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BRAZIL: THE REAL PLAN

In May 1993, Brazil's President Itamar Franco appointed sociologist Fernando Henrique Cardoso to the position of finance minister of Brazil. Cardoso, who was the minister of foreign affairs at that time, was about to face a great challenge. He would be the fourth finance minister for Brazil in less than eight months.

In early 1995, Cardoso took office as the president of Brazil, after defeating the Labor Party candidate, metalworker Lula (Luis Ignacio da Silva) in the elections. That was a clear signal that the Brazilian people trusted Cardoso to finally put the country on the right track to success.

Cardoso was reelected in 1998, defeating da Silva again, mainly because of the objectives he achieved. Brazil was finally able to control inflation, the currency was stable, the country proved that its economy was manageable by surviving the Mexican Crisis in 1995 and the Asian Crisis in 1997, and above all, the country was back on the radar of international investors (**Exhibit 1**). In more than 30 years, Cardoso was the first democratically elected president to complete his term since Juscelino Kubsticheck (1956–61). In five years, the country experienced growth and stability and it seemed that Brazil would take its place among the developed capitalist countries.

Cardoso, however, was still struggling to complete the reforms. If Brazil were not able to approve and implement significant fiscal reforms, all the positive things that had been accomplished would be jeopardized. **Exhibit 2** shows budget deficit data and **Exhibit 3** illustrates foreign debt. In terms of foreign indebtedness, while Brazil was able to reduce short-term debt, net foreign debt expanded by 32.6% in 1998 (growth of net foreign debt was almost double that of total foreign debt due to the decline in the international reserve position).[1] To make matters worse, the Russian Crisis exploded in August of 1998, and investors decided to be more conservative regarding developing countries and to take a deeper look into the economies in which they were investing. What would they see in Brazil? What challenges would Cardoso face in his second term?

[1] Banco Central do Brasil (Central Bank) annual report, 1998.

The Development Cycle of Brazil

From its discovery by the Portuguese in 1500 through its independence in 1822, and even through the beginning of the 20th century, the Brazilian economy was based on agriculture and mineral extraction. Sugar, coffee, rubber, gold, and gems were the main export products. When other Latin American and African countries emerged as strong competitors in these industries and World War I created a decrease in exports, Brazil struggled economically because of its great dependence on commodity prices. The attempts to defend coffee prices (one effort included trying to burn the product to decrease the excessive supply in 1931)[2] were unsuccessful. At the beginning of the Great Depression in 1929, coffee alone was responsible for 71% of total exports, or 10% of the gross national product (GNP). The decrease in coffee activity was offset somewhat by an increase in cotton production. Brazil, especially the São Paulo region, benefited from European immigrants who came searching for the rich soil of the region. They brought their expertise, and soon farmers and international investors started investing in infrastructure, such as railroads and energy mills, and determined São Paulo as the future economic center of Brazil. **Exhibit 4** shows a map of Brazil.

World War I and the increase in trade barriers after the Great Depression sharply reduced international trade, and Brazil turned to its internal market. This contributed to the industrial development of the country, as it had to provide the goods for its own market. After World War II, Brazil switched its trade focus from Europe to the United States (see **Exhibit 5**). Brazil also strengthened its ties with the United States by forming a multinational team to study Brazil's problems. At the same time, the World Bank and the International Monetary Fund (IMF) were inaugurated with the mission to promote development all over the world.

In the late 1950s under President Juscelino Kubsticheck, Brazil experienced growth and development of its industry. Kubsticheck's motto was to do in five years what would normally be done in 50. The state coordinated private investment and printed money to support the development, a move that was largely criticized by the opposing monetarists. Through Executive Groups (GE) for several different industries, Kubsticheck tried to develop production facilities in Brazil. It was the height of the import substitution policy that had been in place throughout the century, for example, with the creation of the "Registration of Similar Products" of 1911. This meant that a Brazilian producer willing to produce a product usually imported by the country would have tax protection and incentives.

In the early 1960s, Jânio Quadros took office and promoted tight monetary and fiscal policy. He came out of a minority party and did not try to build alliances with the big parties that ruled the country. Quadros was not able to run the country because he did not have the support of congress. Thus, he decided to resign, hoping that the people would bring him back to office with much more power. The coup, however, did not work, and his vice president, João Goulart, took office. Goulart was a former labor minister and, during his term, gave a 100% increase to the minimum wage. The aristocracy and military feared that Goulart and his leftist ideas would bring

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[2] Werner Baer. *The Brazilian Economy: Growth and Development*. 4th ed. (Westport, CT: Praeger Publishers, 1995), 36.

the country closer to Communism, and in 1964, a military coup brought Marshal Castelo Branco to power as the president of Brazil. This movement was supported by Brazil's aristocracy and some even said by the United States, which was in the middle of its own battle against Communism.

The initial economic goal of the dictatorship was the stabilization of the economy, which was experiencing an annual inflation rate of 88%. It was the vision of the new regime, which was established in 1964, that the path to economic recovery lay in Brazil's ability (1) to control inflation; (2) to eliminate the price distortion that had accumulated during the past; (3) to modernize capital markets to lead to an increased accumulation of savings; (4) to create a system of incentives to direct investment into areas and sectors deemed essential by the government; (5) to attract foreign capital (both private and official) to finance the expansion of the country's productive capacity; and (6) to use public investments for infrastructure projects and in certain government-owned heavy industries.

In the first years after the 1964 change of government, policymakers emphasized stabilization and structural reforms in Brazil's financial markets. The former consisted of classic stabilization measures—curtailment of government expenditures in a number of sectors, increased tax revenues as a result of improvements in the tax-collection mechanism, tightening of credit, and a squeeze on the wage sector. The stabilization program also included measures to eliminate the price distortions that had worsened during the previous decade of inflation.[3]

Initially, the stabilization measures put in place caused Brazil to go through a recession. From 1968 on, however, the Brazilian economy entered its remarkable seven-year boom, known as the "Brazilian economic miracle." Between 1968 and 1974, real annual gross domestic product (GDP) growth averaged 11.3% per year and new industries such as iron, steel, car manufacturing, oil, chemicals, aviation, and telecommunications emerged.

Nevertheless, the inflation rate remained high. To avoid the inflation-induced loss of the purchasing power of money, a complex system of indexation was introduced in 1968. Under Brazil's indexation system, domestic currency values of wage rates, rents, debts, government bonds, savings, and other mid- to long-term contractual agreements were ratcheted upward continuously in step with increases in the price levels. Indexation protected the real value of a contract and offset some of the distortions that inflation would bring about, including discouraging savings due to negative interest rates, impossibility for the government to sell bonds to cover its deficits, decapitalization of enterprises due to the use of historical costs in depreciation. Initially, indexation appeared to exhibit positive results and coexisted with a steady decline of inflation.[4]

The government also focused its efforts on investment and industrialization. Between the early 1960s and the mid-1970s, more than 350 state-owned enterprises (SOEs) were created for the production of industrial goods and services. The newly founded enterprises were protected by

[3] Baer, 75.
[4] Baer, 140.

high tariff barriers. Critics of this import substitution industrialization (ISI) strategy had doubts about the possibility of high rates of economic growth once the dynamism of ISI vanished. Orthodox critics of the ISI process felt that the inefficient industrial structure resulting in the production of high-priced goods (which could not be sold in large quantities domestically or abroad) would severely limit the prospects of industrial growth. They also believed that the failure to diversify exports during the period of ISI would lead to stagnation based on import constraints. Thus, they felt that the post-ISI hopes of high rates of growth would lie primarily in developing the agricultural export sector and the rationalization of industry (i.e., weeding out industries with no present or prospective comparative advantage).

Nonorthodox or structural critics felt that because ISI had not solved some of the underlying socioeconomic problems that were present even before the process had started (e.g., the backwardness of the agricultural sector or the unequal distribution of income), economic stagnation was bound to return once the inherent dynamism of ISI had spent itself. Some structural critics even pointed to evidence showing that ISI aggravated existing socioeconomic problems. In Brazil and in a number of other developing countries undergoing ISI, income became more concentrated than before and the new industries did not create sufficient employment for the rapidly growing urban population.[5]

In 1973, the “miracle era” ended with the first oil shock. Instead of engaging in an austere adjustment program to cope with the dramatic decline in the country’s terms of trade, the government opted for a growth policy that resulted in substantial structural changes in the economy, a resurgence of inflation, and a rapid expansion of the country’s international debt. The oil shock of November 1973 quadrupled the price of petroleum. Because Brazil was relying on imports for more than 80% of its oil consumption at the time, the country’s total import bill rose from USD6.2 billion in 1973 to USD12.6 billion in 1974, the trade balance changed from a slight surplus in 1973 to a deficit of USD4.7 billion in 1974, and the current account changed from a deficit of USD1.7 billion to one of USD7.1 billion. **Exhibit 1** shows a detailed balance of payments for the 1970s.[6]

Indexation, once the antidote, turned out instead to be the poison. It increased inflationary pressures. In response to the external oil price shocks, indexation pushed prices up throughout the economy as indexed prices and wages increased. In terms of the government, the presence of indexation on its accounts produced rising deficits in the public sector’s budget. Since indexation benefited mainly members of the upper class, who had wages and savings that were subject to indexation, income distribution worsened during the so-called miracle era. **Exhibit 6** shows social data on Brazil.

