

Speculative (Short-Term) Credits and Brazil in the Twenty Century: The experience of middle-income developing country

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Abstract

The objective of this article is to trace some historical patterns regarding the role of international short-term credits during the major economics events involving the external debt of Brazil in the Twentieth Century. We intend to evaluate the degree to which capital inflow into Brazil was speculative in selected historic periods. We want to see to what extent short-term resources financed the Current Account gap (FE gap) throughout these selected periods. Our thesis is that in the periods, that ended in debt crises; speculative short-term capital flows had a substantial share in the financing of the FE gap. As we will see, they were present with more intensity in sub periods characterized by economic instability. The backdrop of these crises were major political turmoil in the country. As policy proposal, this article provides a framework for the defense of developing countries capital controls.

Key Words: Latin America and the capital markets in the Twenty Century; International, short-term (speculative) credits; Brazilian economy and speculative credits in 1914, 1931, 1962, 1982 and 1998 external debt crisis.

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I. Introduction

Let us consider the Brazilian 1982 debt crisis as a benchmark. Classical works about this crisis (Batista 1983 and Cruz 1984): reports that short-term credits played a central role on it. We are considering the analysis of the 1982 debt crisis as a benchmark because, since that crisis, the Brazilian economy interrupted the outstanding growth path that the country had from the 1930s to early 1982.

Batista (1983) reported that an important policy adopted¹ that led to the 1982 debt crisis was funding the country with a massive number of short-term credits. Our thesis is that in periods that ended in debt crisis such as the ones that we will visit, speculative short-term capital flows had a substantial share in the financing of the Current Account/FE gap. They were present with more intensity in periods of economic instability. In this analysis, the background will be the interface between international capital markets and Latin America.

To approach this relevant point in each historical period under analysis, we will start with a sub period of relative stability², and then we will move to a sub period characterized by higher instability and that ended in debt crisis. The chart below illustrates our periodization and conclusions.

Short-term credits as a cause of Debt Crisis

| Period | 1906-1932 | 1947-1962 | 1967-1982 | 1993... | | | |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| Sub period | Stable | Unstable | Stable | Unstable | N/A | | |
| Years | 1906-1914 | 1920-1931 | 1947-1955 | 1956-1962 | 1968-1974 | 1975-1982 | 1993... |
| Cause | Yes | Yes | Yes | Yes | No | Yes | Yes |

¹Discussed in detail in section 3.

² In Latin America economies, it is very difficult to find 5-year period of stability. That is why we are using the term "relative stability".

When one studies the political history of the periods chosen, that is, 1906-1930, 1947-1962 and 1967-1982 one is faced with a great deal of political turmoil. This was the case with 1930 revolution, the suicide of President Getulio Vargas in 1954, the coup d'état and deposition of President Goulart in 1964, and the loss of strength experienced by the military regime from 1982 onwards. These major political facts in Brazilian political history may not directly connected with the external debt crises of these periods, but they are an impressive backdrop.

The modality of financing in this century has changed a lot. At first, the financing term was exceedingly high between twenty to thirty years. This was the case with the stock financing through the London Stock Exchange in pre-World War I or with the bond financing in the New York market in the post-World War I period. After World War II, the financing term, reduced with suppliers' credit (the major resource), averaged five years and scarce bilateral loans averaged fifteen years. During the Euromarkets, banking loan boom of the 1970s and early 1980s, the average term of a syndicated loan was ten to eight years. Currently, in the "emerging markets" mania that started in the early 1990s, derivative lending, like that of the 1960s, is medium term.

Besides this introduction, this paper includes four other sections. In the first, we discuss the period between 1906 and 1931 when the coffee valorization program achieved its apex. In the second, we briefly visit the 1947-1962 period when Brazil was starting its industrialization drive. Section three, describes the role of short-term credits in the 1980s debt crisis. Section four reviews the last decade of the twenty-century. This decade was prone to currency crises due, among other things, financial liberalization.

Section one Coffee Valorization and the Funding Loans- Gold Standard Attempts- 1906-1931

Several authors recognized that pre-World War I short-term capital movements were chiefly involved with the financing of trade, while in the post- World War I era, the larger movements of short-term capital was speculative, see for instance, Bloomfield (1963:48) or Lewis(1938: 144). However, speculative movements of short-term capital associated with capital flight and destabilizing speculation, were not entirely absent before World War I and they were especially relevant in Latin America.

A substantial increase in the Bank of England's discount rate, during the pre-World War I era, or in the USA and UK interest rate, during the interwar period, regularly promoted a massive outflow of short-term credit and gold to the center countries.

Artificial Control of Coffee Prices, Stabilization of the Exchange Rate and Short-Term Credit Movements Throughout the period under review, (1906-1930) **valorization** came to imply monopolistic prices. Because of the Sherman Act |American government condemned Brazil. Since World War I, the country ceased to use the term valorization on his several³ schemes of artificial control over coffee prices. Valorization was replaced by the phrase **coffee defense**.

...valorization was essentially simple; a foreign loan would be obtained to purchase coffee from planters and stockpile it; in year of bad harvests this supply would be released on the international market; and meanwhile all exported coffee would be taxed at a high enough rate to repay the foreign loan.(Love 1980: 45).

In both periods (1906-1914 and 1927-1931), the stabilization of the exchange rate, by the adoption of the quasi-gold standard, benefited the coffee growers, from Sao Paulo State, and international bankers. Hence, we have the creation of Treasury Conversion Office (TCO) of 1906 and the Stabilization Office (SO) in 1926(Pelaez, 1971).

The design of these offices intended to absorb any undesirable revaluation of the mil-reis⁴ related to the inflow of international credit and the improvement on the terms of trade. The idea was to hedge the coffee sector income in terms of national currency. The TCO and SO were currencies board. The stabilization of the exchange rate was a national aspiration, as the population imported all her consumption. Hence, coffee valorization (or coffee defense) had an "ideology" to justify its implementation.

Lewis (1938: 149) adds that- "accumulation of short-term capital in a country was paralleled by a large inflow of gold, and presumably their exit from the country will be marked by an outflow of the metal." Together with these inflows, we have the presence of the abnormal short-term capital and the consequent capital flight associated with it.

The maintenance of a relevant level of gold reserves worked as a window dressing to attract large flows of capital in both international capital surges, i.e., 1906-1913 and 1924-1927. Accumulation of short-term

³The second "coffee defense" (without a Currency Board) happened during World War I and lasted from 1917 to 1920. The third (also without a Currency Board) lasted from 1921 to 1924 while the fourth (with Currency board) lasted from 1926 to 1930.

