TEQUILA OR TORTILLA? NOTES ON THE BRAZILIAN ECONOMY IN THE NINETIES*

Franklin Serrano**

1 International Capital Flows and Macroeconomic Instability

Like most other Latin American countries, the Brazilian economy was very much affected by what were perhaps the two most important changes in the external conditions affecting the continent since 1980, namely, the interruption (and even reversal) of international capital flows to the region after the 1982 Mexican default and the sudden resumption of these flows in the early 1990's.[1] The first of these shocks – combined with world recession, a deterioration in the terms of trade for commodities and the unprecedented increase in international interest rates that happened in the early eighties – plunged Brazil into a decade of stagnation[2] and persistent and extremely high rates of inflation which led also to the progressive dismantling of a successful regime of state-led industrialization.

The sudden resumption of capital flows towards Latin America in the early nineties was decisive for economic recovery and the dramatic reduction and successful stabilization of the rate of inflation, the latter obtained in Brazil with the 1994 Real plan, which was based on deindexing the economy and (more crucially) strict control of the nominal exchange rate.

2 Indexation and Inflation

The external debt crisis and the interruption in capital flows was common to most Latin American countries but its particular effects on the Brazilian economy were, of course, very much influenced by some distinctive features of the Brazilian economy and its development strategy.

One of these peculiar Brazilian features was the high degree of price indexation of the economy. In fact, widespread indexation in Brazil can be traced back to the mid-sixties. The military government of the time decided to follow a development strategy in which the local currency should not become persistently overvalued relative to the U.S. dollar. That led to a crawling-peg exchange-rate regime with frequent mini-devaluations. This continuous nominal devaluation of the currency in turn led to the need, in order to prevent capital flight, of formally indexing interest rates on government bonds (the so-called "monetary correction" mechanism). Indexation then spread to all financial contracts and introduced an element of inertia in inflation which at the same time made necessary or perhaps inevitable (even in a repressive regime) a partial but growing indexation of wages. The latter by its turn reinforced the inertia in inflation rates giving further stimulus to widespread indexation of all contracts.[3]

Therefore, when the external shocks due to the debt crisis hit Brazil the economy already had a very high degree of indexation and a relatively high and persistent rate of

* *Financial support from CNPq/Brazil is gratefully acknowledged.*

** *IE/Universidade Federal do Rio de Janeiro, Brazil.*

[1] *On this surge see FFRENCH-DAVIS,TITELMAN, UTHOFF (1994)*

[2] *On these four shocks and their impact on Latin America see SINGH (1994).*

[3] *On the early Brazilian debate about indexation and inertia see Serrano (1986)*

inflation. That explains why inflation accelerated so much and reached such high and persistent levels in Brazil during the eighties. The debt crisis led to the so-called "maxi-devaluations" on top of the crawling peg as a means of altering the real exchange rate, promoting exports and making imports more costly in order to obtain a trade surplus to service the debt and make up for capital flight. Those maxi-devaluations accelerated inflation and led to further increases in interest rates and then of wages. On the other hand the complex system of indexed contracts allowed the economy to operate normally even with record-high rates of inflation. Thus, indexation at the same time made inflation rates much higher and persistent than in other countries but on the other hand prevented the disorganization of the economy that happens under open uncontrolled hiperinflation.[4]

In the period 1980-94 Brazil attempted many different types of stabilization plans. But, regardless of such efforts, until the 1994 "Plano Real" the Brazilian economy lived with a permanent inflationary process with strong trends towards hyperinflation, briefly contained by these increasingly ineffective stabilization attempts. Inflation rates measured by different price indexes presented very abrupt oscillations and, from 1988 onwards, four digit figures were quite common

3 The 2nd National Development Plan and the Export Drive

Another feature of the Brazilian development strategy that was crucial to explain the peculiar performance of the economy in the eighties was that, in marked contrast to most other Latin American countries (where the external debt financed capital flight) a good part of the Brazilian external debt was used to finance the 2nd National Development Plan which invested heavily in the capital goods sector and infrastructure. Those investments were instrumental in reducing the dependency of the economy on some imports (such as oil, for instance) and, more importantly, served to complete the local industrial base (including some indigenous capacity to generate technology) and provide the cost externalities (in transportation, energy and basic inputs) that allowed the country in a short period of time to become a major exporter of industrial commodities. This successful export performance coupled with the stagnation of the economy and other measures to ration imports allowed the country to produce large trade surpluses after 1983 for ten years[5]