After the miracle, Brazil went through an era between 1974 and 1978 of misguided economic policies. The country continued to invest in SOEs and increased its oil imports, while the entire world was slowing the pace of development due to the oil crisis. The government borrowed money abroad at floating rates to finance its investments, not all of which were

[5] Baer, 75.
[6] Baer, 89.

profitable. When the second oil shock happened, interest rates in international markets skyrocketed. As Brazil borrowed money at floating rates, this increased the amount of foreign debt service to 5% of the GDP.

In the following period from 1980 to 1984, Brazil focused on managing its international relations. The Mexican debt moratorium in 1982 started a debt crisis in Latin America. Brazil reached an agreement with the IMF, went through a maxidevaluation of its currency, and, because foreign investors were not confident about investing in Latin America, Brazil's government financed its expenditures by increasing its domestic debt. The economic unrest led to questions regarding the dictatorship's ability to handle the crisis—the populous began pressuring the government to end the dictatorship. General Figueiredo was the last military president in Brazil. In 1984, Brazil went through an indirect election, and congress elected Tancredo Neves as the first civilian president after 20 years of dictatorship.

Neves was to take office in 1985, but he died before then. His vice president José Sarney took office in his place and inherited a terrible economic situation: an economic recession, inflation rates of almost 200% annually, and high foreign debt. To address the problems of foreign debt and inflation, Brazil implemented a series of unorthodox fiscal and monetary plans. The first of these plans, called the "Cruzado Plan," was implemented in February 1986. Prices and wages were frozen, all indexes were banished from the economy, and a new currency called the cruzado was introduced (it replaced Brazil's 1942–1967 currency called the cruzeiro). Initially, the population was very motivated by the thought of ending inflation, and even went out on the streets claiming themselves as "Sarney's supervisors." They monitored price increases in stores and, if they noticed any, called police to close the store down. The price freeze, however, resulted in a misalignment of relative prices that when combined with barriers to imports resulted in a shortage of products. For producers it was a matter of luck—if the suppliers of a company had increased their prices before the freeze, and if the company did not have time to translate this increase into its prices, the company's products would not be profitable at their frozen price. As a result, producers kept their products from the official market, and a black market for products such as milk and meat developed. By August 1986, the demand for goods exploded and yet the supply stayed constant. As item after item disappeared, shop owners began charging more than official prices. Facing the shortage of many goods and the reappearance of inflation, the government scrapped the Cruzado Plan. The new measure, dubbed Cruzado Plan II, attempted to reassert control over the economy by increasing sales taxes by 50% to 100% and lifting most price controls. The Cruzado Plan II, however, only succeeded in reigniting an annual 500% inflation rate.

After the failure of both Cruzado Plans, a series of other economic stabilization plans were implemented under Sarney's presidency. **Exhibit 7** summarizes them, all of which failed and were abandoned after a few months. Many of them included wage and price freezes, introduced new currencies (e.g., the cruzado novo), and promised to kill inflation with no pain. When the miracle could not be realized, more traditional monetary and fiscal tools were used to fix the damage caused by each of these plans. At the end of the 1980s, Brazil's economic situation was worse than at the beginning of the decade. Between 1980 and 1990, per-capita income fell by almost 4% and cumulative inflation during the 1980s reached 39,043,765%, compared with 85% in the United States during the same period.[7] In Sarney's last year, the entire country was just waiting for the first direct elections in 29 years.

Back to Democracy

On March 15, 1990, Fernando Collor de Mello, former governor of the small state of Alagoas, took office as president of Brazil, after winning the race in a second-round ballot against Labor Party candidate da Silva. Although relatively unknown, Collor capitalized on the nation's discontent with the traditional parties and organized the National Reconstruction Party (PRN), which had no say in congress. The PRN held only 20 out of 531 seats in the chamber of deputies, and 2 out of 81 of the senate seats).[8] History was repeating itself, as Collor was taking office under the same conditions as Quadros had in the 1960s. Even worse, Collor was inheriting a devastated country because now the economy was stagnant, hyperinflation was about 81% a month (March 1990), and there was huge domestic and foreign debt. As Brazil declared a moratorium on foreign debt in 1987, the relationship with the international community worsened. Moreover, Brazil amended its constitution in 1988, transferring tax collection, but not responsibilities, to states, which hurt the federal budget.

In addition, Collor faced other challenges. Due to the numerous attempts to stabilize the economy under Sarney, the population would have little confidence in the commonly used tools such as price freezes as a solution to the inflation problem. Nor would Collor be able to approve fiscal reform, because congress had no history of doing so and because Collor's party was a small minority in congress.

Collor's stabilization plan's goals were to control inflation by applying tight policies to restore the government's capacity to implement economic policy and to renegotiate the debt. Although this approach seems orthodox, the way Collor decided to approach the problem had never been seen before in the international economy.

Collor made it clear that the main target of his plan was to "kill the tiger of inflation with a single bullet." Prices and wages were frozen in an attempt to control the "inertial inflation."[9] The government also implemented a tight fiscal policy by trying to reduce the number of federal employees, implementing new taxes on financial transactions, increasing the efforts to collect taxes, and starting to implement a privatization plan.

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[7] James Brooke, "Bad Times, Bold Plans for Brazil," *New York Times*, January 7, 1990.

[8] Susan Kaufman Purcell and Riordan Roett ed., *Brazil Under Cardoso* (Boulder, CO: Lynne Rienner Publishers, 1997), 26.

[9] Inertial inflation is the inflation that is already built up in people's minds. The most different elements of the supply chain would be so used to inflation that, even in its absence, they would adjust prices for possible inflation. In an inertial inflation scenario, if all suppliers kept prices constant, there would still be inflation, because the next member of the supply chain would adjust his prices anyway.

It was the monetary policy of the "Collor Plan," however, that shocked Brazil. The government froze checking, savings, and investment accounts to reduce the money supply. Each Brazilian citizen would be allowed to withdraw a certain amount of money (about USD1,250) per month, and access to the remaining balance would be blocked for 18 months. The amount of blocked money amounted to about 80% of money circulating in the economy.[10] The idea was to control inflation by making money a scarce resource, driving interest rates up, and slowing down demand. Collor also implemented the fourth currency reform in four years by replacing Brazil's current currency, the cruzado novo or "new cruzado," with the cruzeiro, which had been the name of Brazil's currency between 1942 and 1986.

The immediate impact of the Collor Plan was to reduce dramatically the country's liquidity so that the money supply as a percentage of GDP fell from about 30% to 9%. Within a month, inflation declined to a single-digit monthly rate (5% or 9%, depending on the index used). The sharp decrease in liquidity led to a pronounced decline in economic activities, as revealed by the negative growth of the GDP of 7.8% in the second quarter of 1990. The fear of a recession and the pressure from various socioeconomic groups led the government to release many blocked financial assets ahead of schedule, which was done in an ad hoc fashion, without well-defined rules.[11]

After 45 days under the plan, the money supply grew again by 62.5%, or 14% of the GDP. In the first few months of the plan, an estimated one-third to one-half of the frozen assets found their way back into the market, taking advantage of several loopholes and exceptions to the confiscation. By July 1990, the inflation rate that had dropped between April and June started to increase again, reaching a monthly rate of more than 17% in November. In addition, Collor was not able to fire federal employees because of the protection given by the constitution and the lack of support from congress.

At the same time, Collor was putting together a plan to open the Brazilian economy through a process called "abertura."[12] The idea was to integrate Brazil into the global economy and let foreign competitors come to the national market by reducing trade barriers. There was additional pressure from the international community and agencies such as the IMF for Brazil to turn into a more open economy. The timing of this move was not good. Brazil was going through a recession, and opening the economy under these conditions displeased the Brazilian business community.

By the end of the first year of his term, Collor had not achieved his main campaign pledge to control inflation. The annual inflation rate at the end of 1990 reached 1,477%. In 1991, Collor implemented a second unsuccessful attempt to control inflation by freezing prices and eliminating indexation. Collor, however, had lost all his support—the people could not forgive him for confiscating their savings. The congress did not like the fact that the president was constantly attacking it, and the business community was disgruntled with the recession and the

[10] "Brazil's Congress given Backing to the Collor Plan," *Wall Street Journal*, April 13, 1990.
[11] Baer, 184.
[12] Abertura is the Portuguese word for "opening."

opening process. It did not take long to organize all these forces and find a reason to put Collor out of office. On September 29, 1992, following allegations of corruption in his government, the chamber of deputies suspended Collor from the presidency for 180 days, during which time he faced impeachment before the senate, which decided to remove him permanently from office. On December 29, 1992, minutes after they had brought corruption charges against him, Collor resigned, three years before the end of his term. The senate still impeached him by a large majority.

The Real Plan

On the same day Collor resigned, Itamar Franco, Collor's vice president, took office as president of Brazil. Franco's greatest public role prior to becoming president was as mayor of Juiz de Fora, a city in the countryside of the state of Minas Gerais. Franco promised a government without corruption and without economic shocks. He developed his image as a simple man working for the public by criticizing mayors and governors for the high inflation rates in the countryside. At the beginning of 1993, politicians, media, and entrepreneurs saw the new president in a positive light.

Franco inherited a devastating economic situation. Inflation was 25% a month (about 1,200% per year) and Brazil was in a recession. The first months of his presidency were tumultuous. In the first month, Finance Minister Gustavo Krause resigned from his office; Paulo Haddad was appointed to replace him. Haddad, however, also left office in March 1993, after disagreements with Franco. Eliseu Resende was appointed to occupy the post, but after accusations of maintaining inappropriate relationships with contractors in his previous position as the chief of the national department of highways, Franco dismissed him in May 1993. and the president appointed Senator Cardoso, who was the minister of foreign affairs, as the new finance minister. Franco was betting that Cardoso's liaisons and political influence would bring stability to the government.