⁴ Brazilian Currency at that time.

capital in the country came together with a large inflow of gold. The outflow of gold reserves from the country followed the exit of the earlier. In Furtado's (Furtado 1963) words, the gold convertibility attempts in Brazil made possible a huge capital outflow.

The gold outflow happened due to the rise of the interest rate on the center countries. During the 1906-1914, the Bank of England fomented this movement while on the period of 1920-1931 the Bank of England together with USA promoted the outflow since they shared the hegemony of the international financial markets. Villela and Suzigan (1973:332), report that 1890 to 1931, Brazil received new loans amounting to £ 343, 4 million, paid £ 365, 4 million and increased its external debt by £ 245, 9million⁵. This discrepancy stopped between 1932 and 1945. In this period, the country used 75 percent of the trade surplus for the payment of the external debt. This percentage dropped to 40 percent between 1934 and 1945.

Stable period 1906-1914

Bloomfield (1973) has shown that international adjustment came about easily, since the discount policy of the British center could exert a strong and prompt influence on international capital flows. In a domestic upswing, gold reserves flowed towards the center.

The 1906-1914 period was an uncommon time of economic stability in Brazilian history (Fritsch, W., 1988). At first, short-term credit financed coffee valorization. Likewise, this type of credit anchored the currency stabilization promoted by the TCO from December 1906 to March 1907. Foreign borrowing funded the TCO and kept stable the overvalued mil-reis. From 1907 to April 1910, the capital inflow of speculative resources in the TCO kept working. Rumors of exchange appreciation forced the closing of the TCO in 1910 as the ceiling reached the £20 million-pound ceiling. The TCO resumed activity in January 1911.

In the first half of 1913, despite the trade deficit, the foreign exchange situation remained stable due to the huge inflow of capital (£ 20 million). This inflow caused an appreciation of the local currency on the foreign exchange market outside the TCO, the "imports" market, regulated by the Banco do Brazil⁶. However, in the second semester of 1913, a substantial increase in the Bank of England's discount rate promoted a massive outflow of short-term credits and gold to the center countries.

With the beginning of the World War I in July of 1914, the flow of capital stopped. In August, due to a massive run, the TCO closed, and the foreign exchange market collapsed. Brazil had to sign the second⁷ "Funding loan" or a "debt renegotiation" loan amounting to £ 14502 thousand. That is short-term credits outflow, from the TCO, caused the debt crisis.

Unstable period 1920-1931

For Jorgensen and Sachs (1989:52), however, the overall level of international capital flows never recovered to that of its heyday in the period 1870 to 1914. When one compares the flows of private investment between 1914 and 1930 it was two-thirds as those between 1900 and 1913. Furthermore, during the inter-war period, lending for European reconstruction and servicing the war debt, between the industrialized countries eclipsed developmental finance for the periphery.

Latin American countries date the start of the Depression from the second half of 1928 due to the abrupt halt in foreign lending in June 1928 when the New York stock market started its meteoric rise and interest rates tightened on the call money market (Kindleberger, 1984: 317).

As previously mentioned, since World War I, the term "coffee valorization" was replaced by "coffee defense". The beginning of the third⁸ valorization scheme (or coffee defense scheme), in 1921, was financed with short-term credits.

The apex of the Brazilian export economy was from 1924 to 1929. During 1926, the IPDC (Sao Paulo Institute of Coffee Defense) of Sao Paulo State relied heavily on international short-term credit to finance the coffee valorization. In the beginning of 1927, short-term credits supported coffee prices with the creation of the Stabilization Office (SO).

In the second half of 1928, international lending dropped heavily. Despite this fact, New York banks kept on lending at short-term in the hope of some improvement (United Nations 1949:6) and Sao Paulo State

⁵ For Oliveira (1977:16), the coffee production, responsible for an important share of the External debt was a kind of production that consumed itself in its own financing.

⁶ It was a dual exchange currencies system involving the TCO on the export market and Banco do Brazil (BB) for the other markets. The gold convertibility was only on notes issued by the TCO. That is why we use the term quasi-gold standard

⁷ Funding loan means the payment of debt with the resources of another debt contracted for this special purpose. The first funding loan dated 1898.

⁸ During World War I, happened the second "coffee defense" program (without a currency board). It lasted from 1917 to 1920.

kept on borrowing on a short-term basis to such an extent that in 1929, they raised a £ 20 million loan for ten years. Half of this loan was to consolidate short-term debts.

At the onset of 1929, a "hot money" movement promoted a run on the SO reserves and in November of 1930, the revolutionary government closed the SO. The hick of USA interest rate, among other things, promoted a run on the SO. Short-term credits were a major cause for the debt crisis of 1930/31. Therefore, the country faced the drying up of the reserves. In 1930, according to Villela and Suzigan (1973: 340), the country lost all the gold deposited in the SO and in the Banco do Brazil, £30 million. In 1931, Brazil defaulted on the bulk of its sterling, franc, and dollar debt.

Promoted by The House of Rothschild to evaluate the country accounts, the country received two missions headed by orthodox "money doctors". In 1924, came the Montagu Norman mission and 1931 the Otto Niemeyer mission (Abreu, 1973).

On the political side, the 1920s experienced the rise of the "Tenentista" movement led by junior army officers. They were against the Old Republic (coffee oligarchs). Among their several claims was universal vote and halt of the payment of the external debt⁹. They contributed significantly to the Brazilian Revolution of 1930. The market for Latin American securities collapsed in October 1930 when prices for all bonds went down in the wake of the revolution in Brazil (Kindleberger 1986:438). As the result of the 1929, we have a period of about 15 years during which hardly any foreign capital flowed into Latin America.

Section 2 "Financial Engineering" and Post World War II Development 1947-1962-

The 1947-1962 period

In the period of 1947-1962, private capital exports were not substantial as in the pre-World War II period. For instance, up to 1954, in real terms, these flows represented only half as many private capital exports as those of the 1920's (United Nations 1954: 9). According to Bloomfield (1953), private short-term capital movements of the postwar period often accentuated inflationary pressures in capital-receiving countries.

Further, the Brazilian experience in 1953, 1961 and 1962 confirmed Triffin's observation that private capital tends to worsen rather than buffer the impact of current account imbalances (Triffin, 1961: 31).