4 External Debt, Inflation and the Crisis of the Public Sector

The vicious circle of exchange-rate shocks and inflation acceleration had destructive effects upon public finance. The management of the country's foreign debt – virtually nationalized in the beginning of the 1980s as part of the policies to face the problems of the balance of payments – led to a chronic disequilibrium in public finances, while the acceleration of inflation led to a collapse in the demand for the local currency, continuously devaluated, and decreased the ability of the public sector to borrow long.[6]

The real value of tax revenues tended to fall given the well-known lags between nominal incidence and actual payment (the 'Tanzi' effect). However with a series of fiscal reforms the government did manage to index most tax revenues and created a large number of new taxes (including one on financial transactions) that, in spite of the growing trend of tax evasion, prevented a complete fiscal collapse.

Progressively the only means of financing a deficit still available was the emission of fully-indexed public bonds with very short maturity and guaranteed (and full) liquidity.

---

[4] *On the Brazilian "indexed-money"regime see Mendonça de Barros (1993).*

[5] *On the 2nd National Development Plan see Cano(1993).*

[6] *On the link between the foreign-debt crisis and crisis of the public sector see Cruz (1994,1995). On the "lost decade" see also Cardoso de Mello (1992).*

In practice such bonds became the country's indexed currency. Capital flight, and the consequent open hyperinflationary explosion, was avoided but at a very high cost for the public sector not only in financial terms, but also in terms of the government's ability to implement and control macroeconomic policy.

The need to guarantee liquidity for government bonds in practice implied a passive and virtually uncontrolled monetary supply. The only tool still available for avoiding open hyperinflation was the management of internal nominal interest rates. However, the exclusive reliance on increasing interest rates for the macroeconomic management of the economy had two consequences. First, it reinforced the financial component of the public deficit. Second, it also led to the acceleration of inflation as, in such context of a drastic shrinking of the maturity of all contracts, the increase in very short-term interest rates on government bonds also increased the minimum opportunity cost also for productive capital and led to an increase in mark-ups and hence on the supply prices for all sectors of the Brazilian economy.

Note that short-term interest rates became a factor in accelerating inflation for two reasons. First, because the shortening of the maturity of all contracts made the distinction between short and long rates practically disappear. Short-term rates (rather than the inexistent long rate) thus became the "cost of capital" both in the sense of representing its financial cost and, more importantly, as its opportunity cost[7].

The second reason is that, given the fact that the country had been cut out of the international financial markets since 82, increases in the domestic interest rate did not have, in that period, the antiinflationary effect of attracting capital inflows and slowing down exchange-rate devaluations.

Therefore, under those conditions an explosive exchange-rate, interest-rate, prices, wages, exchange-rate spiral was continuously reproduced as nominal interest-rate increases to avoid hyperinflation at a given point in time led to a worsening of the inflation process in subsequent periods. This spiral was temporarily interrupted by stabilization plans that tried to rein in nominal exchange-rates, wages and sometimes included price controls. The most spectacular of these plans were the Cruzado plan of 1986 and the Collor plan of 1990. The 1986 Cruzado plan, implemented by the first civilian government after the military withdrew, included a comprehensive price freeze and a number of deindexing measures. A faster-than-expected recovery of the activity levels (mainly due to a credit boom) together with the over-extension of the price freeze for electioneering reasons led to growing inflationary speculation, particularly (though not exclusively) in regard to the frozen nominal exchange-rate.[8] In a context of great fragility in the country's balance of payments (the planned external debt renegotiation had not achieved the desired results), speculative attempts such as these were bound to be successful, and inflation and indexation quickly returned to their accelerating spiral as soon as price controls were lifted. (Tavares, 1989).

In the 1990 Collor plan there was a rather drastic but very short-lived attempt to control and dismantle the indexed-money mechanism, which included the government seizing a large part of the public's liquid assets and transforming them compulsorily into a 18-month loan to the Tresury. That led to a large (but temporary) increase in the demand for the local currency that temporarily stopped the nominal exchange rate devaluations.