Cardoso immediately formed a team to address the economic problems including the high inflation, the government's budget deficit, high foreign debt, and the intrusive government involvement in the economy. The first stage of the economic stabilization program was the Immediate Action Plan, which cut government expenditures by USD6 billion and contained measures to improve tax collection and to speed the privatization of state-owned companies. As the constitution of 1988 transferred tax collection to the states, the team also decided to transfer additional responsibilities such as health, education, social services, housing, basic sanitation, and irrigation to them.[13]

By the end of 1993, inflation increased to 38% per month (more than 2,000% per year). By the end of his term, Franco was not very popular so there was no possibility for his reelection. The favored opposition candidate for the upcoming elections in October 1994 was da Silva, and if the stabilization plan were successful, Cardoso would be a natural candidate to oppose him.

[13] Baer.

On March 1, 1994, the government implemented one of the key components of the Real Plan, the creation of the “Unidade Real de Valor, URV” (unit of real value). Cardoso explained that the economy would operate with two currencies: the cruzeiro real, Brazil’s official currency (which replaced the cruzeiro in August 1993—1,000 cruzeiros = 1 cruzeiro real), and the URV. The cruzeiro real would be maintained as legal tender, and at the same time there would be an additional currency—the URV, which was a unit of account in which all prices and wages would be quoted. The URV was tied to the U.S. dollar at a 1:1 exchange rate, and its value relative to the cruzeiro real rose daily based on the current inflation rate. The URV was to be replaced with a new currency, the Brazilian real, at a 1:1 exchange rate at a future point.

Under the Real Plan, every transaction was supposed to be indexed on URVs, but paid with cruzeiros reais (plural of “real”). If a car was priced 10,000 URVs, its price in URV would not change, provided that other things (such as productivity, raw materials costs, and wages) were constant. The car’s price in cruzeiro reais, however, would increase on a daily basis. Official prices, contracts, and taxes were denominated in URV, and the government encouraged its use on a voluntary basis by private economic agents. The URV began to be used extensively for private contracts. This way, all contracts would be voluntarily set in URVs, but when it came time to pay the bills, they would be paid in cruzeiros reais.

Customers were told that prices in URV were supposed to be stable. The government, however, did not impose any threat to suppliers or implement any price-freezing plan. They focused their advertising on advising customers to check prices and to shop for the best price. For the first time, the Brazilian consumer experienced sustained price stability and learned to bargain. The population understood the mechanism of the URV quickly. In the first two months of its existence (March and April 1994), the inflation in URV was more than 10% a month but by May, it was already falling, and in June it was below 5%.

Once the economic team felt that Brazil’s inflationary culture was eliminated, they decided to phase out the URV in July 1994. The index now would be called “real,” the new currency for the country. All contracts in URVs were automatically converted to the new currency on a 1:1 basis. The URV and the cruzeiro real were abolished. At the time of the final conversion of prices from URV to reais, many supermarkets, stores, and businesspeople took advantage of the initial confusion and increased prices. They also feared a price freeze. The government refrained from freezes and, by using its public relations network, suggested that the public minimize its purchase of necessities to force a price retrenchment. The merit of this strategy was that, as people did not expect prices in URVs to increase, they did not expect prices in reais to increase. The strategy succeeded, not for the arithmetical complexity it represented, but rather for the psychological effect of destroying the inflationary culture.

Another important element of the Real Plan was its exchange rate policy. When the real was introduced, the upper limit of the exchange rate was fixed to the U.S. dollar at a 1:1 parity. The real was free to appreciate against the dollar, depending on market forces.

A low inflation rate gave incentive to consumption. Real wages were 18.9% greater in the first two months of 1995 than they were in 1994. In the first eight months of the Real Plan, consumption was 20% higher than in previous years. The increased confidence in the economy also stimulated private investment. The government implemented a tight monetary policy and increased interest rates to control demand and to prevent speculative stockpiling of goods.

With a stronger economy, a stable currency, and high interest rates, Brazil started to attract both long- and short-term capital from abroad (**Exhibit 1**). Part of this capital entered Brazil due to the acceleration of the privatization program (**Exhibit 8**). Multinational companies also started to invest in expanding or starting facilities in Brazil as a result of the new confidence in the Real Plan and the future market potential. With respect to the privatization program, Gustavo Loyola, former president of the Central Bank, noted:

> The privatization program of Collor had an immediate impact on the monetary stabilization… [The] state reform initiated by Collor was very important to the mid-term success of the Real Plan. Beyond its positive impacts on fiscal performance, the privatization process has been contributing to the change process of the Brazilian economy, especially in terms of the productivity gains associated with the improvement of the telecommunication and transportation infrastructure.[14]

The increase in the demand for reais associated with the capital inflows led the currency to appreciate (see **Exhibit 9** for exchange rates). In October 1994, the exchange rate was (Brazilian real) BRL0.84 per U.S. dollar. The appreciation was the target of much criticism of the Real Plan. The appreciation combined with the removal of trade barriers, and increased real wages and demand contributed to the first trade deficit in many years in November 1994. **Exhibits 1** and **5** show the surge of the trade deficit. The increase in imports, however, did have a positive side. If Brazil had not increased imports to meet national demand, domestic demand would have exceeded the supply of goods, which would have brought inflation back.

Keeping up with the Plan

In the short term, the results of the Real Plan were impressive. Inflation was brought down from a monthly rate of 47% in June 1994 to 1.5% in September 1994. Growth seemed to pick up in the third quarter of 1994 (**Exhibit 10**). Sales were rising, reflecting purchases from lower-income groups, whose real incomes were boosted by the fact that their monthly losses from quasi-hyperinflation had disappeared (**Exhibit 6**).

The initial good results, however, were just the beginning of a long process. Cardoso, who won the presidential election in October 1994, had great challenges ahead. The first challenge was the Mexican Crisis in December 1994, which negatively affected confidence in all of Latin America. On December 20, 1994, Mexico was forced to let its currency, the peso, which

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[14] Gustavo Loyola was interviewed by the case writer in May 2000.

was previously tied to the U.S. dollar, float. Subsequently, the peso lost about 50% of its value by early March 1995. Factors contributing to the peso devaluation were: rising U.S. interest rates, an overvalued exchange rate, a current account deficit, and falling foreign exchange reserves. The loss of investor confidence resulting from the Mexican Crisis spread all over Latin America. This effect was known as the "tequila effect."

Brazil suffered initially as international investors regarded Brazil as next in line, and withdrew their short-term investments in the country (see **Exhibit 1** for impacts on the capital account during the crisis). To keep the capital from fleeing, Brazil's Central Bank sharply increased interest rates. Nevertheless, capital outflows put pressure on the exchange rate. Due to this pressure for a devaluation of the real, Brazil modified its exchange rate system in March 1995. The new system, a crawling-peg system with bands, allowed the Central Bank to gradually devalue the real by adjusting the target exchange rate band versus the U.S. dollar periodically. The initial band was set at BRL0.86 to BRL0.90 per dollar and had to be adjusted almost immediately to BRL0.88 to BRL0.93 per dollar as markets appeared to expect further depreciation. Subsequently, the Central Bank let the real devalue between 0.5% and 0.65% monthly (equivalent to 6.1% and 7.5% yearly)[15] by adjusting the bands. These policies combined with a high level of international reserves of the Brazilian Central Bank were successful in convincing investors that Brazil's situation was different from Mexico's.

In Loyola's view, the Mexican crisis brought disagreement to the government:

> In the exchange rate issue, the change in the policy was done awkwardly, due to the absence of consensus within the economic team. The decision, then, was to substitute the floating rates policy by an explicit band policy, forcing the devaluation of the Brazilian currency. There was, thus, in February 1995, the introduction of the exchange rate horizontal broad band, which would change every 12-month period. The Mexican crisis brought, for the first time, disagreement to the team that conceived and executed the Real Plan. It had the direct consequence of making the president of the Central Bank—Pérsio Arida—leave the office, four months after the crisis. From the Mexican crisis, the Cardoso government team took two different sides regarding the exchange rate policy.[16]

In the political arena, Cardoso was struggling to keep up with the privatization plan, which started in the Collor era, and slowed down during Franco's term. Sacred cows, such as the SOEs in the oil and mining industries, were part of the privatization agenda. See **Exhibit 8** for balance of privatizations. This caused great concern from the opposition. Their arguments were twofold: (1) the government would be giving away the country's resources (a return to the "The

[15] Gustavo Franco, "O Desafio Brasileiro," *Editora* 34 (1999):306. Translation provided by case writer. Gustavo Franco was the president of the Central Bank from August 1997 to January 1999, and one of the economists who developed the Real Plan.

[16] Interview with the case writer (May 2000).

oil is ours!" xenophobic manifest of the 1960s)[17] and (2) they were charging the government with selling SOEs very cheaply to finance the Real Plan and the BOP. Demonstrations were held all over the country, especially in front of the stock exchanges in Brazil's two major financial centers: São Paulo and Rio de Janeiro. Despite the manifest, the government went forward with the privatization.

Another initiative in the political arena was Cardoso's effort to amend the constitution to allow the current president to run for reelection. The opposition resisted this plan because the success of the Real Plan and Cardoso's resulting popularity lowered its chances of defeating Cardoso in the election. After Cardoso included mayors and governors in his proposal for reelection, the amendment was approved. Finally, Cardoso was also able to approve administrative and social security reforms that would ease the fiscal deficit.