Table 2 here

Stable sub period: Spontaneous Import Substitution (1947-1955)¹⁰

The "dollar shortage" of the first years after the end of World War II left its mark in the Brazilian external accounts. In 1952, "forced external savings", through commercial arrears, as well as short-term credit financed the country's increasing capital goods imports needs. This type of "compensatory finance" together with short-term balance of payments loans (autonomous finance), were the major sources of external funding in this period. More specifically, we recognized the presence of short-term financing in 1951-1952 when the country accumulated a series of short-term and medium-term debts to finance its commercial arrears. Additionally, by late 1952, the country suffered a substantial capital outflow, causing the foreign exchange black market rate to double the official rate.

| Current Account | | millions of dollars | | | | | | | | | |
|---|-------|---------------------|------|-------|-------|-------|------|-------|------|------|--|
| Year | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | |
| FE GAP- /Current Account | (151) | (2) | (82) | (140) | (403) | (624) | 55 | (195) | 2 | 57 | |

Source: Conjuntura Economica, December 1972:58

Regarding commercial arrears, this debt originated from obligations with maturities of less than one year and considered as deferred cash payments in the ordinary course of international trade. If the obligations are past due, they are transformed into commercial arrears depending on the balance of payments situation of the country they may rapidly create a substantial overhang of short-term external debt (Donnelly 1970: 257).

The Second Vargas Government and the commercial arrears (1950-1955)

In the end of 1952, as reported by Donnelly (1970:101), Brazil amassed US\$ 541 million commercial arrears with U.S. exporters and European exporters being its principal creditors. On the external front, Vargas had to face an interruption of external financing. Skidmore (1967: 117) remembers that in 1953, the Joint United States- Brazilian Economic Commission ended since the Eisenhower administration replaced the Truman

⁹This was the claim of the 1935 Aliança Libertadora Nacional the left wing of this movement.

¹⁰ The periodization follows Donnelly (1970).

Government¹¹. The new administration was “openly suspicious of the need for any specific measures to aid in the economic development of the poorer nations”.

When one analyzes the Brazilian external accounts in the 1947-1955 period, we see the country experiencing a continuous current account deficit of small magnitude. This deficit presented an increasing trend thanks to the impact of the rise in the services account due to the remuneration of foreign direct investment and interest on loans.

As we can see from the table 1 (B-A) below the “dollar shortage” of the first years of the end of World War II left its marks in the Brazilian external accounts. The resort to “forced external savings” in 1952 through the commercial arrears, to finance the country’s increasing capital goods imports needs, become clear (B-A). As the international economy becomes liquid, short- and medium-term loans turn out to be major source of financing the Current Account.

It is important to mention that from 1953 to 1962 the World Bank did not make any loan to Brazil. The political reason behind this fact goes beyond the objective of this research. We see that the country almost doubled its need of external resources from an average of US\$ 155 million in the 1947-1951 period to US\$ 238 million in 1954-1955 period.

According to Malan (1977:115) the accumulation of the backlog of financial arrears until 1954, due to the Korean boom, had a long-term impact in the economy. It started a new phase of critical short-term external indebtedness that lasted for one decade. Donnelly (1970) adds that, up to 1954, if one considers the country’s external debt as a ratio of the GDP, or as a ratio to exports, the level of external debt was not significant.

However, what was significant was the structure of repayment of this newly created external debt¹². In late 1954, when coffee prices started going down, the external debt (group I) was 1317 million. Brazil, in late 1954, negotiated a stabilization loan of US\$ 160 billion with the New York FED. The coffee price collapsed in 1955 when international price fell by over 30 percent.

If one considers the negotiations involving the financial arrears as a debt crisis and commercial arrears a form of short-term credit financing, we can say that short-term credits caused the “debt crisis” of 1954.

Vianna (1987: 17) reports about the intention of the World Bank to influence more deeply the economic policy of the borrowing countries. The foreign exchange crisis of the end of 1952 furnished the ammunition for the argument of the World Bank.

According to Donnelly (1970:101) securing balance of payments loans --particularly of the magnitude needed by Brazil was not an easy task. The loans carried political strings or/and were accompanied by political pressures. Donnelly recalled that Vargas cited foreign pressures in his suicide note when he killed himself in 1954.

Unstable sub-period - 1955-1962- Planned Import Substitution (Target Plan) the Overhang of Short-Term Debt

Avramovic (1964) calls our attention to the different forms of private short-term credit lending that carried a high “risk premium”. He also stressed the debt overhang resulted from a debt profile that concentrated on medium- term and short-term international financing.

We identified a strong presence of hot money in the 1956-1962 by the huge outflow of capital in Latin America. As reported by Triffin (1966) the net outflow averaged US\$ 600 million between 1956 and 1963, with a high of US\$ 850 million in 1961-1962, the years when Brazil had to negotiate its external debt every three months. Brazil’s share of these outflows, as the largest external debtor country, was substantial.

During the five-yearperiod, 1956-60 export credit represented or formed a third of the net inflow of foreign capital in the shape of autonomous long-term loans. This proportion shrank in 1961 (to 26.1 percent) owing to the notable increase in development credit and again in 1962 (15.8 percent). (United Nations 1965: 136)

Together with balance of payments loans, suppliers’ credit became a major source of financing for developing countries. In Brazil, medium-term suppliers’ credit (from private entities) accounted for 67 percent of gross capital inflow in the period from 1956 to 1962.

The Kubitschek Government’s (1956-1960) rupture with the IMF in 1959 and the increasing need for foreign resources to finance the high imports of the Target Plan (Plano de Metas) generated several forms of speculative

¹¹Through its Point Four Program, the Truman Government was sympathetic to the financial problems of developing countries. The technical studies by The Joint Commission developed the technical studies from July 1951 to July 1953.

¹²Rezende (1982: 758) reports that in mid-1954 Brazilian authorities negotiated a short-term “stabilization” loan of US\$ 160 million with the New York FED.

short-term credit financing. These were cases of swap loans and cash loans and, on a minor scale, of commercial arrears. That is, the country resorted to all sorts of financial engineering to close its external accounts.

Current Account- 1956-1962

| Year | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 |
|---------|------|-------|-------|-------|-------|-------|-------|
| FE-GAP* | 57 | (264) | (248) | (311) | (478) | (222) | (389) |

Source: Conjuntura Economica, November 1972

* Equal Current Account

When we analyze the Brazilian external accounts in the 1956-1962 period, we see the country experiencing a continuous and increasing current account deficit. Among other things, this deficit reflected the rupture in world trade related to the Suez crisis and the disincentive to the export sector associated with the differential exchange rates mechanism.