However the government did not manage to change the rules concerning the liquidity of new issues of public bonds and the informal indexation of short-term interest

---

[7] *On the long rate of interest as the determinant of the "cost of capital" and markups see Pivetti (1991) and Serrano (1993). On the short rate affecting the markups in the Brazilian context of high inflation see Serrano (1994).*

[8] *Because of formal capital-account controls this was done mainly by postponement and anticipation and under- and over- invoicing of exports and imports, respectively.*

rates. The government quickly (in less than one month) allowed, through a number of formal and informal channels, the restoration of the liquidity of the private sector, undoing thereby the increase in the demand for the local currency. Given that failure, and the fact that the external debt situation was still unresolved, soon the pressure to devalue the currency to service the external debt and to increase interest rates to avoid capital flight proved irresistible, leading to the gradual reindexation of the economy and with it to the quick return of high and accelerating inflation.[9]

5 Economic Stagnation and the end of State-Led Development

Due to the shrinking of the maturity of all financial contracts (in Brazil over that period contracts with a maturity of more than one month were usually classified as long-term contracts) and the virtual inexistence of feasible interest rates which could compensate the risks of either borrowers or lenders over a longer time-span, along the eighties the Brazilian economy gradually drifted to a state of financial regression. The credit system collapsed and there was a drastic and permanent fall in both the demand and the supply for credit (both for consumers and firms). The state became the only big borrower and the financial system organized almost exclusively around the intermediation of indexed government bonds.

The scarceness of credit, together with the effects of inflation on wage-earners' incomes led to a relative stagnation of consumption expenditure and housing investments. Government expenditure – particularly on investment – slowed down due to the financial crisis of both the Treasury and the state-owned firms. In that macroeconomic context the only dynamic component of final demand was exports and therefore the incentives for the private sector to invest for the domestic market were rather limited. However, given the other negative trends in aggregate demand, the export drive by itself did not (and in a large economy such as Brazil's could not) manage to sustain growth in private investment. Thus, firms invested as little as possible in increasing their productive capacity, slowing down equipment renovation which, together with the costly and difficult access to imported capital goods, implied growing industrial obsolescence.

The macroeconomic instability and the high inflation rates, together with the adjustment costs of the external debt resulted not only in a deep crisis of the public sector but, more importantly, led to a profound institutional crisis of the State (aggravated by a long and slow transition from military to civilian rule), marked by an increasing disarticulation and loss of planning and operational capacity by most agencies and policies related to industrial promotion, such as taxation, international trade, science and technology.

Progressively the State allowed its capabilities to promote industrial development – both in terms of incentives and regulation – to weaken. At the same time, increasing constraints on public finances reduced to minimum levels all maintenance and expansion investments in infrastructure services such as energy, transports and telecoms.

Gradually the regime of incentives for nationalization and regulation against imports (the latter had been strengthened because of the debt crisis) was dismantled. Under pressure from the World Bank, restrictions on imports were lifted, initially at a slower pace, but later accelerated by reforms implemented by the neoliberal Collor administration in 1990. Thus, persistent macroeconomic instability (deep-seated recession and very high inflation) together with increasing trade liberalization became the context within which the Brazilian economy had to operate in the beginning of the 90's.

[9] On the Collor Plan see (TEIXEIRA , 1994 ; TAVARES, 1993).

6 The Resumption of Capital Flows and the New Exchange Rate Regime

The situation of Brazil and of all other Latin American economies was bound to change drastically when in the beginning of the nineties, capital suddenly started flowing again towards the continent. These new flows were of a markedly different nature from that of the seventies. Instead of bank loans they consisted mostly of short-term speculative flows and securities often coming from pension funds and other institutional investors trying to diversify their portfolios and escape from the relatively low interest rates prevailing in international markets.

Provided that local nominal interest rates (corrected by expected exchange-rate devaluation) were reasonably attractive and that local regulations were such that capital was free to move in and out at very short notice, there was suddenly, after so many years of severe credit rationing to Latin America, no difficulty in attracting what from a local point of view were large amounts of capital.

Indeed, the Brazilian case clearly shows the exogenous nature of the surge. Official international reserves more than doubled between 1991 and 1992, in spite of triple-digit domestic inflation, long-standing recession and an increasingly disorganized public sector. The capital flows were of such magnitude that in spite of the subsequent import boom reserves were to increase more than sixfold from 91 to 95.

For a number of reasons – mostly related to the domestic political situation and the election calendar – only in 1994 the government was able to take full advantage of this new external situation in order to launch a new (and this time successful), radical stabilization attempt, the Real Plan.

