

PART I CASE STUDIES



CASE 1.1 WILL ARGENTINA DEVALUE ITS PESO?

In November 2000, Mike Lanning was reacting to reports that Argentina might devalue its peso. Such a decision would have important ramifications for his company, Wessen Development Inc., (WDI). WDI is contemplating entering a joint venture with IRSA, the largest developer of shopping malls in Argentina, to construct a new shopping mall on the outskirts of Buenos Aires. The new shopping center, codenamed Mega, would include a Jumbo supermarket, 150 retail outlets, a movie theater with sixteen screens, a video game center, and a bowling alley. Mr. Lanning believes there is still much room for growth in shopping centers, especially outside of Buenos Aires. He notes that Argentina has 0.04 square meters of shopping center space per habitant. By comparison, in the U.S. there are 0.7 square meters of shopping center space per habitant, or nearly twenty times the space found in Argentina. Moreover, in Argentina's interior, where entertainment opportunities are limited, shopping centers—with their movie theaters, entertainment centers, restaurants, and stores—make a good place for a family outing.

Despite these promising prospects for Mega and other shopping projects, he is greatly concerned that the slowdown in Argentine economic activity and high unemployment rate could lead to renewed pressure to rescind the Convertibility Act and devalue the peso. Exhibit I 1.1 contains key Argentine economic indicators. One of the problems pointed to by opponents of convertibility is that Argentina is especially vulnerable to external shocks because of its currency board, which fixes the peso at par with the dollar and requires that the monetary base be fully backed by international reserves. Any turmoil in global capital markets, such as occurred during the Mexican, Asian, Russian, and Brazilian crises,

leads to capital outflows, which push interest rates up and restrict the government's access to international debt markets. The currency board also makes Argentina exposed to devaluations by its Brazilian neighbor, such as occurred in January 1999. Argentina sends more than 30% of its exports to Brazil, so a devaluation of the Brazilian *real* makes Argentine business less competitive in its most important market. A *real* devaluation also gives Brazilian producers a competitive edge over their Argentinian counterparts in the Argentine market as well.

A rise in interest rates and reduced access to capital or a devaluation of the *real* will slow down economic growth or even push the country deeper into recession, something Argentina does not need with its double-digit unemployment rate.¹ Under the currency board system, Argentine prices will drop in response to a recession, thereby bringing the economy back to equilibrium, but the adjustment mechanism is costly and protracted.

A peso devaluation, on the other hand, could improve the competitiveness of Argentine exports and import-competing products as well as reduce real interest rates (once the threat of devaluation was gone). A decline in real interest rates along with improved trade prospects, in turn, would stimulate Argentine economic activity and reduce unemployment. The latter effects would help boost government tax revenues as well and could reduce its unemployment compensation and other social spending.

¹It should be noted that many analysts attribute the high unemployment rate to Argentina's rigid labor laws rather than to peso overvaluation. Other analysts have pointed to the deteriorating education system as causing wage stagnation and increased demands by the Peronist labor unions for job security.

CASE I.1 • Will Argentina Devalue Its Peso?**231****EXHIBIT I 1.1 KEY ARGENTINE ECONOMIC INDICATORS**

Key indicators	1997	1998	1999	
GDP (\$ billions)	293.0	298.3	282.9	
Real GDP growth (%)	8.1	3.9	−3.1	
Consumer price inflation (%)	0.5	0.9	−1.2	
Population (millions)	35.7	36.1	36.6	
Exports of goods (\$ millions)	26,431	26,441	23,316	
Imports of goods (\$ millions)	28,554	29,558	24,145	
Current-account balance (\$ millions)	−11,954	−14,274	−12,152	
Foreign-exchange reserves excluding gold (\$ billions)	22,320	24,752	26,252	
Total external debt (\$ billions)	130.8	144.1	148.6	
Debt-service ratio (%)	50.2	57.6	63.1	
Exchange rate (Ps:US\$)	1	1	1	
Key indicators (forecast)	2000	2001	2002	2003
Real GDP growth (%)	0.8	3.7	3.4	3.7
Consumer price inflation (%)	−0.9	−0.7	0.4	1.3
Budget balance (% of GDP)	−2.1	−1.5	−0.8	−0.1
Current-account balance (% of GDP)	−4.2	−4.4	−3.6	−3.9
Money-market rate (%)	6.9	6.7	6.4	7
Exchange rate (Ps:US\$)	1	1	1	1