From the Sources and Uses chart in table2, we see that foreign exchange needs (B-A) doubled in the period 1957/61. It increased from an average of US\$ 238 million in the period 1952/1956 to US\$ 533 million in the period 1957/61. In 1962 alone, the amount of foreign exchange needed (B-A) to be covered by loans was US\$ 669 million. From 1957 on, the external bottleneck became acute since the amount of money in the new loans did not cover the needed foreign exchange. The country used all sorts of "financial engineering" to manage it.

Specifically, in 1962, although commercial arrears played a small role, the Goulart Government (1962-64) financed its foreign currency needs entirely with short-term credits and had to cope with a huge net outflow of capital.

In the words of Celso Furtado, a member of the Goulart government (1962-1964), the financial minister of this government, pressed by the IMF, BIRD, The Hague Club and Washington, had to renegotiate the foreign debt every three months. (Bandeira 1978: 93).

They seriously considered the alternative of rupture with IMF, as did Kubitschek (Bandeira 1978: 93). By early 1963, the President was inclined to a moratorium since the debt service became unbearable (Bandeira 1978: 109). The inflation rate in 1964 reached 100 per cent. The crisis ended in the military overthrow of the elected President in the end of March 1964. The first military government reached a rescheduling agreement as it came to good terms with the IMF.

Section 3. The Euromarket, petrodollars and the 1982 Debt Crisis- (1967-1982)

The 1967 to 1982 period

Kindleberger (1987: 45) reports that the Euromarkets established the basis not only for term lending to Latin America through syndicate bank loans, but also for foreign exchange speculation on an increased scale. According to Stalling (1987:108), short-term capital flows to Latin America since World War II until at least the mid-1980s have been at least as large as long-term flows.

In 1974, Svedberg (1987: 327) reports that Euromarkets's debts of non-oil developing countries were about US\$135 billion. In 1982, at the time of the debt crisis that started with the default of Mexico in August, these debts skyrocketed to US\$ 500 billion in nominal terms and over 30 countries were in default. At the end of 1982, short-term debt amounted to about US\$ 130 billion. Brazil, for instance, was rolling over about US\$ 10 billion on a day-to-day basis.

Stable sub period 1967-1974- The 'Economic Miracle'

Table 2 here

Since 1966, there was no need for compensatory finance loans due to the positive inflow of autonomous capital and foreign direct investment (FDI). It is also relevant to mention that private bank loans replaced the suppliers' credit of the late 1950's and early 1960's.

It was the time of the "Economic Miracle" (1967-1973). The average rate of savings has experienced a substantial increase vis-à-vis the 1956-1964 period from 15 percent to 20 percent of the GDP. As in the 1960s, external savings played a secondary role in the extraordinary growth process of the 1967-1973. The GDP annual growth averaged 10 per cent.

Capital Controls

By the end of 1973, huge inflow of short- term credits related to the introduction of the floating exchange rate system captured Brazil. Due to the increase in the uncertainty related to this type of flow, inflationary pressures increased. Therefore, the government to adopt a series of measures aiming to control these flows. The minimum maturity for external debt was 10 years and the compulsory deposit increased to 40 per cent. One may say it was the first time that Brazil adopted serious measures to control the capital account and it last at least until 1980 when the government started to finance the external accounts with short-term resources. (Cruz 1984: 35).

To sum up, in 1973, the Brazilian economy was in an expansionary cycle, with a record average GDP growth of 10.7 percent per year. Short-term credit forced their way into the country. These movements resulted in inflationary pressures. Hence, generated a manageable crisis that did not end up in a debt crisis.

Current Account*- 1968-1974

| Year | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 |
|------------------------|-------|-------|-------|--------|--------|--------|--------|
| Current account | (508) | (281) | (562) | (1312) | (1489) | (1688) | (7122) |

Source: Until 1971, Conjuntura Economica, November 1972; for 1972 Conjuntura Economica, February 1988.

When one analyzes the Brazilian external accounts in this period, one sees that the country experienced a continuous current account deficit of increasing magnitude. The 1974 oil shock reflected in the jump of the Foreign Exchange Gap (current account) of this year. Brazil was importing more than 60 percent of its oil needs. As we will see in the next period, the trend of large current account deficit financed with international bank credit will increase.

From the source and needs in Table 2 one can see that until 1973, at the end of the “economic miracle”, the need for new loans to finance the foreign exchange needed was minimal (B-A). The role played by FDI and import financing is important. It was usual for a multinational company to get a loan from its parent company and this loan transformed into equity.

Unstable sub period 1975-1982- Growth-cum debt period

Despite the adverse external conditions related to the first oil shock and the introduction of floating exchange rate system, the country embarked on an ambitious import substitution program- the II PND (1974-1977), Second Development Plan. The gross external debt jumped from US\$ 12.6 billion in 1973 to US\$ 49.9 billion in 1979 -- the equivalent of 3.3 times the exports in 1979, US\$ 15.2 billion.

In 1980 and onwards, despite that medium- and long-term debt registered in the Central Bank followed the legal requirement of minimum term of eight years¹³, the accelerated increase of the short-term debt, not normally mentioned in the official statistics, resulted in a reduction of the average tenor of the country's external debt.

Created in September of 1977, Resolution 432 intended to reduce the increase of the monetary base due to capital inflows. RES. 432 allowed the banks involved in the lending of external resources to transfer their hard currencies debt to the Central Bank, which in turn become responsible for all the costs involved. The purpose of this device was to match the management of the external debt profile (minimum term for amortization of 8 years), with the short-term credit demand (minimum tenor of 3 months). If the banks could not get clients to borrow from their hard currency lending (minimum tenor of amortization of 8 years) they always had the possibility of depositing at the Central Bank these idle resources. (Batista 1983:140).

With the help of a methodology of comparing/adding data from the BIS and the Central Bank, Nogueira Batista (1983: 38) illustrated the share of short-term credit in the total external debt (TE). In December 1980, it was roughly 17 per cent in a total TE of US\$ 59 billion. In December 1982 was 18 percent in total TE of US\$ 85 billion.