That plan, like the 1986 Cruzado was also based on stabilizing the nominal exchange rate and on synchronizing and deindexing wages, prices and financial contracts. The main differences were a certain lack of concern for possible real-wage losses during the preparatory phase of synchronization[10] and the maintenance of very high interest rates to ensure the continuation of foreign-capital flows. The interest rate was set so high when monetary reform was introduced that it quickly led to a nominal appreciation of the new currency, which was initially supposed to be pegged on a one-to-one basis to the U.S. dollar and eventually went as high as 85 cents of Real to the dollar, for a short while. The Brazilian Central Bank since then has followed a policy of slowly and gradually making small devaluations. But the large current-account deficits since then showed that those exchange-rate "corrections" have not managed to prevent even an increasing currency overvaluation, let alone making up for the initial real appreciation.

The plan was very successful in bringing inflation down. The stabilization as in other similar programs had a marked expansionary effect in the short run, mainly due to the sudden recovery of consumer credit. In consequence, the economy started growing faster. That was not to last very long since the upsurge in the demand for imports forced the government to slow down the economy (through credit controls and record-high real interest rates) and growth slowed down again from mid-95, to a figure averaging around 2-3 % since then.

The combination of a very appreciated currency in a new environment of liberalized imports (which were further liberalized in the first months after the monetary reform), on one hand, with burgeoning credit, on the other, naturally led to an explosion of imports. Very quickly monthly figures for imports more than doubled. As exports did not and could not follow suit, Brazil ran a deficit in 1995, after more than a decade of trade surpluses. In fear of a Mexico-style balance-of-payments crisis, the authorities decided to put the brakes on the economy, basically through monetary policy.

[10] Synchronization was achieved through a special indexed transitory unit of account, the URV- Unit of Real Value by which wages were compulsorily converted at their average real value over a period, while other prices were freely and voluntarily converted at any desired rate.

That consisted mainly of very tight credit controls and record-high real interest rates. High nominal interest rates with a relatively stable exchange rate attracted a massive inflow of foreign hot money, that much more than compensated for the growing trade deficit.

That large inflow of foreign capital and the ensuing accumulation of reserves put great pressure on public finances (internal debt) as the government, in order to keep the high interest-rate differential, was forced to sterilize the liquidity generated by the balance-of-payments surplus by issuing public bonds. Sterilization operations together with the high domestic interest rate has led to an explosion of internal public debt and interest payments. This, together with stop-and-go growth performance, which prevents tax revenues from growing sufficiently, resulted in large government deficits and an increasing pressure for the government to cut or at least prevent the growth of public expenditures.

The Real Plan represents a complete break with macroeconomic regime of relative real exchange-rate stability that was consistently kept since the early sixties to avoid compromising the export performance of the economy. Now the government's policy goal is to achieve the greatest possible stability of the nominal exchange rate in order to control inflation and prevent the return of indexation. More important, perhaps, is the fact that such relative nominal stability seems to be also strictly necessary for the strategy of financing growing trade and current-account deficits through short-term capital inflows.

Thus, the situation faced by firms in the Brazilian industry in the mid-90's is one in which competition from imports is very intense (given liberalization plus overvaluation). Moreover, aggregate demand grows relatively slowly, mainly due to the fact that the marginal propensity to import seems to have increased substantially and the explosion of imports following any upturn in economic activity leads the central bank to slow down the economy to prevent trade deficits from growing too fast. Additionally, exports have been growing slowly, having lost a number of incentives as Brazil joined and followed the WTO and Mercosur rules, while export profitability was reduced by real exchange-rate appreciation.

The continuing fiscal difficulties together with the neoliberal ideological stance of the present administration mean that the government has neither the will nor the means to give incentives and generate externalities that could improve systemic competitiveness.[11] Thus, while the state-led pattern of development was abandoned in the eighties, no alternative industrial development strategy has been devised to replace it, there being no signs that any such comprehensive strategy will emerge in the near future.

7 On Bananas and Alligators

There has been a lot of discussion about whether and to what extent the Real is overvalued, with government officials going as far as saying that the real exchange has found a new more appreciated market-equilibrium level, determined, "just like the price of bananas", by supply and demand. Even without touching the quantitative part of this heated debate there are of course a good number of reasons to believe that the real is indeed overvalued.[12]

---

[11] Note that the sectors that were still considered to be internationally competitive in the early nineties in a comprehensive study of Brazilian industry were precisely those that were targeted either directly or indirectly (via infrastructure externalities) in the 2nd National Development Plan of 1974. See Coutinho & Ferraz (1994).

[12] For the curious idea of the exchange rate being at its free market equilibrium determined by supply and demand "just like the price of bananas"(sic) (see FRANCO, 1995).