However, devaluation has its own problems. For one thing, most of Argentina's liabilities are denominated in dollars (see Exhibit I 1.2 for an accounting of these dollar-denominated liabilities). A devaluation of the peso would lead to a redistribution of wealth to creditors from debtors, with much of this redistribution occurring between foreign creditors and Argentine debtors. However, the inflation that would follow a devaluation of the peso would mitigate this

wealth redistribution somewhat although it would bring its own set of problems.

Peso devaluation would also reduce the equity of Argentine banks and private companies. Even if all domestic private and public dollar-denominated debt were to be honored in pesos, a devaluation of the peso would put substantial pressure on bank capital. As shown in Exhibit I 1.3, at a new peso:dollar exchange rate of 1.7:1, bank capital would go to zero. It would take a much

EXHIBIT I 1.2 DOLLAR-DENOMINATED ARGENTINE LIABILITIES

	Local creditors	Foreign creditors	Total
Non-financial public sector and central bank	32,200	81,000	113,200
Non-financial private sector	46,700	35,100	81,800
Financial sector	2,100	23,600	25,700
U.S. dollar liabilities (total)	81,000	139,700	220,700

EXHIBIT I 1.3 PRIVATE-SECTOR IMPACT OF PESO DEVALUATION

	Current	Post-Devaluation Scenarios		
		1	2	3
Exchange rate	1.00	1.40	1.70	3.47
Non-financial sector (millions of pesos)				
Assets	80,890	80,890	80,890	80,890
Liabilities	38,046	44,988	50,211	80,890
Equity	42,843	35,892	30,678	0
Change in equity		-16.2%	-28.4%	-100.0%
Banks (millions of pesos)				
Assets	155,023	155,023	155,023	
Liabilities	138,229	147,962	155,023	
Equity	16,794	7,061	0	
Change in equity		-58.0%	-100.0%	

larger peso devaluation (1 to 3.5) to wipe out non-bank capital. The higher peso costs of servicing the Argentine government's foreign debts following a peso devaluation would increase the

budget deficit as well. According to Exhibit I 1.4, a devaluation of the peso to 1.7 would increase the Argentine deficit by over 50%, to 2.9% of GDP from 1.9%.

EXHIBIT I 1.4 PUBLIC-SECTOR IMPACT OF PESO DEVALUATION (IN PESOS UNLESS OTHERWISE INDICATED)

	Current	Post-Devaluation Scenarios	
		1	2
Exchange rate	1.00	1.40	1.70
Total revenues	54,900	54,900	54,900
Primary spending	52,800	52,800	52,800
Primary balance*	2,100	2,100	2,100
Interest payments	8,000	10,063	11,560
Pesos	640	640	640
U.S. dollars	7,360	9,423	10,920
– To local creditors	2,355	2,355	2,355
– To foreign creditors	5,005	7,068	8,565
Central bank revenue	400	1,128	1,368
Fiscal balance	(5,500)	(6,835)	(8,092)
Fiscal balance (% of GDP)	-1.9%	-2.4%	-2.9%

*Primary balance refers to the government's pre-interest balance.

CASE 1.2 • Brazil Fights a Real Battle**233**

In talking to some investment bankers, Mike Lanning was made aware that pressure for a peso devaluation would likely decline if the promised monetary easing by the Federal Reserve takes place. Lower U.S. interest rates would lead to lower Argentine rates and stronger economic growth.