Current Account* (Millions of dollars)

| Year | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|------------------------|--------|--------|--------|--------|---------|---------|---------|---------|
| Current Account | (6700) | (5977) | (4037) | (5892) | (10472) | (12807) | (11734) | (16310) |

Source: Conjuntura Economica (CE), FGV (February 1988).

When we analyze the Brazilian external account in the 1975-1982 sub-period, we see that the increasing current account deficit trend presented in the last period continues to increase. Among other things, this deficit reflected the oil shocks of 1974 and 1979¹⁴, the increase in imports related to the II PND, and the exponential increase of the external debt service. To cope with the increasing demand of foreign exchange Brazil promoted a painful internal adjustment in 1979 and exports increased from an average of US\$ 11.7 billion between 1975-1979 to an average of US\$ 21 billion in 1980-1982.

The Resolution 63 type of lending of external resources allowed banks to transfer their hard currencies debt to the Central Bank. The Bank in turn, become responsible for all the costs involved. The possibility of deposit in the Central Bank under Resolution 432 made this type of foreign loan almost free from exchange risk. The banks fund themselves with an 8-year external debt loan and lend in any term that was convenient. In the

¹³In the second half of 1960s, it was 10 years.

¹⁴ Brazil was importing 60 percent of its oil needs.

absence of a client, there was always the possibility of transferring the risk to the Central Bank. (Nogueira Batista 1983:140).

In 1980, we have the Resolution 63 type of foreign loan together with Resolution 432, which, in practical terms, allowed short-term lending in hard currency. Adding to that, the government also start to fund itself with short-term credits in the international market, invalidating (discrediting) the effort and wisdom of the eight-year minimum tenor in international borrowing (**capital control**). For Batista (1983), this deflection in the financial policy was a major contributor to the Brazilian moratorium of December 1982.

From the sources and uses chart reported in table 2 see that the country foreign exchange needs (B-A) present an increasing trend. Brazil's reliance on banks loans to cover increasing foreign exchange needs is clear. The painful export drive of the early 1980s was unable to cover these needs. On the eve of the Mexican crisis of late 1982, Brazil was unable to obtain the resources to close its external accounts.

The debt crisis of the early 1980s that reached its peak with country the country moratorium of December 1982 initiated the "lost decade". Pressed by the IMF the country promoted a structural adjustment program to pay for the external debt. Until early 1990s, the country became a net exporter of capital. Since wages were frozen, such adjustment generated big social arrests during the decade. On the positive side, we see the end of the military regime. The last General "president", Joao B. Figueiredo (1979-1985), left the office in 1985 and his successor was a civilian.

Section 4 Higher Volatility and Uncertainty: Brazilian External Debt in the 1990s International capital markets in the 1990s

Following a tendency quite common in other emerging markets, private capital inflows to Brazil disappeared in the 1980s. The data below copied by Blecker (1998) shows that Latin America transferred out a total of \$145.7 billion between 1985 and 1991. From 1992, transfers into Latin America became positive but in 1995, they fell to zero due to the Mexican crisis. That is, the region remained isolated from international capital markets from the time of the 1982 Mexican moratorium to the signing of the first Brady Plan. This Plan restructured Mexico's in 1990.

Net transfer of financial resources in billions of dollars-Latin America and Caribbean- 1985-1995

| 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| -30.6 | -11.9 | -18.1 | -21.8 | -27.3 | -27.1 | -8.9 | 8.4 | 14.3 | 6.4 | -0.4 |

Source: Blecker (1998:16)

Capital flows returned to Latin America after the introduction of the Brady solution to developing country external debt. Analyzing the composition of these flows, Delvin, Ffrench-Davis and Griffith- Jones (1994: 234) documented that net capital, inflows in Latin America in 1992-1994 reached 5 percent of GDP. These inflows exceeded the ratio of the previous peak of 4.5 percent in 1977- 1981. Bonds notably increased their participation, whereas the share of commercial bank lending fell dramatically.

A significant development in global finance in the 1990s is the growth of international portfolio investment (PI)¹⁵ in emerging markets. It also opens the door for new attempts of inflation stabilization. Since this type of external debt contains an array of securities, it is also coined "securitization" in the literature. "Securitized" flow is more volatile than bank loans. Interest-arbitraging flows and portfolio investment are problematic because of their volatility and pro-cyclical nature. According to Griffith-Jones (1996), this outflow might happen when there is little control on capital flows especially because foreign investors could sell their stocks to local investors and not to other foreign investors in the case of balance of payment crises. This occurred in Mexico in 1994.

For Delvin, Ffrench-Davis and Griffith-Jones (1994: 234), a source of potential concern is that a high proportion of net capital inflows in the early 1990s (higher than in previous decades) correspond to short-term flows, where the risk of volatility is higher. By far the greatest part of currencies trades was short run. Most trades are not for trade finance or long-term investment but based on, expectations of gain derived from changes in the value of financial assets - i.e., they are speculative (Eatwell 1996)

Current Account (millions of dollars)

| Year | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------------------------|--------|------|-------|--------|---------|---------|---------|---------|---------|---------|
| Current Account | (1407) | 6143 | (592) | (1689) | (17972) | (24347) | (33275) | (35095) | (25335) | (24225) |

¹⁵ Portfolio investment covers government bonds, private bonds, bonds issued by international organizations, preference shares and various kinds of other securities (term deposits, marketable promissory notes)

Source: Until 1998, *Conjuntura Economica* June 1999, and then *Conjuntura Economica* June 2001

When we analyze the Brazilian external accounts in this period, we see that the country experienced a continuous current deficit of increasing magnitude. This reflects, among other things, the problem of international trade competitiveness because of an appreciation of the exchange rate due to international capital inflows.

Brazil came late in external debt rescheduling. The country signed the final Brady agreement only in April of 1994. It encompassed an exchange of instruments that covered over \$ 50 billion in debt stocks and arrears (Cardoso and Goldfajn 1998: 168). The resumption of capital flows together with the foreign debt negotiation significantly relieved external constraint. Compared with earlier periods, the main determinant of the capital inflows in 1990's Brazil has been the extremely high interest differential between Brazil and the developed economies.

Table 3 here

Brazil has received massive foreign capital inflows. Those flows prompted, among other consequences, a major accumulation of foreign reserves that reached almost US\$ 60 billion in April 1996 (10% GDP or 1 1/2 year of imports) (Garcia and Barcinski 1996: 27). As we can see from line 3 of table 3, from 1992 to 1996 Brazil used an average, US\$ 10.5 billion per year to build up reserves. Those reserves worked as an insurance policy of the anti-inflation plan, Real Plan of July 1994, permitting the Brazilian government to keep fixed exchange rate for a long time.