The more obvious, and seldom discussed, reason is that local interest rates have been systematically higher than the external interest rate paid on Brazil's dollar-denominated debt (equal to international interest rate plus sovereign-country risk spread). This is, of course, the reason for the large growth in internal debt described above, which comes from sterilization operations designed to keep the interest-rate differential sufficiently positive in order to support the governments' target exchange rate. If market-equilibrium exchange rates had prevailed, domestic rates would be equal to the above-mentioned foreign rate since then, by definition, expected devaluation and exchange-risk premiums would be zero.

Another frequent argument is that, if measured in terms of the wholesale-price index, the overvaluation is not getting worse since at least some of those prices have lately (after a couple of years) began converging to international levels. That convergence of course is not to be observed in the cost-of-living index, which contains a large proportion of services, many of which are nontradable. Here it is interesting to note a couple of things. First, with regard to industrial (and some agricultural) wholesale prices, the convergence of tradable goods' prices in a open economy is only to be expected. However, that tendency of prices to approach international levels does not at all entail a tendency of costs to reach the same levels. In particular, costs that depend heavily on services have been increasing much faster than wholesale prices.

Therefore, it is not surprising that a lot of industrial and agricultural goods that were produced locally are now mostly imported (wheat and boxcars for the São Paulo underground system, for instance). Thus in the long run overvaluation in these sectors may lead not to divergent prices but to reverse import substitution, of which there seems to be ample evidence[13]

Besides that, the idea of measuring overvaluation in terms of wholesale prices leaves out the fact that a growing number of modern urban and industrial services are becoming increasingly tradable and traded, and that, in Brazil, trade in services has also been liberalized considerably. The most obvious of these tradable services, which causes a deficit of a few billion dollars a year, is the highly visible "invisible trade" in tourism, as it can be easily checked by observing the hordes of Brazilian tourists in Miami and New York City.

Indeed as a good illustration, quite recently in 1997 a couple from São Paulo is reported to have struggled bravely to save the life of their little son who, in a rather unfortunate incident, was almost eaten alive by an alligator in a Florida nature theme park. One wonders why this family was not spending their holidays watching the no-less-fierce alligators that abound in the Brazilian Pantanal region, and that can be easily reached from São Paulo in a few hours. The logical answer, were we to take the idea that current exchange rates reflect market equilibrium seriously, is that the U.S. has somehow managed to gain a substantial comparative advantage over Brazil in terms of alligators!

Finally, there is the additional problem that most analysts measure the Real's exchange rate relative to the dollar. The problem is that the competitiveness of Brazilian exports depends on the exchange-rate policies not only of our partners but, more importantly, of our direct competitors. Thus, in a period in which a sort of "dollar exchange-rate dumping" is widely practiced by a number of emerging economies (China being the most obvious example) these competitive devaluations must be taken into account. The recent (late 1997) round of dollar devaluations all around East Asia surely affects adversely the competitiveness of Brazilian exports[14]

---

[13] For some evidence see AMADEO (1996)

[14] This point has been made a number of times by Mr. Delfim Netto (a well-known former finance minister of the military dictatorship) in the Brazilian press. Nevertheless, most economists still talk of "social dumping", thinking that Asian workers' real wages in terms of goods and services are lower than that of unskilled Brazilian workers.

8 Import Penetration and Export Performance

Whatever may be the exact extent of the exchange-rate overvaluation, the extent of the changes in the import coefficients of the Brazilian economy, brought about by the combination of carefree import liberalization and exchange-rate appreciation, should not be underestimated.[15] Indeed, most analysts tend to worry about imports of (often superfluous) consumer goods and expenditures by tourists abroad and are in fact rather happy when they see that a much larger amount of the increased imports consists of components, intermediate inputs and capital goods.

Now, in principle there is nothing wrong with thinking that imports of the that latter group of products are more "productive", than tourism abroad and imported microwave popcorn. Indeed, in principle a large absolute amount of imports of capital goods and other inputs should be a good thing.

However, there are at least two serious macroeconomic problems when the proportion of the economy's demand for parts & components and capital goods that is imported is very high. The first problem has to do with domestic growth and employment. If the import coefficient of the aforementioned goods is very high, it means that the accelerator and multiplier effects of increases in the autonomous components of final demand will be largely reduced, insofar as that increased demand spills over abroad. That can drastically reduce the creation of domestic value-added and jobs[16]

The second problem concerns the balance of trade. The demand for capital inputs (both circulating and fixed) is naturally a derived demand. And, as it is well-know from the classic accelerator formula in a closed economy, the share of current output that must be devoted to induced investment is necessarily equal to the relevant capital-output coefficient multiplied by the intended rate of growth of output.