Another option being considered is unilateral dollarization, whereby Argentina would replace the peso with the dollar. Dollarization, it is argued, would enhance the credibility of Argentina's commitment to monetary and exchange rate stability. Despite the currency board, the Argentine peso is not fully credible. Hence, any shocks from global financial crises result in widening spreads between peso- and dollar-denominated bonds, leaving the Argentine economy with high credit costs, less investment, and slower economic growth. Proponents claim that dollarization, by reducing the risk of devaluation, would result in lower Argentine interest rates and faster economic growth. The tradeoff is the loss of monetary policy options that would ensue once the Argentine peso is completely abolished. Most important of these is that dollarization appears to preclude a "lender of last resort." However, Argentina has a limited lender-of-last-resort capacity through its Contingent Repurchase Facility, which offers a temporary source of funds to illiquid banks. This facility,

which was arranged in 1996, gives Argentina the option to sell government bonds to a group of international banks under a repurchase agreement. Another cost of dollarization would be the Argentine government's loss of seignorage. Currently, the currency board stands ready to convert pesos into dollars but it invests its dollars in interest-bearing assets. These assets would have to be sold off to get the cash to replace the pesos currently in circulation.

Mike Lanning also realized that he had to consider the consequences of these alternative currency scenarios for his own projects as well as the likelihood of their materializing.

Questions

1. What are the pros and cons of Argentine peso devaluation?
2. Given these pros and cons, what is the likelihood that Argentina will devalue its peso?
3. What are the pros and cons of dollarization?
4. What are the likely consequences of peso devaluation for the Mega project?
5. What effects would dollarization likely have on the Mega project?
6. What alternatives are available to stimulate Argentina's economic growth independent of exchange rate policy?

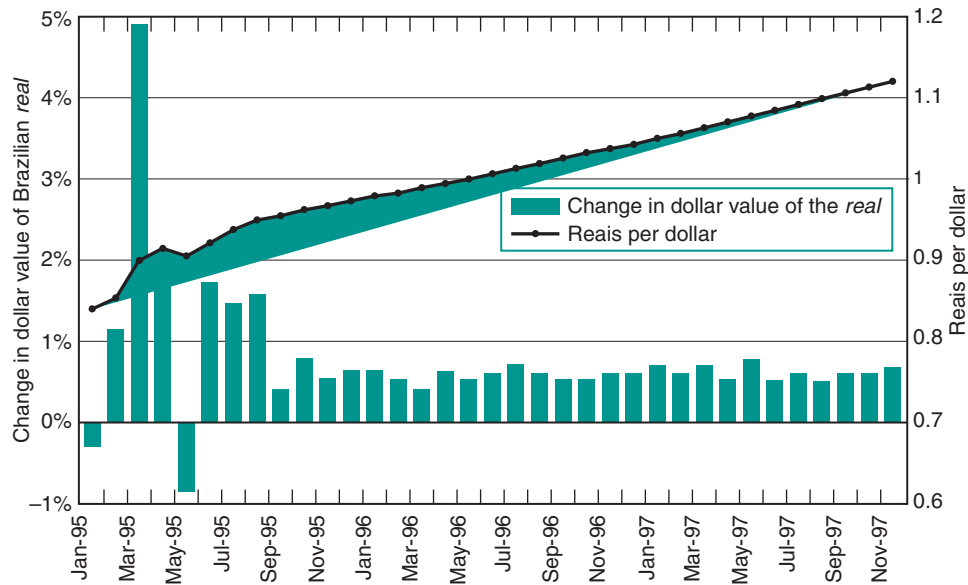
**CASE 1.2 BRAZIL FIGHTS A REAL BATTLE**

In 1994, with inflation running at close to 50% *monthly* and Brazil's economy near collapse, Fernando Cardoso was elected president. A former socialist mugged by reality, Cardoso opened the economy, adopted a number of free-market policies, stabilized the currency, and brought inflation down to just 7% annually by 1997. Now the Asian financial turmoil is threatening President Cardoso's proudest achievement

and the cornerstone of his popularity: a stable Brazilian *real*. Fallout from the Asian crisis has been more acute in Brazil than elsewhere in Latin America, partly because speculators believe that the *real* is overvalued. They also see parallels to Asia in Brazil's large trade deficit financed by foreign capital inflows. The pressure on the *real* has been ratcheted up because Brazilian financial players are unusually aggressive and