Cailloux and Griffith-Jones (1997) show a negative tendency regarding bond issuance in Brazil; in 1993, 16.3 percent of the bonds issued had a put option (for an average of 2 years); in 1994, this percentage increased to 19.9 percent and in 1996, to 35.8 percent!

The dependence of economic policy on the number of flows of portfolio investment, especially short-term credits, illustrate the behavior of the Brazilian authorities that have adopted frequent changes in legislation especially regarding laws concerning taxation and other incentives to short- term capital.

From 1996 to 1997, the basic interest rate of the Brazilian Central (BACEN) bank jumped from 22 percent to 42 percent. This reflected the 1997 East Asia crisis. BACEN fomented an inflow of short-term speculative capital to compensate for the loss in reserves of US\$ 10 billion related to this crisis. The reserves in the end of 1997 amounted to US\$ 51 billion.

Garcia and Barcinski(1996: 19) reports that short-term capital movements (line 12 of table 3), which turned positive in 1992, reached important levels in 1995 (of roughly US\$ 20 billion¹⁶); and in 1996, it reduced to US\$ 5752 million. From 1997 onward, we have an outflow of short-term capital due to the Asia Crisis and other crisis that followed. That is, as usual, the short-term credits became one of the key actors in the currency/debt crisis that Brazil faced in 1998/1999.

At the end of 1997, Batista estimates that Brazilian short-term liabilities amounted to US\$ 60 billion. Therefore, the Brazilian authorities imposed several restrictions on short-term borrowing. For instance, restriction on foreign borrowing to purchase federal government dollar-indexed securities. The authorities also extended the minimum maturity on foreign loans from 12 to 24 months. They also extended the term for renewals and prorogation from six to twelve months (Banco Central do Brasil 1999: 110).

In the second quarter of 1998, adverse developments in Asia and Russia ignited a period of renewed loss of reserves by the country. In August, Brazil adopted a series of measures to attract capital inflows. It reduced the minimum maturity of new international bond issue to one year from two years. It removed the investment ceiling on foreign borrowing to purchase dollar-indexed securities.

The Government also eliminated a tax on foreign fixed income and waived a tax on international loans used to finance foreign direct investment (BIS November 1998:9).

Further financial difficulties led the government to abandon the fixed exchange rate regime (and floated the Real) in the end of December 1998. On January 13, 1999, the Central Bank attempted to shift the foreign exchange system from a mini band to a wider band, but it lasted only 48 hours. Within four days, the country lost almost US\$ 6 billion in international reserves. Following this episode, Brazil adopted a free-floating exchange rate regime.

Foreign exchange reserves amounted to a peak of \$74.7 billion in April 1998. (Banco Central do Brasil 1999: 110). In the first quarter of 1999, foreign exchange reserves dropped from US\$ 43 billion at end-1998 to US\$ 32 billion. The latter amount also included a first disbursement of \$ 9 billion under the US\$ 45 billion IMF official assistance package arranged in December of 1998.

That is, from April 1998 to the first quarter of 1999, the country lost roughly US\$ 50 billion in reserves. Like in 1982 debt crisis Brazil between 1999 and 2002 has signed three agreements with IMF

¹⁶ In this year, it surpassed the medium and long-term capital movement.

amounting to US\$ 86 billion. From this total, US\$ 41 billion in 1998/99, US\$ 15 billion in August 2001 and US\$ 30 billion in September of 2002

In fact, the majority of banks in Brazil made money from the event through heavy dollar buying in the futures market- it is widely believed that financial institution made some \$ 10 billion out of the devaluation and that a large portion of this was made by the foreign banks.

...These gains came largely at the expense of the Brazilian Central Bank, which intervened in the foreign currency markets through state-owned Banco do Brasil (RISK July 1999: 4).

Between 1999 and 2002, Brazil signed three agreements with IMF. It involved resources amounting to US\$ 86 billion being US\$ 41, 5 billion in 1998-1999, US\$ 15 billion in August 2000 and US\$ 30 billion in September 2002.

II. Conclusions

The presence of short-term speculative resources in the Brazilian economy is constant. They were present in the financing schemes of the coffee valorization, the stabilization offices of the 1906-1932 period, and the external debt crisis that followed. During the 1947-1962 period, they were a major source of financing either in the form of financial arrears, or in the several credit instruments developed during the "finance engineering" sub period of 1955-1962 with the resulting debt overhang.

We can assert that a debt profile concentrated on medium-term and increasing short-term international financing was the major responsible factor in the external debt crisis of 1960 and 1963. The same phenomenon occurred in the 1990s debt crisis since the "derivative" lending of the 1990s is of medium-term nature and there is a huge inflow of short-term credit via the Annex IV of Brazilian Central Bank resolution 1289/87 of May 1991. This law allowed the foreign investors to buy fixed income assets. In both periods, a severe cash-squeeze liquidity crisis plagued the economy and forced the country to negotiate with the IMF.

Regarding the political turbulence that surrounded the debt crisis visited, it began in the 1920s. As reported, the "Tenentista" movement contributed significantly to the Brazilian Revolution of 1930. The left wing of the movement advocate, among other things, the halt of the payment of the external debt. In the 1954 crisis, Vargas cited foreign pressures in his suicide note when he killed himself this year. From 1962 to 1964, the President Goulart government renegotiated the foreign debt every three months. After the coup d'état and his deposition of in 1964 the first military government came to good terms with the IMF

The country moratorium of December 1982, engendered by short-term financing forced the country to follow IMF's financial adjustment programs. The adjustment provoked social turbulence and political movements that lead to the end of the twenty years of the military regime in 1986.

Loosing roughly 67 per cent of the country reserves from April 1998 to the first quarter of 1999 (US\$ 74,7 billion to US\$ 23 billion) is an example of the difficulties of the usage of short-term credits. As a result, Brazil signed three agreements with IMF, 1999, 2000 and 2002. As we are aware, the financial programing of the IMF are deflationary. It does little for economic growth as well as improving the lives of the people, particularly the poor who already face barely subsistence level wages and high unemployment.

There is a maxim that those who do not learn from history are condemned to repeat it. It is my hope that my comparisons of the impact of speculative short- term credit in different periods of Brazil's often-turbulent history in the Twenty Century will provide enough "nuance" to developing countries when they faced with this type of international financing. Brazil is an important developing country, and the evaluation of its experience can be of a significant help to other developing countries.