The end of inflation also brought problems to the banking system in Brazil. Before the Real Plan, commercial banks earned up to half of their income from the free float provided by inflation. Banks could generate easy profits by lending surplus cash in checking accounts in the overnight market. This effortless source of profit masked inefficiencies in the Brazilian banking system, which was overstaffed and had too many branches. With the end of inflation, banks had to return to their traditional roles as intermediaries in the capital markets, making money with spreads obtained between borrowing and lending money, and they had to relearn the most basic banking skills—taking deposits, lending, and charging for services—almost overnight. Not all banks learned how to lend and many suffered high levels of nonperforming loans as a result.

In order to avoid a banking system crisis, the Central Bank intervened heavily in the banking sector by taking control of two of the top-10 commercial banks in Brazil in 1995 and developing an institution to protect assets (similar to the U.S. FDIC). More than 190 financial institutions went under one of the several types of Central Bank interventions. In order to finance these interventions, the government decided to create a fund, the PROER (program for restructuring financial institutions), funded by the required reserves of commercial banks with the Central Bank, to invest in these troubled organizations.

These actions of the Central Bank were criticized by the opposition, which claimed that the government was using their money to finance the "thieves" who owned the troubled banks. The government's rationale, however, was straightforward. It had to prove to the domestic and international markets that it was in control of the situation, and that it would go after the banks' shareholders and try to recover the losses. As the president of the Central Bank, Gustavo Franco, noted:

> The opposition tried to make the PROER a political issue, without giving importance to what the bad outcomes of a banking system crisis would mean to Brazilians. The Brazilian who remembers the Collor Plan knows pretty well the feeling of having his own assets blocked in the bank, out of reach. Well, the

[17] For an interesting description of the xenophobia in Brazil since the 1960s, refer to Roberto Campos, *Lanterna na Popa*, Topbooks, not available in English.

> PROER has prevented that. About 4 million account holders had their money locked in long-lasting liquidation processes.[18]

Although the government's actions were costly, the commercial banking sector emerged strengthened from the crisis. International players, such as the HSBC (Hong-Kong Shanghai Bank), ABN-AMRO, Sudameris, Credit Agricole, and the Spanish Banco Santander and Banco Bilbao Vizcaya entered Brazil and increased the competitiveness of the banking sector. The arrival of big competitors started a wave of mergers and acquisitions, and consolidation in the financial markets.

Asian Crisis: The Second Challenge

In the last quarter of 1997, a financial crisis erupted in Asia when Thailand was forced to devalue its currency (baht) due to massive capital outflows resulting from a loss of confidence in the Thai economy. The baht devaluation led investors to question the soundness of their investments in other Asian countries and they quickly shifted their money out of other countries as well. The withdrawal of investments forced other Asian countries such as Indonesia, Malaysia, and South Korea to abandon their exchange-rate peg as well. Investors lost their money in Asia, and started to worry about their portfolios in other developing countries. The contagion effect of the Asian Crisis quickly reached Latin American economies. The real was under significant pressure, but the government promptly responded. The Central Bank doubled its basic lending rate to 43.5%, and the government enacted a package of revenue-raising measures and expenditure cuts equivalent to about 2.5% of GDP.[19] After the storms, interest rates returned to pre-Crisis level. Brazil learned how to respond to attacks. The high interest rates, however, were a burden to state governors, who saw the interest they paid on federal loans increase substantially. The stabilization plan was once more paying its dividend. The measure that was implemented restored the confidence of the international financial community, and capital began to flow back into Brazil by December of 1997.

Cardoso Reelection: What's Next?

Eleven days prior to the October 1998 election, Cardoso delivered a speech announcing a major fiscal adjustment and reform effort that would represent a cornerstone of a second mandate for his government. The Real Plan's success led to Cardoso's reelection by a large majority in the first round in October 1998. Once more, Cardoso defeated the Labor Party's da Silva. The scenario this time, however, was quite different. His second term started in the beginning of 1999, but even before Cardoso finished his first term, a series of events threatened to jeopardize all the positive outcomes realized by the Real Plan, and observers voiced concerns about the true extent of Brazil's economic reforms.

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[18] Franco, 280.

[19] Brazilian Letter of Intent to the IMF (November 13, 1998).

In August 1998, Russia was faced with a balance of payments crisis resulting from a drop in oil revenues due to declining oil prices. Faced with decreased foreign currency reserves, the Russian authorities decided to devalue the ruble to unilaterally restructure short-term public debt, and to impose a 90-day moratorium on private-sector payments of foreign obligations. Investors immediately pulled their money not only out of Russia, but also out of Brazil. They worried about the size of Brazil's budget deficit and its leaders' ability to take tough steps to address the gap.

As 1998 was an election year, Cardoso decided not proceed with the biggest and most unpopular reforms, such as fiscal reform. The country's fiscal deficit, however, had been increasing in recent years and was reaching 8% of the GDP, which was an unacceptable figure in the international economy. Several factors contributed to the budget deficit: (1) Brazil's fiscal systems suffered from chronic structural problems stemming from the federal nature of the tax and spending system. States spent, and the federal government taxed, giving no one a political incentive to reduce the deficit. (2) The high real interest rates of 1995 and 1997 contributed to much of the debt. See **Exhibit 2** for the nominal and operational budget balance. (3) Loyola suggested that the fiscal problem could also be attributed to the elimination of inflation:

> There were several mistakes in the economic policy during the Real Plan. However, the worst of them was the underestimation of the effect of the decreasing inflation rate on the public accounts… Inflation helped to adjust the public accounts, which nominal value was inflexible to the downside. It is the typical example of wages, which were sub-indexed. During inflation times, politicians developed an irresponsible strategy of giving high nominal wage increases, because they knew that such increases would be somewhat offset by inflation. Despite the inflation and indexation times, there was still a certain monetary illusion on the part of workers and money-savers in Brazil. When monetary stability came, the politicians did not take into account that all of a sudden the real wages had become inflexible too. This generated many fiscal problems.[20]

An additional problem was that, according to many experts, the real was overvalued in real terms. Despite the nominal devaluations of the crawling peg exchange rate system, the real had appreciated in real terms since the beginning of the Real Plan, because of the initial appreciation of the real and because the rate of depreciation under the crawling peg system was not always large enough to compensate for the inflation rate differential. Goldman Sachs estimated that this real appreciation resulted in an overvaluation of 14% to 20% in 1998, while Rudiger Dornbusch, a prominent MIT economist, estimated the extent of the overvaluation to be in the range of 25 to 35%. In contrast, Franco, the president of Brazil's Central Bank maintained that the real was valued correctly.[21] He explained that:

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[20] Interview with the case writer.
[21] Franco.

> Overvaluation, these days, has become a relative notion. One would hardly find in Brazil, before the Russian crisis, much people giving importance to the overvaluation argument. The currency was some 10% stronger at that point than it was at the beginning of the plan, inflation was zero, and the Central Bank was devaluing the *real* at a pace of 7% per year more or less. But the true issue is not really whether the PPP rate was the right rate, but whether the president, in his second term, would maintain his support to the existing policies.[22]

The third problem facing Cardoso was the increasing imbalance in the balance of payments. The Real Plan had resulted in a large deterioration in the current account. The current account deficit increased steadily from USD1.1 billion in 1994 to USD33.8 billion in 1998. The current account deficit was financed by capital inflows, which kept Brazil's large stock of Central Bank reserves stable and even increasing. The capital outflows in the wake of the Asian Crisis resulted, however, in a negative overall balance in the fourth quarter of 1997. The Russian Crisis led again to massive capital outflows.

The Asian Crisis had not affected Brazil much, but the Russian Crisis really hurt the country. In response to capital outflows, Brazil brought interest rates back to 42.5% in October 1998. International reserves, which amounted to USD70.2 billion at July's end, declined to USD45.8 billion at the end of October. Devaluation seemed to be the only way out. The government was reluctant, however, to fool with the currency stability—a basic pillar of the Real Plan. See **Exhibits 6** and **9** for impacts of both the Asian Crisis and the Russian Crisis.

While Cardoso needed the support of congress to quickly approve some reforms, congress had its own agenda. It could help the president, but not without payback. Congress was willing to trade its support for the most selfish and narrow-minded reasons, to obtain small advantages for specific groups or regions. Initially, President Cardoso was not willing to pay so high a price.

What should Cardoso do? His challenges were to control the flight of the capital, adjust the budget deficit (especially through fiscal reform), and address the real devaluation issue, but in such a manner that it would not trigger inflation. Additionally, he would have to push reforms even further and try to approve tax and fiscal reforms in congress.

[22] Interview with the case writer.