Given that this is the technically necessary form of the derived demand for inputs and a proportion of that demand is imported, it is then clear that the import coefficient for these inputs will necessarily be an increasing function of the growth rate of the economy. If the proportion of imported inputs is high that means that any increase in the rate of growth of the economy has a strong "accelerator" effect on the demand for imports.

It is mainly for this reason that the Brazilian balance of trade worsens so quickly when the economy starts growing. When output increases not only does the absolute level of imports also increase, but the economy's import coefficient (ratio of imports to output or income) rises as well, making a stop-and-go type of demand management virtually inevitable whenever the expansion starts through the domestic market.[17]

With this relative deindustrialization of components and capital goods, growth can only be sustained if it is driven by exports. That is implausible, since, with an appreciated currency and no coherent set of systemic incentives and conditions, exports tend to grow rather slowly. Indeed there is evidence of a decrease in the sophistication of Brazilian exports, which tend to concentrate more and more in agricultural and in-

---

[15] For data on the extent and nature of import penetration see BIELCHOWSKY , STUMPO (1996) and also CORREIA, MOREIRA (1996)

[16] This phenomenon also explains the grossly exaggerated measurements of increases in "productivity"observed in Brazilian manufacturing industry since 1990. Such"productivity"is being measured as gross value of output per worker and not (as it should be) as value added per worker.Therefore, any increase in the import coefficient (or even outsourcing to the service sector) will ceteris paribus increase "productivity" measured in this way. See Amadeo (1996), who calls the first (wrong) concept of productivity "T-productivity" and the correct standard (value added) concept "V-productivity".

[17] A similar point was made in 1963 by M.C. Tavares (See TAVARES, 1975).

dustrial commodities with low income elasticities and flexible dollar prices for which terms of trade have been deteriorating decisively since the early eigthies.

But no matter how implausible, a strategy of export-led growth would also be insufficient given that its multiplier-accelerator effects would not be strong enough to pull a large economy such as Brazil by its bootstraps. A continental country cannot be an export platform regardless of how much its goverment may want it to become one.

In fact, a growth-led exports strategy in which the export of more sophisticated goods is made viable by an expansion of the domestic market – and the associated economies of scale and externalites – has always been the successful strategy for Brazil, a country whose main competitive advantage is a huge, integrated domestic market (Ferraz, Kupfer, Haguenauer, 1996).

In any case, it is important to notice that while there might be ample room for disagreement in terms of what is the adequate size of import coefficients of the economy, it is abundantly clear that the strategy of systematically increasing the import coefficient has not been accompanied by a strategy of improving the export performance. It is this fact, and not in the government officials' preferences for a very open economy that shows how irresponsible the strategy is. The curious peculiarity of Brazil's situation is that it has a government who sanctimoniously preaches austerity in terms of the local currency (when there are huge potential underutilized human and material resources available locally) and, at the same time, is greatly and irresponsibly profligate in terms of expenditure in dollars (the supply of which they cannot control).

This inherent and structural fragility of the country's trade balance, seem to point to growing current-account account deficits with constant or even decreasing domestic growth rates because of the accumulated interest payments on both the new and the old external debt and growing factor-services payments (more on this below).

9 Foreign Direct Investmente and the Current-Account Deficit

After Brazil started incurring a series of large current-account deficits, the same officials that had argued it would be dangerous to have growing current-account deficits suddenly discovered that there was no problem with that. The argument now was that the size of the current-account deficit does not matter. What matters is how it is financed.

Following this line, one argument was that a growing part of the deficits were being financed by foreign direct investment which is supposed to be the "good" sort of capital inflow whilst speculative short-term hot money would be the "bad" sort.

This idea is quite popular even among critics of the current administration, but it misses two important points. The first is that the high (and growing) marginal propensity to import that is giving rise to the problem is itself (at least in part) a result of the increase in foreign direct investment – which, in a regime of liberalized trade, always has a very high import content attached to it (take for instance the new investment projects in the automobile industry). Thus it is not easy to see how more of the same could improve the situation.