EXHIBIT I 2.1

BRAZIL'S CRAWLING PEG LEADS TO A GRADUAL DEVALUATION OF THE *REAL* AGAINST THE U.S. DOLLAR



Source: International Financial Statistics, various editions.

sophisticated, traits that are a legacy of the past three decades when rampant inflation and abrupt policy shifts forced traders to be brutally pragmatic and move quickly to survive.

The speculators may have met their match in President Cardoso, however. Cardoso is unlikely to give up easily because he has staked Brazil's fortunes, and his own, on the *Real Plan*, which he had introduced in 1993 while he was finance minister. Its linchpin is a crawling peg designed to end the cycle of runaway inflation followed by massive devaluations that has given Brazil 30 years of economic chaos and eroded living standards for much of the population. By permitting only a tightly controlled and limited 0.6% depreciation of the *real* against the dollar each month (see Exhibit I 2.1), Cardoso has managed to halt Brazil's hyperinflation and bring a new confidence that is spurring foreign invest-

ment (see Exhibit I 2.2 for statistics on the Brazilian economy). However, Brazil's current account deficit is mounting, its foreign exchange reserves are falling, and financial markets are getting nervous that the *real* will suffer the same fate as that of the Asian currencies. The loss of confidence in the *real* is showing up in the form of capital flight, with \$10 billion fleeing Brazil in the last two weeks of October 1997 alone.

In addition, a fractious Congress has kept President Cardoso from carrying out the budgetary reforms that would allow him to control the fiscal deficits that have been the engine of hyperinflation and thereby institutionalize Brazil's newfound macroeconomic stability. These reforms, which include revamping the tax, civil service, and social security system and privatizing key industries from telecom to mining, would allow Brazil to consolidate the economic gains it has

CASE I.2 • Brazil Fights a Real Battle**235**

already made, give investors greater confidence in the economy's future, and speed up Brazil's growth rate. As of now, Brazil has a bloated public sector (government workers cannot be dismissed, regardless of performance), large budget deficits (5.9% of GDP in 1997), protected industries, high tax rates with low tax collections, and one of the most unequal distributions of income and wealth in the world. One legacy of Brazil's large budget deficits is that the country must now roll over about \$20 billion a month in government debt.

Nonetheless, until the Asian crisis hit, investors had responded to currency stabilization and the free-market reforms already begun by pushing up the Brazilian bolsa (stock market)

by about 158% from January 1994, when the *Real Plan* took hold, to October 1997 (see Exhibit I 2.3). However, contagion from the Asian crisis has recently pummeled the bolsa, sending it down 29% from August through October.

Although it now appears that Cardoso will have to wait until his second term in office to carry out most of the proposed reforms, he is nonetheless reputed to be preparing a new push on his long-stalled reform program. One of the stalled reforms is a bill to privatize the Brazilian social security system. This system, which pays out benefits to some workers in their 40s, is widely viewed as contributing to a Brazilian savings rate of just 16% of GDP (to