Exhibit 1

BRAZIL: THE REAL PLAN (A)

Balance of Payments

Year	Exports	Imports	Trade Balance	Services Factors	Services Nonfact.	Services Total	Current Account	Amortization	Capital Account	Balance of Payments	Change Reserves	Gross Debt
1970	2,739.00	2,507.00	232.00	(353.00)	(462.00)	(815.00)	(562.00)	(672.00)	1,015.00	545.00	(378.00)	5,295.60
1971	2,904.00	3,245.00	(341.00)	(420.00)	(560.00)	(980.00)	(1,037.00)	(850.00)	1,846.00	530.00	(483.00)	6,621.60
1972	3,991.00	4,235.00	(244.00)	(520.00)	(730.00)	(1,250.00)	(1,489.00)	(1,202.00)	3,492.00	2,439.00	(2,369.00)	9,521.00
1973	9,199.20	9,192.20	7.00	(712.40)	(1,009.70)	(1,722.10)	(1,688.00)	(1,672.50)	3,512.10	2,178.60	(2,145.40)	12,571.50
1974	7,951.00	12,641.30	(4,690.30)	(900.50)	(1,532.10)	(2,432.60)	(7,122.40)	(1,920.20)	6,253.90	(936.30)	946.10	17,165.70
1975	8,669.90	12,210.30	(3,540.40)	(1,732.70)	(1,429.30)	(3,162.00)	(6,700.20)	(2,172.10)	6,188.90	(950.00)	941.70	21,171.40
1976	10,128.30	12,383.00	(2,254.70)	(2,189.10)	(1,573.90)	(3,763.00)	(6,017.10)	(2,986.90)	6,593.80	1,191.70	(1,136.10)	25,985.40
1977	12,120.10	12,023.00	97.10	(2,558.60)	(1,575.70)	(4,134.30)	(4,037.30)	(4,060.40)	5,278.00	630.00	(611.70)	32,037.20
1978	12,658.90	13,683.10	(1,024.20)	(4,232.30)	(1,804.90)	(6,037.20)	(6,990.40)	(5,323.50)	11,891.40	4,262.40	(4,275.40)	43,510.70
1979	15,244.40	18,083.10	(2,838.70)	(5,542.20)	(2,378.00)	(7,920.20)	(10,741.60)	(6,384.70)	7,656.90	(3,214.90)	3,321.10	49,904.20

Source: *Conjuntura Economica* and *Boletim do Banco Central do Brasil*, in Werner Baer, *The Brazilian Economy*, 1995.

Exhibit 1 (continued)

Balance of Payments (yearly, 1993–1998)

International Transactions (USD millions)	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Current accounts, nie	*20*	*–1,153*	*–18,136*	*–23,248*	*–30,491*	*–33,829*
Goods: exports f.o.b	39,630	44,102	46,506	47,851	53,189	51,136
Goods: imports f.o.b	–25,301	–33,241	–49,663	–53,304	–59,841	–57,739
Trade balance	*14,329*	*10,861*	*–3,157*	*–5,453*	*–6,652*	*–6,603*
Services: credit	3,965	4,908	6,135	4,655	5,989	7,631
Services: debit	–9,555	–10,254	–13,630	–12,714	–15,298	–16,676
Balance on goods and services	*8,739*	*5,515*	*–10,652*	*–13,512*	*–15,961*	*–15,648*
Income: credit	1,308	2,202	3,457	5,350	5,344	4,914
Income: debit	–11,630	–11,293	–14,562	–17,527	–21,688	–24,531
Balance on goods, services, and income	*–1,583*	*–3,576*	*–21,757*	*–25,689*	*–32,305*	*–35,265*
Current transfers, nie: credit	1,704	2,577	3,861	2,699	2,130	1,795
Current transfers: debit	–101	–154	–240	–258	–316	–359
Capital account, nie	*81*	*173*	*352*	*494*	*482*	*375*
Capital account, nie: credit	86	175	363	507	519	488
Capital account, nie: debit	–5	–2	–11	–13	–37	–113
Financial account, nie	*7,604*	*8,020*	*29,306*	*33,142*	*24,918*	*20,063*
Direct investment abroad	–491	–1,037	–1,384	467	–1,042	–2,721
Dir. investment in rep. econ., nie	1,292	3,072	4,859	11,200	19,650	31,913
Portfolio investment assets	–606	–3,052	–936	–257	–335	–594
Portfolio investment liabilities, nie	12,928	47,784	10,171	21,089	10,393	19,013
Other investment assets	–2,696	–4,368	–1,783	–3,327	2,251	–5,992
Other investment liabilities, nie	–2,823	–34,379	18,379	3,970	–5,999	–21,556
Net Errors and Omissions	*–815*	*–442*	*1,447*	*–1,992*	*–3,160*	*–2,911*
Overall Balance (78cbd)	**6,890**	**6,598**	**12,969**	**8,396**	**–8,251**	**–16,302**
Reserves and Related Items	**–6,890**	**–6,598**	**–12,969**	**–8,396**	**8,251**	**16,302**
Reserve assets	–8,709	–7,215	–12,920	–8,326	8,284	6,990
Use of fund credit and loans	–504	–133	–49	–70	–33	4,773
Exceptional financing	2,323	750	0		0	4,539

Source: *IMF International Financial Statistics*, various years, Washington, D.C.

Exhibit 1 (continued)
Balance of Payments (quarterly, 1996–1998 Q3)

International Transactions (USD millions)	**96Q1**	**96Q2**	**96Q3**	**96Q4**	**97Q1**	**97Q2**	**97Q3**	**97Q4**	**98Q1**	**98Q2**	**98Q3**
Current accounts, nie	*–3,451*	*–4,154*	*–5,739*	*–9,904*	*–4,944*	*–7,659*	*–7,035*	*–10,853*	*–6,006*	*–7,332*	*–9,062*
Goods: exports f.o.b	10,297	12,633	12,986	11,935	10,712	14,196	14,951	13,330	11,913	14,068	13,494
Goods: imports f.o.b	–10,751	–12,478	–14,238	–15,837	–11,580	–15,464	–16,588	–16,209	–13,753	–14,072	–15,276
Trade balance	*–454*	*155*	*–1,252*	*–3,902*	*–868*	*–1,268*	*–1,637*	*–2,879*	*–1,840*	*–4*	*–1,782*
Services: credit	1,100	984	1,169	1,402	1,082	1,564	1,573	1,770	1,963	1,821	1,921
Services: debit	–2,528	–2,901	–3,596	–3,689	–3,304	–3,712	–4,242	–4,040	–3,935	–3,884	–4,665
Balance on goods and services	*–1,882*	*–1,762*	*–3,679*	*–6,189*	*–3,090*	*–3,416*	*–4,306*	*–5,149*	*–3,812*	*–2,067*	*–4,526*
Income: credit	1,150	1,568	1,237	1,395	1,181	1,567	1,436	1,160	1,247	1,267	1,293
Income: debit	–3,493	–4,595	–3,833	–5,606	–3,532	–6,262	–4,576	–7,318	–3,800	–6,857	–6,187
Balance on goods, services, and income	*–4,225*	*–4,789*	*–6,275*	*–10,400*	*–5,441*	*–8,111*	*–7,446*	*–11,307*	*–6,365*	*–7,657*	*–9,420*
Current transfers, nie: credit	837	700	597	565	552	531	520	527	438	429	450
Current transfers: debit	–63	–65	–61	–69	–55	–79	–109	–73	–79	–104	–92
Capital account, nie	*96*	*96*	*129*	*173*	*130*	*100*	*144*	*108*	*113*	*94*	*152*
Capital account, nie: credit	98	100	133	176	136	110	156	117	137	104	160
Capital account, nie: debit	–2	–4	–4	–3	–6	–10	–12	–9	–24	–10	–8
Financial account, nie	*8,828*	*8,042*	*4,389*	*12,169*	*4,953*	*8,008*	*10,391*	*1,566*	*23,047*	*12,933*	*–16,607*
Direct investment abroad	1,352	–114	–329	–442	–120	–385	–256	–281	–176	–291	–1,409
Direct investment in rep. econ., nie	1,847	3,771	1,557	4,025	3,239	4,902	4,912	6,597	4,347	6,570	10,552
Portfolio investment assets	–53	–62	–100	–42	–58	–45	38	–270	27	–21	–1,348
Portfolio investment liabilities, nie	3,743	5,173	3,643	8,530	4,358	5,355	6,087	–5,407	12,442	9,512	–6,088
Other investment assets	2,015	–3,634	187	–1,895	–1,146	1,040	163	2,194	–176	1,146	–6,892
Other investment liabilities, nie	–76	2,908	–569	1,993	–1,320	–2,859	–553	–1,267	6,583	–3,983	–11,422
Net errors and omissions	*–1,177*	*244*	*135*	*–1,194*	*–1,050*	*–1,555*	*680*	*–1,235*	*–636*	*–3,383*	*568*
Overall balance	**4,296**	**4,228**	**–1,086**	**1,244**	**–911**	**–1,106**	**4,180**	**–10,414**	**16,518**	**2,312**	**–24,949**
Reserves and related items	**–4,296**	**–4,228**	**1,086**	**–1,244**	**911**	**1,106**	**–4,180**	**10,414**	**–16,518**	**–2,312**	**24,950**
Reserve assets	–3,987	–4,216	1,109	–1,232	934	1,106	–4,169	10,414	–16,508	–2,312	24,960
Use of fund credit and loans	–23	–12	–23	–12	–23	0	–11	0	–10	0	–10
Exceptional financing	–286				0	0	0	0	0	0	0

Source: *IMF International Financial Statistics*, various years, Washington, D.C.