Bearing mind that Brazil is a mid-income developing country a final note that may be of help to other developing countries. It concerns the use of capital controls. For instance, using counterfactual reasoning one could imagine a different scenario for the country if it used capital control that in the 1950s and 1960s. We are aware that this were times of dollar scarcity but we have to remind that capital control was the rule among developed country in these two decades.

The experience of the 1967-1982 period illustrates the success of this type of control as well the impacts the abandonment of this practice in the sub-period (1975-1982) that lead to the 1982 moratorium. Regarding the 1990s, we don't need any counterfactual reasoning. The loss of roughly 67 per cent of the country international reserves in less than a year speaks by itself. We emphasized the aspect of Brazil being a mid-income country because for the case of low-income developing country they solely rely on multilateral institution to finance their external resources needs.

Bibliography

- [1]. Abreu, M. P. (1973), 'The Niemeyer Mission: An Episode of British Financial Imperialism in Brazil'. Centre of Latin American Studies, Working Paper no. 10,
- [2]. Cambridge: University of Cambridge,
- [3]. Abreu, M. P. (1984), "ADívida Pública Externa do Brasil, 1824-1931", *Estudos Economicos*, XV, no 2, May/August.
- [4]. Avramovic, D., et al (1964) *Economic Growth and External Debt*. Baltimore: The Johns Hopkins Press.
- [5]. Banco Central do Brasil (BCB) (1999) *Relatorio Annual*. Brasilia:BCB.
- [6]. Bandeira, L.A. M. (1978) *O Governo Joao Goulart Rio de Janeiro*: Editora Civilização Brasileira.
- [7]. Batista Jr, P. N. (1983) *Mito e Realidade na Dívida Externa Brasileira*. São Paulo, Paz e Terra.
- [8]. BIS, Bank for International Settlements (1998 and 1999) *International Banking and Financial Markets Developments*. Several numbers.
- [9]. Blecker, R. A. (1998) 'International Capital Markets Mobility, Macroeconomic Imbalances, and the Risk of Global Contraction'. CEPA Working Papers Series III, no 5. New York: New School for Social Research.
- [10]. Bloomfield, A. I. (1953) 'Speculative and Flight Movements of Capital in Postwar International Finance', *Princeton Studies in International Finance*, no 3.
- [11]. Bloomfield, A. I. (1963) 'Short-Term Capital Movements under the Pre-1914 Gold Standard. Essays in International Finance No 11, Princeton: International Finance Section. Princeton: Princeton University.
- [12]. Bloomfield, A. I. (1973) 'Living with Floating Exchange Rates'. *Wharton Quarterly*, March.
- [13]. Cailox, J. P. and Griffith-Jones, F. (1997) 'Flujos de Capitais Europeos en America Latina'. *Ciclos*, Vol. 7, No 13, 2nd semester.
- [14]. *Conjuntura Economica* (1972) '25 Anos de Economia Brasileira. Estatísticas Básicas. Conjuntura Economica. V. 26, separata, November
- [15]. Cruz, Paulo D. C. (1984) *Dívida Externa e Política Economica*. São Paulo: Brasiliense.
- [16]. Delvin, R., Ffrench-Davis, R., Griffith-Jones, S. (1995) 'Surges in Capital flows and Development: An Overview of Policy Issues', in Ffrench-Davis, R., and Griffith-Jones (eds) *Coping with Capital Surges: The Return of Finance to Latin America*. Boulder, Col.: Lynne Rienner Publishers Inc.
- [17]. Diaz-Alejandro, C.F. (1975) 'Less Developed countries and the Post-1971 International Financial System', *Essays in International Finance* no. 108.
- [18]. Donnelly, J. T. (1970) 'External Debt and Economic Development in Postwar Brazil, 1947-1966'. PhD dissertation, Nashville, Vanderbilt University.
- [19]. Eatwell, J. (1996) 'International Capital Liberalization: The Record', Working Paper Series: Globalization'. CEPA, Labor Markets, and Social Policy. Working Paper 1. New York: New School for Social Research.
- [20]. Fritsch, W. (1988) *External Constraints on Economic policy in Brazil, 1889-1930*. Pittsburgh, Pa: University of Pittsburgh Press, 1988.
- [21]. Furtado, C. (1963) *Formacao Economica do Brasil*. Brasilia: Editora Universidade de Brasilia.
- [22]. Garcia, M. G. P. and Barcinsky, A. (1996) 'Capital Flows to Brazil in the Nineties: Macroeconomic Aspects and Effectiveness of Capital Controls'. Departamento de Economia PUC-RJ, Texto para Discussao no 357, July. Rio de Janeiro: PUC-RJ.
- [23]. Goldsmith, R. W. (1986), *Brasil 1850-1984: Desenvolvimento Financeiro sob um Seculo de Inflacao*. Sao Paulo: Editora Harper & Row do Brasil.
- [24]. James, H. (1992) 'Financial flows across frontiers during the inter-war depression', *Economic History Review*, XLV, no. 3, pp. 594-613.
- [25]. Jorgensen, E. and Sachs, J. (1989) 'Default and Recognition of Latin American Foreign Bonds', in Eichengreen, B. and Lindert, P.H. (eds), *The International Debt Crisis in Historical Perspective*. Cambridge, Ma: MIT Press.
- [26]. Kindleberger, C. P. (1978) *Manias, Panics and Crashes: A History of Financial Crises*. New York: Basic Books, Inc., Publishers.
- [27]. Kindleberger, C.P. (1987) *International Capital Movements*. London: Cambridge University Press, 1987.
- [28]. Lewis, C. (1938) *America's Stake in International Investments*. Washington, D.C.: The Brookings Institutions.
- [29]. Love, J. (1980) *Sao Paulo in the Brazilian Federation 1889-1937*. Stanford: Stanford University Press.
- [30]. Malan, P. S. (1977) 'Foreign Exchange Constrained Growth in a Semi-Industrialized Economy: Aspects of the Brazilian Experience, 1946-1976'. PhD dissertation, University of Berkley, Berkley.
- [31]. Oliveira, Francisco C. (1977) *A Economia da Dependencia Impefeita*. Rio de Janeiro: Edicoes Graal.