EXHIBIT I 2.2**KEY BRAZILIAN ECONOMIC STATISTICS (IN U.S. \$ BILLIONS UNLESS OTHERWISE INDICATED)**

	1990	1991	1992	1993	1994	1995	1996	1997
Gross Domestic Product	\$445.9	\$386.2	387.3	\$429.7	\$543.1	\$705.4	\$775.4	\$803.0
Current-Account Balance	-\$3.8	-\$1.5	\$6.1	\$0.0	-\$1.2	-\$18.1	-\$24.3	-\$33.8
Current-Account Balance (% of GDP)	-0.9%	-0.4%	1.6%	0.0%	-0.2%	-2.6%	-3.1%	-4.2%
Budget Deficit (% of GDP) ¹	-1.4%	-1.4%	2.2%	-0.2%	-1.3%	4.8%	3.9%	5.9%
Foreign Investment ²	\$0.8	\$3.9	\$16.4	\$15.8	\$23.8	\$25.8	\$34.3	\$55.1
Portfolio	\$0.5	\$3.8	\$14.5	\$15.0	\$21.6	\$22.6	\$24.7	\$37.2
Direct	\$0.3	\$0.1	\$1.9	\$0.9	\$2.2	\$3.3	\$9.6	\$17.9
Reserves Excluding Gold	\$7.4	\$8.0	\$22.5	\$30.6	\$37.1	\$49.7	\$58.3	\$51.4
Exchange Rate (End of Period, Reals/\$) ³	0.000064	0.0004	0.005	0.119	0.846	0.973	1.039	1.116
Inflation (Consumer Price Index)	1657.7%	493.8%	1156.0%	2828.7%	992.0%	25.9%	11.3%	7.2%
U.S. Inflation Rate (CPI)	5.4%	4.2%	3.2%	3.0%	2.6%	2.8%	3.0%	2.3%

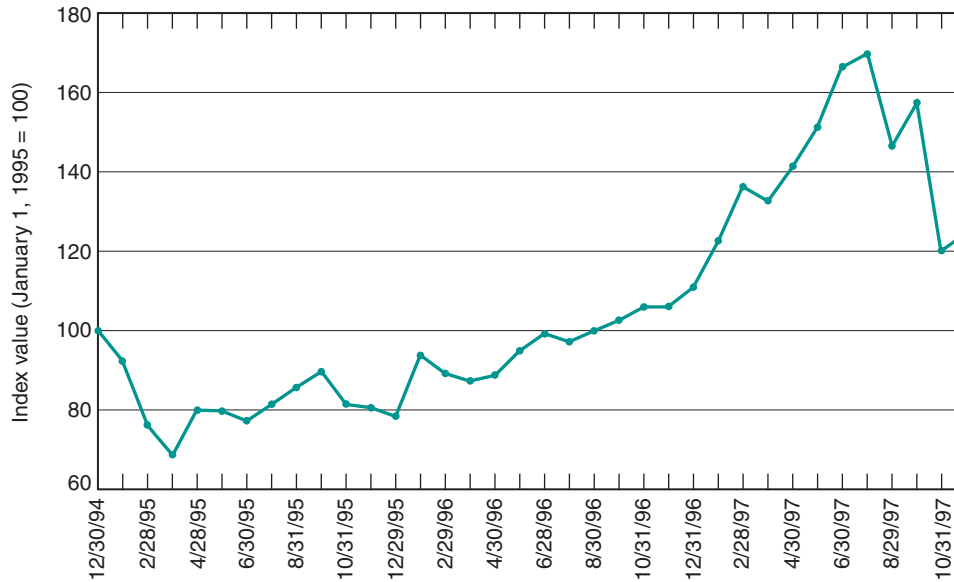
¹A negative sign indicates a budget surplus.

²Other components of foreign investment are relatively minor.

³Exchange rate for the *real* prior to 1994 reflects the effects of two earlier currency replacements.

Source: Current Bank of Brazil Bulletin, April 1998 and Economic Report of the President, February 1998.

EXHIBIT I 2.3 BRAZILIAN BOLSA IN U.S. DOLLARS:
JANUARY 1995–NOVEMBER 1997



Source: Morgan Stanley Capital International.