The second and more important point, is that foreign direct investment currently being made in Brazil is overwhelmingly geared either to the production of goods for the domestic market or to the recently privatized public utilities. In both of these cases foreign direct investment, while permanently increasing imports and payments for foreign factors services, is not adding significantly to the country's export capacity.

10 A Bicycle That Must Accelerate in Order to Stand Still

The argument according to which the size of the current-account deficit does not really matter contains a grain of truth. This argument, that became known as the "bicycle" argument, runs as follows. It is said that foreign trade is like a moving bicycle that never stops. Thus, this year's imports are not paid out of this year's exports, since most of them are financed by supplier's credit. Thus, since there is never a final settlement date one can permanentely run a deficit and keep paying interest, in the same way that, in a closed economy, a family can every year take a new one-year loan to buy consumer goods by installments, running a permanent "deficit".[18]

This argument is undoubtedly correct but, at a closer examination, it shows that the Brazilian external situation is actually much worse than what may be gathered by looking at the size of the current-account deficit. For assuming that all imports are financed (and refinanced if need be) automatically, exports need to be used only to pay for the net income outflows corresponding to the loans to, and foreign investments made in, the country. Thus the crucial condition for the viability of the "bicycle" is that exports cannot grow persistently lower than those payments. But the fact is that, in the Brazilian case, those payments are growing much faster than exports.

There is no escape from the unpleasant arithmetic of compound interest that shows that any trade deficit, no matter what its size, will not translate into a growing current-account deficit if the rate of growth of exports is higher than the rate of interest on the country's foreign debt. On the other hand, if the rate of interest on foreign debt is higher than the rate of growth of exports a constant trade deficit, no matter how small, will tend to entail an ever-growing current-account deficit. Unfortunately for the bicycle riders, Brazil seems to be stuck in the latter, unsustainable path: the growth rate of exports in current dollars has been systematically below the dollar rate of interest that the country pays on its foreign debt.[19]

The external fragility of Brazil's situation in fact seems to be considerably worse than shown by the analysis of the familiar debt-stability condition, because that condition probably underestimates considerably the interest payments that are actually being made by the country to its foreign investors.

In fact a peculiar feature common to both the phase of accumulation of reserves and balance-of-payments surplus of the early nineties and the phase of current-account deficits after the Real plan is that a goodly part of the capital flows entering Brazil has been attracted by the high domestic interest rates on the public debt, which – when converted into dollars by market exchange rates – have been considerably higher than the dollar interest rate that Brazil pays on its foreign debt. It is true that from those higher rates one has to take out taxes and the intermediation fees of the local investment banks – whose cushy job it is to arbitrage between the Brazilian government and the foreign institutional investors and expatriate Brazilian capital holders that provide the bulk of resources. But even after those items are discounted, the actual payments of interest being made abroad reveal a rate that is probably closer to the domestic rate of interest than to international rates[20]. If that is the case, the relevant stability condition would change to something like "the rate of growth of dollar exports cannot be much lower than the domestic rate of interest converted into dollars at the current exchange rate".

All this stems from what is, in actual fact, an internationalization of domestic public debt, which is a distinctive characteristic of the current macroeconomic strategy of the Brazilian government.

---

[18] Mr. G. Franco, for years the leading figure in the Brazilian Central Bank, had argued in a 1995 paper that current-account deficits beyond 2% of GDP were "dangerous". Apparently he quickly changed his mind when the country started moving towards deficits that ended up being more than twice as big as that, and began to argue in the in the Brazilian press that "size does not matter" because of the "bicycle" effect.

[19] That can be seen even in the very conservative estimates made by Giambiagi (1997).

[20] Which in the Brazilian national accounts would probably appear as payments for "other factor services" rather than payments of interest on foreign debt proper (the former coincidentaly being one of the fastest growing deficit items the Brazilian external accounts).

It is true that this way of attracting capital would at least have the advantage of transferring the exchange risk to the foreign investors. But what we are seing now, after the recent turmoil in Asia, is that foreign investors only invest in Real-denominated bonds when they perceive the risk of devaluation to be low. Recently there has been a switch to dollar denominated bonds, which have lower rates but are indexed to the dollar.

For all the reasons stated above, i.e., sluggish export performance, high marginal propensity to import, and the large and growing payments of profits, dividends and interest, the Brazilian economy faces increasing current-account deficits with low and even decreasing growth rates.

11 Tequila or Tortilla, or Perhaps Both?

The fact that these growing current-account deficits are financed in a context in which foreign capital can easily and quickly leave the country seems to point to a situation that could easily and quickly lead to a foreign-exchange crisis not dissimilar to what happened to Mexico in 1994.