Exhibit 2

BRAZIL: THE REAL PLAN (A)

Government Accounts, 1970–97 (annual averages as a percentage of GDP)

	1970–75	**1976–80**	**1981–85**	**1986–90**	**1991–93**	**1994–96**	**1997**
Operational Concept[1]							
Revenue	25.2	24.1	26.3	28.3	31.7	33.0	34.1
Expense	22.9	22.3	28.0	31.0	32.1	35.3	38.1
Deficit[2]	**–2.3**	**–1.8**	**1.7**	**2.7**	**0.4**	**2.3**	**4.0**
Savings[3]	6.4	4.9	0.6	0.6	2.6	0.2	–1.5
*Nominal Concept**Error! Bookmark not defined.***							
Revenue	25.2	24.1	26.3	28.3	31.7	33.0	34.1
Expense	24.0	24.4	39.8	62.7	61.9	49.1	39.7
Current	20.0	21.3	37.4	58.4	58.8	46.7	37.2
Investment	4.0	3.0	2.3	3.3	3.1	2.5	2.5
DeficitError! Bookmark not defined.	**–1.2**	**0.3**	**13.5**	**34.3**	**30.2**	**16.1**	**5.9**
Savings**Error! Bookmark not defined.**	5.2	2.8	–11.2	–31.0	–27.1	–13.6	–3.2
Revenue from “Inflationary taxes”	0.8	1.7	2.3	3.6	3.2	0.6	0.2

Source: National Accounts and Central Bank. Elaborated by Depec-Bacen, in Gustavo Franco, *O Desafio Brasileiro*.

[1] The nominal or total deficit (PSBR) is the difference between total government expenditures and total revenues, including all levels of public administration and the state enterprises. The operational deficit excludes the nominal interest paid on public debt. It is usually more informative than the nominal deficit, because the latter tends to rise with inflation, regardless of a simultaneous improvement in government finances.

[2] Surplus (–), Deficit (+).

[3] Revenue minus current expenses.

Exhibit 2 (continued)

Primary, Operational, and Nominal Balances of the Nonfinancial Public Sector[1]
(percentage of GDP)

	1994	1995	1996	1997	1998
(A) Primary Balance (deficit –)	4.3	0.3	-0.1	–1.0	0.0
Central government	3.1	0.6	0.4	-0.3	0.6
States and municipalities	0.5	-0.2	-0.6	-0.7	-0.2
Public enterprises	0.8	-0.1	0.1	0.1	-0.4
(B) Interest Payments (net)[2]	3.8	5.1	3.7	3.3	7.6
Central government	1.5	2.2	2.0	1.4	5.8
States and municipalities	1.5	2.1	1.3	1.5	1.6
Public enterprises	0.9	0.8	0.4	0.4	0.2
(C) Operational Balance (deficit –) (A – B)	0.5	–4.8	–3.8	–4.3	–7.5
Central Government[3]	1.6	–1.6	–1.6	–1.8	–5.2
States and municipalities	–1.0	–2.3	–1.8	–2.2	–1.8
Public enterprises	0.1	-0.8	-0.3	-0.3	-0.5
(D) Interest Payments	48.5	7.4	5.8	5.1	8.0
Central government	19.9	2.9	3.0	2.3	6.1
States and municipalities	19.5	3.3	2.1	2.3	1.8
Public enterprises	9.3	1.2	0.7	0.5	0.1
(E) PSBR (= –Nominal Balance) (A – D)	44.2	7.1	5.9	6.1	8.0
Central government**Error! Bookmark not defi ıed.**	16.8	2.3	2.6	2.6	5.5
States and municipalities	19.0	3.5	2.7	3.0	2.0
Public enterprises	8.5	1.3	0.6	0.4	0.5
Acc ımulated Debt[4]	20.7	24.9	29.4	30.2	36.0
Federal government	6.4	9.8	14.3	16.8	21.1
States and municipalities	9.4	10.3	11.2	12.5	13.7
Public enterprises	5.0	4.9	3.9	0.9	1.3

Note: Slight differences between the numbers in Exhibit 6A and 6B are due to different data sources.

Data Source: *IMF Staff Country Report No. 99/97*, Washington, D.C.

[1] Proceeds from privatization not included in revenue.
[2] Interest payments on external debt plus the real portion of interest payments on domestic debt.
[3] Includes federal administration, Central Bank, decentralized agencies, and social security system.
[4] End of period stocks.

Exhibit 3

BRAZIL: THE REAL PLAN (A)

Gross Foreign Indebtedness
(in millions of U.S. dollars)

	1994	**1995**	**1996**	**1997**	**1998**[1]
A—Total debt (B + C)	148,295	159,256	179,935	199,998	235,058
B—Medium- and long-term debt[2]	119,668	128,732	142,148	163,283	210,458
IMF loans	186	142	68	32	11
Renegotiated debt bonds	51,538	51,451	51,239	41,930	40,400
Other bonds	1,616	2,452	3,637	7,457	8,900
Import financing	35,711	36,113	34,165	50,785	65,040
Multilateral	10,473	10,680	11,325	12,353	17,379
Bilateral	19,473	18,976	15,821	14,348	15,339
Other financing sources	5,765	6,457	7,019	24,084	32,322
Currency loans	30,387	38,347	52,836	62,898	95,949
Other loans	230	227	203	181	158
C—Short-term debt	28,627	30,524	37,787	36,715	24,600
Credit line for petroleum imports	2,530	3,067	4,985	5,695	4,276
Other credit lines/public companies	56	354	177	-	-
Commercial banks (liabilities)	25,575	26,235	30,611	26,501	18,476
Rural financing	-	581	1,944	4,003	1,232
Special operations[3]	466	287	70	516	616

Source: *Central Bank: Annual Report, 1998, Brasilia.*

[1] Estimated.
[2] Data refer to capital registration in the Central Bank. They are not compatible with the BOP figures, which represent inflows and outflows that effectively occurred in the period.
[3] As from 1997, besides Central Bank's operations, bridge loans, and loans for on-lendings to export companies.

Exhibit 4

BRAZIL: THE REAL PLAN (A)

Map of Brazil

Source: https://www.cia.gov/cia/publications/factbook/geos/br.html.

Exhibit 5

BRAZIL: THE REAL PLAN (A)

Trade Balance Components
(dollar amounts in millions)

(USD)	**1994**	**1995**	**1996**	**1997**	**1998**
Brazilian Exports – FOB					
Total	43,545	46,506	47,747	52,990	51,120
Primary products	11,058	10,969	11,900	14,474	12,970
Industrial products	31,852	34,711	35,026	37,672	37,493
Semimanufactured goods	6,893	9,146	8,613	8,478	8,111
Manufactured goods	24,959	25,565	26,413	29,194	29,382
Special transactions	635	826	821	844	657
Brazilian Imports – FOB					
Total	33,079	49,972	53,301	61,347	57,550
Consumer goods	5,540	10,927	9,721	11,233	10,657
Durable	3,130	6,095	4,569	5,692	5,203
Nondurable	2,410	4,832	5,152	5,541	5,454
Raw materials	15,607	22,382	24,646	27,614	26,709
Fuels and lubricants	4,356	5,217	6,228	5,824	4,127
Capital goods	7,576	11,446	12,706	16,676	16,057

(%)	**1994**	**1995**	**1996**	**1997**	**1998**
Brazilian Exports – FOB					
Total	43,545	46,506	47,747	52,990	51,120
Primary products	25.39%	23.59%	24.92%	27.31%	25.37%
Industrial products	73.15%	74.64%	73.36%	71.09%	73.34%
Semimanufactured goods	15.83%	19.67%	18.04%	16.00%	15.87%
Manufactured goods	57.32%	54.97%	55.32%	55.09%	57.48%
Special transactions	1.46%	1.78%	1.72%	1.59%	1.29%
Brazilian Imports – FOB					
Total	33,079	49,972	53,301	61,347	57,550
Consumer goods	16.75%	21.87%	18.24%	18.31%	18.52%
Durable	9.46%	12.20%	8.57%	9.28%	9.04%
Nondurable	7.29%	9.67%	9.67%	9.03%	9.48%
Raw materials	47.18%	44.79%	46.24%	45.01%	46.41%
Fuels and lubricants	13.17%	10.44%	11.68%	9.49%	7.17%
Capital goods	22.90%	22.90%	23.84%	27.18%	27.90%

Source: *Central Bank: Annual Report 1998, Brasilia.*

Exhibit 5 (continued)

Brazilian Trade by Area–FOB
(dollar amounts in millions)

USD	1997			1998		
	Exports	**Imports**	**Balance**	**Exports**	**Imports**	**Balance**
Total	52,990	61,347	–8,357	51,120	57,550	–6,430
EFTA	378	1,150	–772	360	1,159	–799
LAIA[1]	12,828	12,277	551	12,618	11,567	1,051
Mercosur	9,044	9,631	–587	8,877	9,425	–548
Argentina	6,767	8,120	–1,353	6,747	8,028	–1,281
Paraguay	1,406	531	875	1,249	349	900
Uruguay	870	980	–110	881	1,048	–167
Chile	1,196	995	201	1,023	809	214
Mexico	828	1,186	–358	1,002	974	28
Others	1,760	466	1,294	1,716	359	1,357
Canada	584	1,453	–869	544	1,330	–786
European Union	14,513	16,335	–1,822	14,744	16,826	–2,082
Germany	2,608	5,131	–2,523	3,006	5,239	–2,233
Belgium/Luxembourg	1,483	695	788	2,194	668	1,526
Spain	1,057	1,154	–97	1,056	1,195	–139
France	1,113	1,662	–549	1,230	1,987	–757
Italy	1,709	3,470	–1,761	1,931	3,196	–1,265
Netherlands	3,998	589	3,409	2,744	711	2,033
United Kingdom	1,259	1,488	–229	1,339	1,498	–159
Others	1,286	2,146	–860	1,244	2,332	–1,088
Central and Eastern Europe[2]	1,314	907	407	1,163	793	370
Asia[3]	7,382	8,927	–1,545	5,366	7,631	–2,265
Japan	3,068	3,599	–531	2,202	3,253	–1,051
China, People’s Republic	1,088	1,188	–100	905	1,023	–118
Korea	737	1,368	–631	467	992	–525
Others	2,489	2,772	–283	1,792	2,364	–572
United States[4]	9,407	14,343	–4,936	9,865	13,558	–3,693
OPEC	2,651	4,119	–1,468	2,749	3,224	–475
Others	3,934	1,837	2,096	3,711	1,460	2,251

Source: *Central Bank: Annual Report 1998, Brasilia.*

[1] Venezuela included in OPEC.
[2] Albania, Bulgaria, Hungary, Poland, Slovak Republic, Czech Republic, Romania, and countries of the former Soviet Union.
[3] Excludes Middle East. Indonesia is included in OPEC.
[4] Includes Puerto Rico.