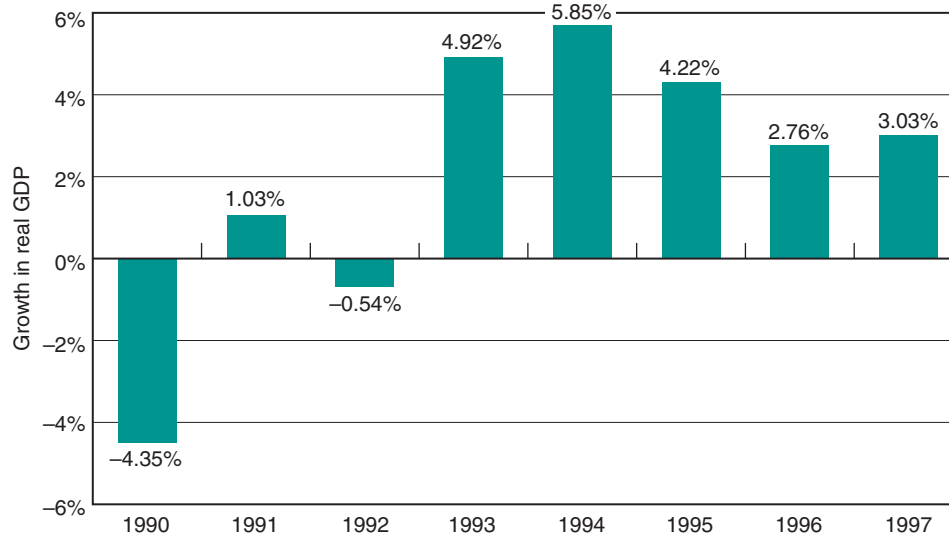
put this number into perspective, Asian countries average closer to 30%). Until the presidential election in October 1998, Cardoso expects to maintain a tight-money policy that will support the *real* and, it is hoped, prevent the trade deficit from spiraling out of control. In addition to raising interest rates, the government's main weapon to stanch Brazil's fiscal and trade deficits is a newly invigorated privatization program. In the first half of 1997, a large share of the \$7.4 billion in foreign direct investment came in the form of purchases of state-owned businesses. Altogether, Brazil expects to take in an estimated \$17 billion from privatizations in 1997 and at least \$22 billion in 1998.

Fortunately, the government is making enough progress toward economic reform to continue to entice foreign investors, who appear mesmerized by Brazil's enormous potential. With a population of 160 million and an estimated GDP of about

\$800 billion that has grown at an average rate of more than 4% annually since 1993 (see Exhibit I 2.4), Brazil is by far the largest market in Latin America (representing about 45% of total Latin American GDP) and provides a launching pad for investments throughout the region. Moreover, it is rapidly industrializing, as evidenced by the fact that industrial products now account for 75% of Brazil's exports. Historically, coffee made up 80% of exports; now it accounts for only about 5%.

Rather than devaluing the currency, the traditional response by Brazilian governments faced with speculative attacks, Brazil's central bank—the Banco Central do Brasil—has defended the *Real Plan* by doubling the basic interest rate to 43% (see Exhibit I 2.5) and spending the nation's dollar reserves to buy up excess reals (plural of *real*). In early November 1997, Cardoso also managed to push through Congress some budgetary reforms along with \$18 billion in