- [32]. Pelaez, C. M. (1971) 'Análise Economica do Programa Brasileiro de Sustentação do Café-- 1906-1945: Teoria Política e Mediação', *Revista Brasileira de Economia*, XXV (4): pp. 5-211.
- [33]. Resende, A. L. (1982) 'A Política brasileira de estabilizacão- 1963-1968', *Pesquisa e Planejamento Economico*, V.12 (3), December.
- [34]. Risk (1999) 'Latin Risk.' *Risk*, July.
- [35]. Skidmore, T.E. (1967) *Politics in Brazil, 1930-1964*. New York: Oxford University Press.
- [36]. Swedberg, R. (1987) 'The impact of an exogenous event: The oil shocks, the private banks and the origins of the debt crisis, *International Social Science Journal*, August: 323-333.
- [37]. Triffin, R. (1961) *Gold and the Dollar Crisis*. New Haven: Yale University Press.
- [38]. Triffin, R. 'International Monetary Reform', *Economic Bulletin for Latin America*, XI (1): 10-41.
- [39]. United Nations (1949) 'International Capital Movements during the Inter-War Period' Department of Economics Affairs. New York: United Nations.
- [40]. United Nations (1954) 'The International Flow of Private Capital 1946-1952'. Department of Economic Affairs. New York: United Nations, 1954.
- [41]. Vianna, S.B. (1987) *A Política Economica do Segundo Governo Vargas (1951-1954)*. Rio de Janeiro: BNDES, 1987.
- [42]. Villela, A. V. e Suzigan, W. (1973) *Política do governo e crescimento da economia brasileira*. Rio de Janeiro: IPEA/INPES.

Table 1
Sources and Uses of External Resources 1947-1962 million of dollars

| Year | 1947/51 | 1952/56 | 1956 | 1957/61 | 1962 |
|-----------------------------------|----------------|-------------|-------------|-------------|--------------|
| Exports | 1314 | 1483 | 1483 | 1319 | 1215 |
| Investments | 13 | 35 | 89 | 117 | 69 |
| A. Sources | 1327 | 1518 | 1572 | 1436 | 1284 |
| Imports | 1103 | 1275 | 1046 | 1252 | 1304 |
| Net services | 282 | 300 | 302 | 281 | 221 |
| Interest | 21 | 41 | 67 | 89 | 118 |
| Debt Amortization | 76 | 109 | 187 | 347 | 310 |
| B. Needs | 1482 | 1725 | 1602 | 1969 | 1953 |
| B-A | 155 | 238 | 30 | 533 | 669 |
| New Loans | 51.4 | 257.4 | 221 | 537 | 562 |
| Deficit/Surplus- Forex | (103.6) | 19.4 | 191 | 4 | (107) |

Source: For 1947 to 1956, *Conjuntura Economica*, November 1972: 9; for 1956 to 1963. *Conjuntura Economica*, December 1972:58. Single year or average five years

Table 2
Sources and Uses of External Resources 1968-1982 (millions of dollars)

| Year | 1968- 1972(1) | 1973 | 1974 | 1975- 1979(1) | 1980 | 1981 | 1982 |
|----------------------|------------------|------|-------|------------------|--------------|--------------|--------------|
| Exports | 5016 | 6799 | 7951 | 11764 | 20132 | 23923 | 20175 |
| Direct | 147 | 318 | 940 | 1012 | 1121 | 1584 | 991 |
| Investments | | | | | | | |
| A. Sources | 5164 | 7117 | 8891 | 12776 | 21253 | 25507 | 21166 |
| Imports | 2767 | 6192 | 12641 | 13676 | 18084 | 22091 | 19395 |
| Net Services (2) | 602 | 891 | 1780 | 2334 | 3841 | 3974 | 5729 |
| Interest | 244 | 514 | 652 | 2458 | 6311 | 9161 | 11353 |
| Debt Amortization | 753 | 198 | 1920 | 3441 | 5010 | 6241 | 6951 |
| B. Needs | 4366 | 7795 | 16993 | 21910 | 33246 | 41467 | 43428 |
| B-A | (798) | 678 | 8102 | 9134 | 11993 | 15960 | 22262 |
| New Loans | 2056 | 4304 | 7455 | 10774 | 14879 | 18882 | 17000 |

(a)

Source: Until 1971 *Conjuntura Economica* (CE) November 1972; from 1972 to 1974,

CE (February 1988). (1) Average; (2) net of interest; (a) for 1972 Cruz (1984: 94 and 127). Conjuntura Economica, FGV (February 1988). (1) Average; (2) net of interest; (a) from 1975 to 1981 Batista (1983: 102) for 1982 Batista (1983: 88).

Table 3 -Sources and Uses of External Resources (thousands of dollars)

| Year | 1992-1996* | 1997 | 1998 | 1999 | 2000 |
|------------------------------------|-------------------|----------------|----------------|---------------|---------------|
| (1) Exports | 42449 | 52990 | 51120 | 48011 | 55086 |
| (2) Investment | 4620 | 16219 | 23737 | 30042 | 29559 |
| (FDI) | | | | | |
| (3) Reserves | (10435) | 7907 | 7976 | 7822 | 2262 |
| Variation (- = increase) | | | | | |
| (4) Sources (A) | 36634 | 77116 | 82833 | 85875 | 86907 |
| (5) Imports | 36463 | 61347 | 57529 | 49210 | 55783 |
| (6) Net services(a) | 5630 | 14682 | 16625 | 9251 | 8878 |
| (7) Interest | 7840 | 10390 | 11948 | 14876 | 14649 |
| (8) Amortization, (b) | 10998 | 26021 | 33587 | 49120 | 34690 |
| (9) Needs (B) | 60931 | 112440 | 119689 | 122457 | 114000 |
| (10) B-A | 24297 | 35324 | 36856 | 36582 | 27093 |
| (11) Loans (c) | 18362 | 57784 | 69341 | 47924 | |
| (12) Short-term capital | 5793 | (17531) | (29093) | (8452) | (2311) |
| (13) Net Loans | 24155 | 40253 | 40248 | 39742 | 30298 |
| (14) IMF Loans | | | | 2966 | (10323) |

Source: For 1992-1993 Boletim do Banco Central (October, 1996); for 1994 too 1998, Boletim do Banco Central (July 1999). (a) Net of interest, it includes transfers; (b) disbursed only; (c) it included other net capitals but not refinancing; for 1999 e 2000 Boletim do Bacen (BB), Abril 2001(V.2) and BB de Janeiro de 2003 (V.7).

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