and GDP combinations in the table fall within the range of its past year-to-year experience, Brazil's GDP has grown only 2.7% per year on average since 1986, with a range of -0.5% in 1992 to 7.0% in 1986. Similarly, between 1996:1Q and 2001:4Q, the average annual real interest rate on Brazil's treasury bills equaled 15%, with a median value of 13%.

Our simple calculations suggest that Brazil must maintain a rate of economic growth consistent with that achieved in its relatively prosperous years. The key uncertainty is real interest rates. Interest rates in large part mirror investors' confidence, which depends partially on developments that Brazil can affect and partially on world events beyond Brazil's control. The recent \$30 billion IMF loan package may assuage investors' fears in the short run.

One adjustment that Brazil can undertake to avoid default is increasing its budget surplus by selling state-owned assets, raising taxes, or cutting public spending. Brazil currently has a primary surplus, consisting of its budget balance less interest payments, equal to 3.75% of its GDP. A higher primary surplus expands the range of real interest rates and economic growth that is consistent with a lower debt ratio. This is a hard task, but the alternative may be harder.