EXHIBIT I 2.4 BRAZIL'S ECONOMIC GROWTH RATE: 1990–1997

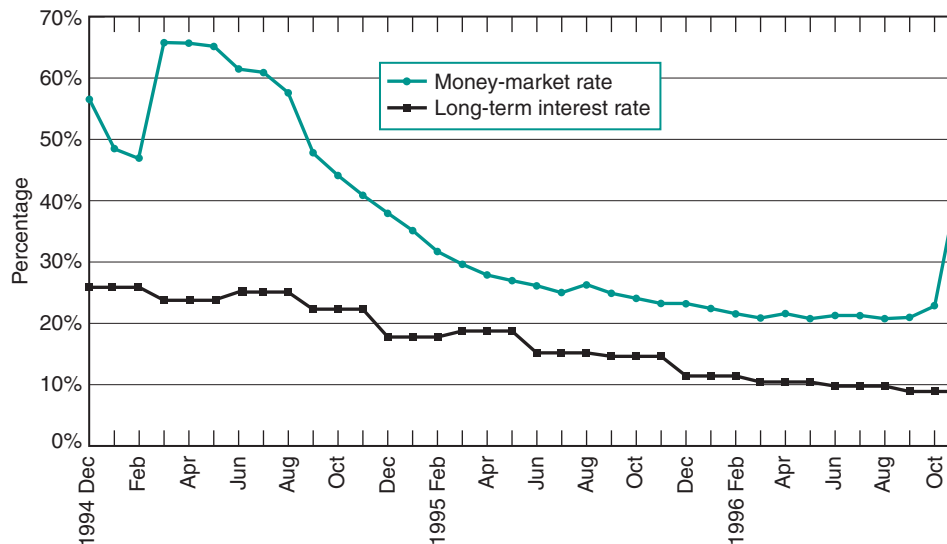


Source: Central Bank of Brazil Bulletin, April 1998.

spending cuts and tax increases, equivalent to more than 2% of GDP. The *real's* defense is not cost-free, however. The high real interest rates are expected to slow GDP growth in 1998 to 1.5%, from 3% in 1997. They are also pushing up the unemployment rate and worsening the credit quality of Brazil's banks. Cardoso's economic reforms have been attacked as benefiting the wealthy and coming at the expense of the poor, who are the first to lose their jobs. These charges are worrisome in a presidential-election year. Some observers have argued that by increasing the pace of the devaluations, Brazil could afford to lower interest rates and boost growth and jobs—and at the same time improve Cardoso's prospects in next October's presidential elections. However, many analysts believe that any significant deviation from the *Real Plan*, especially before an election, would look like politics as usual and cast doubt on the sustainability of all economic reforms. Backsliding on currency stability is also likely to be unpopular. The *Real Plan* has made politicians and the populace aware of the strong

link between devaluation and inflation. Thus, any policy changes that threaten the low inflation wrought by currency stability is likely to be politically risky. However, the recent austerity measures are also unpopular and are eroding Cardoso's approval ratings. With a recession looming as Brazil enters into an election year, Cardoso's supporters fear that rising joblessness will cut deeply into his electoral chances.

Banks and other financial institutions have found that speculating against the *real* is an expensive and difficult proposition because the Banco do Brasil maintains a wide range of controls on the foreign exchange market. One of the most onerous and costly requires that buyers of dollars deposit a large portion of them in special, low-interest accounts with the central bank. In times of intense speculative pressure, the central bank has cut the interest rate paid on these accounts to zero. Thus investors who borrowed reals and converted them to dollars would start losing money the moment they deposited them with the central bank, unless the *real* fell enough to offset the loss of interest.

EXHIBIT I 2.5 BRAZILIAN INTEREST RATES

Source: Central Bank of Brazil Bulletin, April 1998.

Questions

1. How does Brazil hope to control its current-account deficit through a tight monetary policy? What alternatives are available to control Brazil's current-account deficit?
2. How will Brazil's tight money policy affect its fiscal deficit? How will it affect Brazil's real (inflation-adjusted) interest rates, both short-term and long-term rates?
3. Why have Brazil's interest rates generally fallen in recent years?
4. How would reform and privatization of the social security system improve Brazil's savings rate? What would be the likely consequences of this improvement for Brazil's current-account balance and the *real's* value? Explain.
5. What are the costs and benefits of using currency controls to defend the *real*?
6. Why might speculators view the *real* as being overvalued? Based on the data in the case, what is your best estimate as to the *real's* degree of overvaluation?
7. What are the tradeoffs that President Cardoso must consider in deciding whether to accelerate the *real's* depreciation?
8. Could Brazil have avoided the recessionary impacts of its monetary policy if it had devalued the *real* instead?
9. What would a Brazilian devaluation do to the currencies and economies of Argentina and Chile, its neighbors and largest trading partners?
10. What is the link between Brazil's budget deficits and its historical hyperinflation?
11. What mix of fiscal and monetary policy would you recommend to President Cardoso? Should he devalue or defend the *real*?