Exhibit 6

BRAZIL: THE REAL PLAN (A)

Social Indicators

Poverty and Social Data

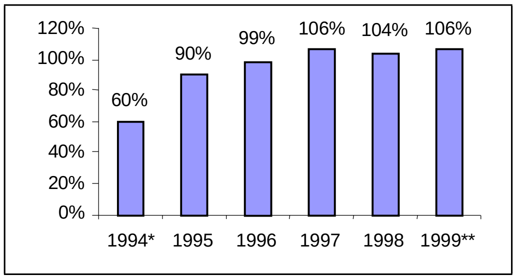
	Brazil	**Latin America & Caribbean**
1998		
Population, midyear (millions)	165.9	502.0
GNP per capita (Atlas method, USD)	4,570	3,940
GNP (Atlas method, USD billions)	758.0	1,978.0
Average annual growth, 1992–98		
Population (%)	1.4	1.6
Labor force (%)	1.7	2.3
Most recent estimate (latest year available, 1992–98)		
Poverty (% of population below national poverty line)	17	-
Urban population (% of total population)	80	75
Life expectancy at birth (years)	67	70
Infant mortality (per 1,000 live births)	34	32
Child malnutrition (% of children under 5)	6	8
Access to safe water (% of population)	69	75
Illiteracy (% of population age 15+)	16	13

Source: *Brazil at a Glance*, World Bank Web site, 9/9/1999.

Exhibit 6 (continued)

Selected Social Data

Purchasing Power of Minimum Wage

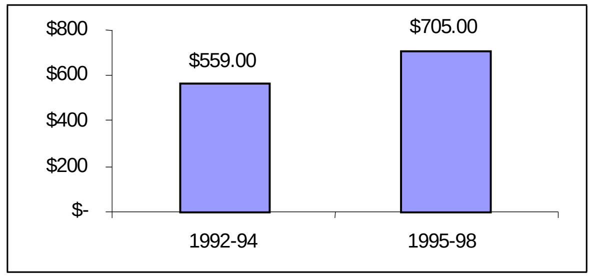


As % of the food basket – average.

Source: PROCON/DIEESE.

* First day of the Real Plan.
** June 1998 to May 1999.

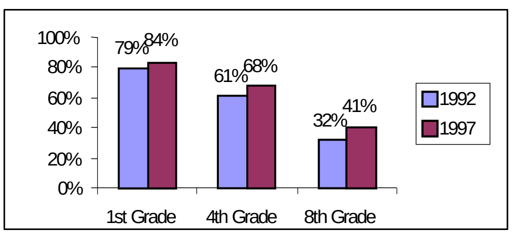
Average Earnings of Employed Individuals



In reais, as of April 1999.

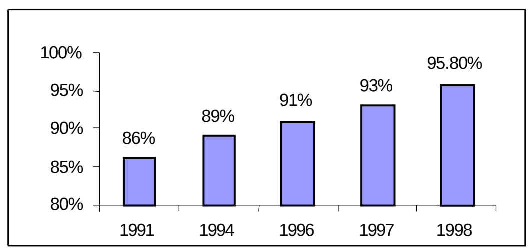
Source: IBGE/PME.

Children Finishing School



Elementary and junior high school.

Net Schooling Rate



Net schooling rate identifies the percentage of the population age 7 to 14 enrolled in elementary education.

Source: Brazilian Government, *Five Years of the Real Plan*, 1999.

Exhibit 7

BRAZIL: THE REAL PLAN (A)

Brazil: Policymakers and Policies, 1985–1993

Year	**President**	**Finance Minister**	**Economic Policy**	**Tools**	**Politics**
1985		F. Dornelles	Orthodoxy		
1986		D. Funaro	Cruzado Plan	General price freeze on final goods price Wage freeze (average of previous 6 months plus 8% or 15%) Rent and mortgage payments freeze, by the 6-month average Wage escalation system (activated by selected triggers) Indexation banned from contracts New currency: cruzado	
1987	Jose Sarney	Bresser Pereira	Bresser Plan	Price and wage freeze Public deficit control as a means to control inflation High interest rates (higher than inflation) to control consumption	Election of governors/ constituent assembly
1988		Mailson da Nobrega	"Rice and Beans" [Plain Vanilla]	No shock treatment Prohibited government to hire Currency devaluation	Constituent assembly
1989			"Summer Plan"	Price and wage freeze Abolition of indexing New currency: cruzado novo Attempt to restrain monetary and credit expansion	Presidential elections
1990		Zelia Cardoso	Collor Plan I	Assets freeze New currency: cruzeiro Introduction of tax on financial transactions Price and wage freeze Liberalization of exchange rate Opening of the economy Preliminary measures to start privatization	
1991	F. Collor		Collor II	Elimination of "overnight" investments Price and wage freeze Extinction of indexation	
1992		Marcilio Moreira	Orthodoxy		Impeachment process
1993		Gustavo Krause			
1994	Itamar Franco	P. Haddad			
		E. Rezende			
		F.H. Cardoso	Real Plan		

Source: Werner Baer, "*The Brazilian Economy,*" Table 9.1 adapted.

Exhibit 8

BRAZIL: THE REAL PLAN (A)

Privatization Program
(dollar amounts in millions)

	1994	1995	1996	1997	1998	TOTAL
Companies Privatized	**9**	**8**	**11**	**4**	**7**	**39**
Metal	0	0	0	0	0	0
"Petroquisa" system (oil)	6	7	5	0	0	18
Fertilizers	1	0	0	0	0	1
Electrical	0	1	1	0	1	3
Railroads	0	0	5	1	1	7
Others	2	0	0	3	5	10
Revenues (USD)	**620**	**1,123**	**4,198**	**3,805**	**1,234**	**10,980**
Metal	-	-	-	-	-	-
"Petroquisa" system (oil)	411	604	212	-	-	1,227
Fertilizers	11	-	-	-	-	11
Electrical	-	519	2,509	-	879	3,907
Railroads	-	-	1,477	15	206	1,698
Others	198	-	-	3,790	149	4,137
Liabilities Transferred to Acquirers (USD)	**349**	**624**	**670**	**3,559**	**1,082**	**6,284**
Metal	-	-	-	-	-	-
"Petroquisa" system (oil)	84	622	84	-	-	790
Fertilizers	2	-	-	-	-	2
Electrical	-	2	586	-	1,082	1,670
Railroads	-	-	-	-	-	-
Others	263	-	-	3,559	-	3,822

Telecommunications	Minimum Asking Price (USD)	Sell Price (USD)	Sell/Asking Price (%)
Telebrás System	**11,552**	**18,944**	**64%**
Fixed telephony and Embratel (long distance)	9,147	11,970	31%
Cellular telephony—A band	2,405	6,974	190%
Cellular telephony—B band	1,425	2,879	102%
TOTAL	**12,977**	**21,823**	**68%**

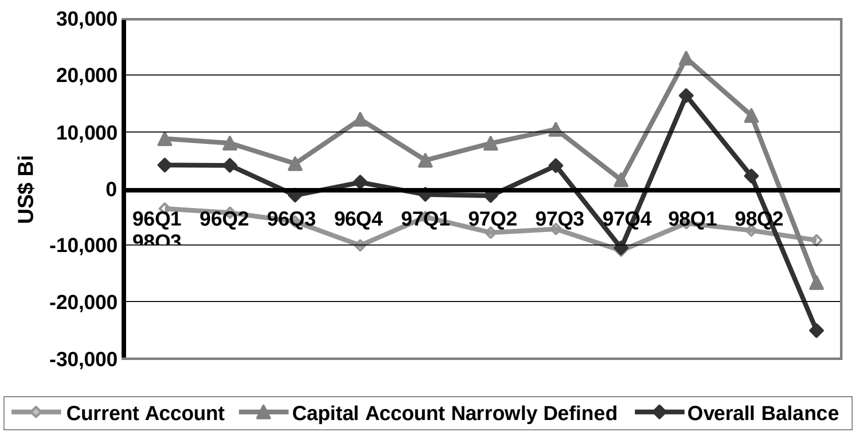
Source: BNDES, in *Central Bank: Annual Report 1998.*

Exhibit 9

BRAZIL: THE REAL PLAN (A)

Brazil in Charts

Balance of Payments (Quarterly, 1996–Q3 1998)



International Reserves (in billions of U.S. dollars)

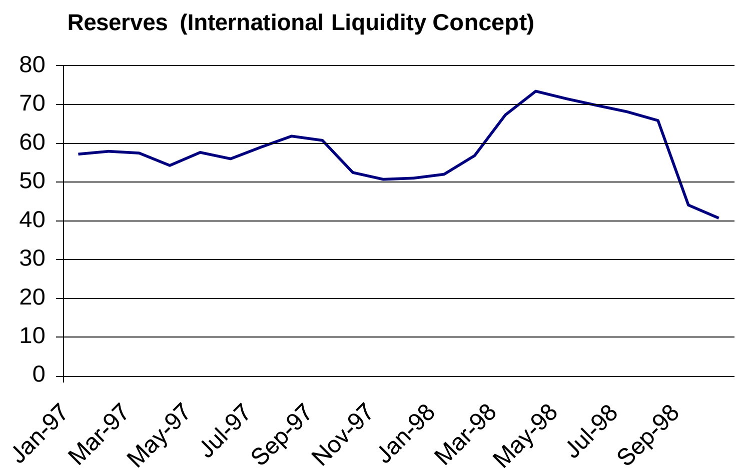
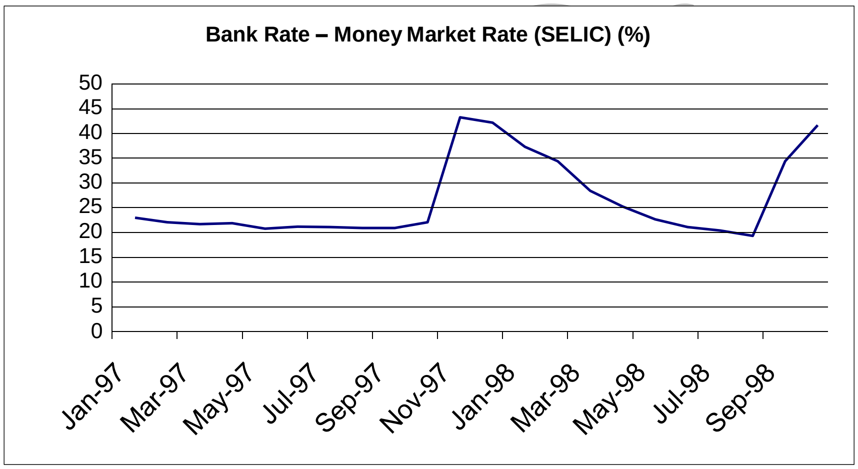


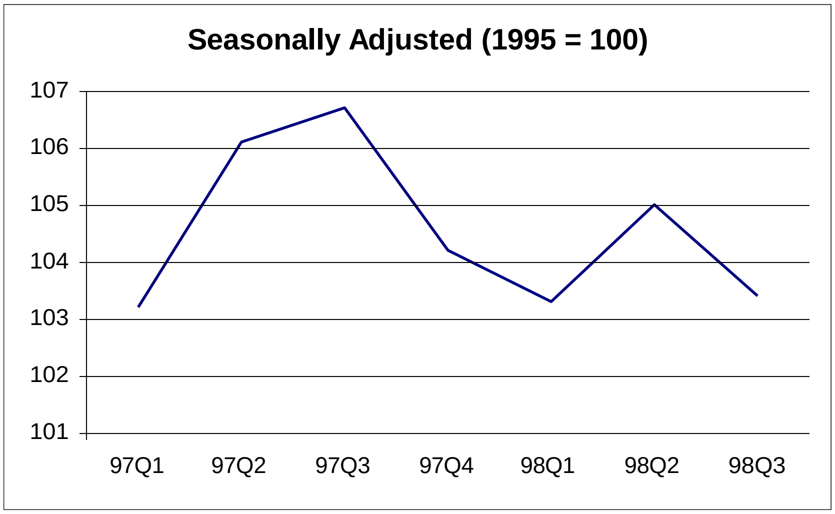
Exhibit 9 (continued)

Interest Rates



Source: *IMF International Financial Statistics*

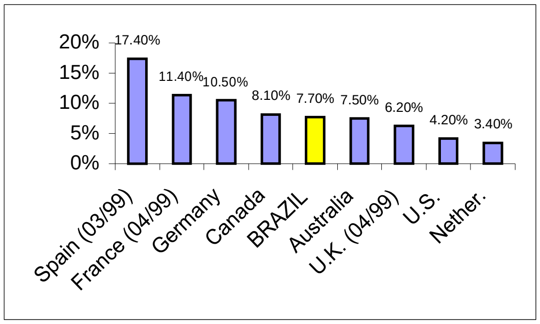
Industrial Production



Source: *IMF International Financial Statistics.*

Exhibit 9 (continued)

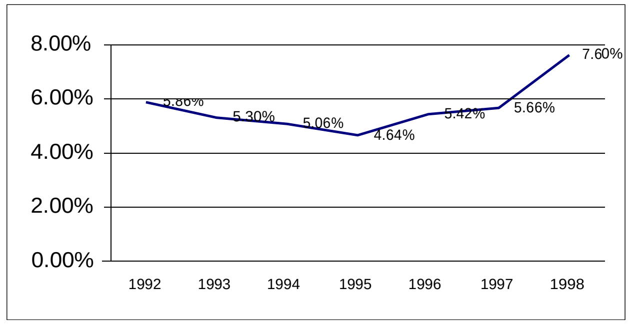
Urban Unemployment Rate



Comparison with other countries (May 99).

Source: *The Economist* (June 1999).

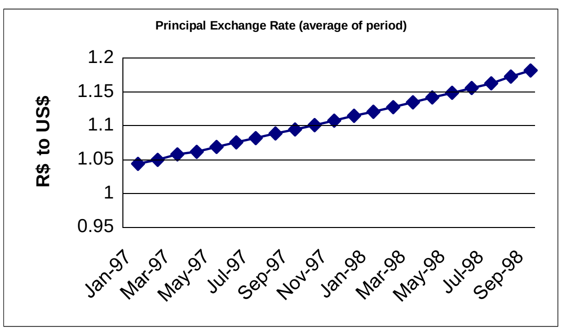
Unemployment Rates



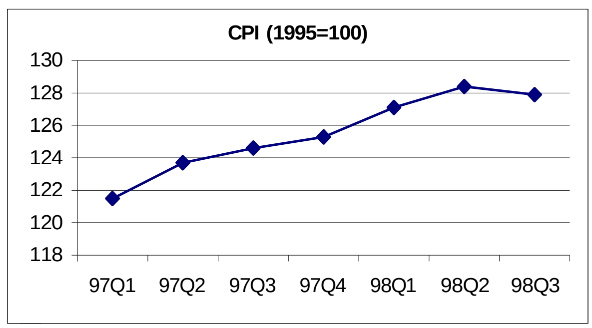
* 12-month average until May.

Source: IBGE/PME.

Exchange Rate



Consumer Price Index



Source: IMF International Financial Statistics, various years, Washington D.C.

Exhibit 10

BRAZIL: THE REAL PLAN (A)

Gross Domestic Product

	GDP 1998 Prices (BRL millions)	GDP Real Variation (%)	Implicit GDP Deflator[1](%)	GDP Current Prices[2] (USD millions)	Population (millions)	GDP Per Capita 1998 Prices (BRL)	GDP Per Capita Real Variation (%)	GDP Per Capita Current Prices[Error! Bookmark not defined.*] (USD)	Inflation CPI (% change)	Money Market Rate (Average %)
1980	621,500	9.2	92.1	237,772	118.6	5,242	7	2,005		
1981	595,086	–4.3	100.5	258,553	121.2	4,909	–6.3	2,133		
1982	600,026	0.8	101.0	271,252	123.9	4,843	–1.3	2,190		
1983	582,445	–2.9	131.5	189,459	126.6	4,602	–5.0	1,497		
1984	613,897	5.4	201.7	189,744	129.3	4,749	3.2	1,468		
1985	662,082	7.8	248.5	211,092	132.0	5,017	5.6	1,599		
1986	711,672	7.5	149.2	257,812	134.7	5,285	5.4	1,915		
1987	736,794	3.5	206.2	282,357	137.3	5,368	1.6	2,057		
1988	736,352	-0.1	628.0	305,707	139.8	5,266	–1.9	2,186		
1989	759,620	3.2	1,304.4	415,916	142.3	5,338	1.4	2,923	1,431.3	
1990	726,577	–4.3	2,737.0	469,318	144.1	5,042	–5.5	3,257	2,947.7	
1991	734,060	1.0	416.7	405,679	146.4	5,014	-0.6	2,771	432.8	
1992	730,097	-0.5	969.0	387,295	148.7	4,910	–2.1	2,605	952.0	1,574.28
1993	766,017	4.9	1,996.2	429,685	150.9	5,075	3.4	2,847	1,927.4	3,284.44
1994	810,829	5.9	2,240.2	543,087	153.1	5,295	4.3	3,546	2,075.9	4,820.64
1995	845,046	4.2	77.6	705,449	155.3	5,441	2.8	4,542	66.0	53.37
1996	868,370	2.8	17.3	775,409	157.5	5,514	1.3	4,924	15.8	27.45
1997	900,326	3.7	7.4	804,182	159.6	5,640	2.3	5,038	6.9	25.00
1998[3]	901,406	0.1	3.9	776,873	161.8	5,571	–1.2	4,802	3.2	29.50

Source: Central Bank Annual Report 1998, and IMF, International Financial Statistics, various years.

[1] The implicit deflator reflects the inflation of value added to the economy. The CPI is an inflation measurement of the overall supply of goods including tradables.

[2] Estimate derived from the division of the GDP at current prices by the average exchange rate, calculated in accordance with Central Bank methodology.

[3] Central Bank estimate.