That is the conclusion that a number of critical commentators of the Real Plan (including myself) reached as soon as the monetary reform was introduced (six months before the Mexican crisis). However, in spite of the initial turbulence in all emerging markets and of the difficult adjustment Mexico had to go through, surprisingly more than two years later no open crisis taken place in Brazil – and even Mexico is back to the international capital markets.

In late 1997 a new wave of international financial turbulence, stemming from the exchange crisis in East Asia, provoked some panic reaction from Brazilian policy-makers but still an open currency crisis was avoided.Of course, the cost of keeping the currency overvalued in terms of increased domestic interest rates and further fiscal and monetary measures to contain the balance of trade, leading to ever-slower growth, is rather high. But still the interesting thing is that this exchange-rate regime could last for so long.

The viability of this type of macroeconomic strategy, given the structural fragility of Brazil's external position, seems to require a continuance of massive capital inflows – perhaps through further privatizations and, more importantly, the internationalization of the banking sector – even if the country grows at very low rates.

This being the case, although an exchange-rate collapse can be avoided, the structural consequences in terms of the dismantling of the local technological and industrial base, unemployment, regional and social inequalities and the giving up of any pretence of implementing a project of national development, will be rather far-reaching.

Just to end on a very optimistic note, let us imagine that in spite of the turbulence generated by the 1997 Asian crisis, capital flows to Brazil continue to allow the economy to proceed along the path taken after 94 at least for a few more years. Then we would not be headed towrads a Tequila (exchange-rate crisis) situation. In this optimistic scenario, our predicament may be more akin to having eaten too many badly-cooked, hotly-spiced Tortillas. It may not hit you as suddenly and spectacularly as a Tequila shot – but as any consumer of cheap Tex-Mex food knows, it may take an awful lot of time to digest.

References

E. AMADEO. The Knife-Edge of Exchange Rate Based Stabilization : Impact on Growth, Employment and Wages, *Unctad Review*, 1996

R. BIELSCHOWSKY, G. STUMPO A Internacionalização da indústria Brasileira : números e reflexões depois de alguns anos de abertura. In: R. BAUMANN (Ed.) *O Brasil e a Economia Global*, Rio de Janeiro : Sobeet-Campus, 1996

CORREIA P., Moreira M. Abertura Comercial e Indústria : o que se pode esperar e o que se vem obtendo, *Texto para Discussão BNDES*, n. 49, 1996

M. PIVETTI *An Essay on Money and Distribution*, London : Macmillan, 1991

F. SERRANO. Review of Pivetti's Essay on Money and Distribution. *Contributions to Political Economy*, 1993

F. GIAMBIAGI. A Condição de Estabilidade da Relação Passivo Líquido Ampliado/PIB : Cálculo do Requisito do Aumento de Exportações do Brasil, *Revista do BNDES*, n 8, Dez. 1997

A. TEIXEIRA. *O Ajuste Impossível*, Rio de Janeiro : Ed. da UFRJ, 1994

G. FRANCO. *Inserção Externa e Desenvolvimento*, [S.l.] : BACEN, 1995. Mimeogr.

LUIZ C. Mendonca de BARROS. A Moeda Indexada : uma Experiencia Brasileira, *Economia e Sociedade*, Campinas, n. 2 , ago. 1993, Campinas

F. SERRANO. Observacoes Sobre a Demanda por Moeda no Brasil, *Boletim de Conjuntura*, IEI-UFRJ, abr. 1994

A. SINGH Growing Independently of the World Economy : Asian Economic Development since 1980, *UNCTAD Review*, 1994 (*)

M.TAVARES. As Politicas de Ajuste no Brasil : Os Limites da Resistencia, *Texto para Discussão IESP*, n. 9, ago. 1993 (*)

J. CARDOSO DE MELLO. Consequencias do Neoliberalismo, *Economia & Sociedade*, n. 1, 1992

R. FRENCH-DAVIS, D. Titelman, A. Uthoff International Competitiveness and the Macroeconomics of Capital Account Opening, *UNCTAD Review*, 1994(*)

P. CRUZ. Notas sobre o financiamento de longo prazo da economia brasileira, *Economia & Sociedade*, v. 3, 1994

P. CRUZ. Endividamento Externo e Transferencia de Recursos Reais ao Exterior: Os Setores Publico e Privado na Crise dos Anos Oitenta, *Nova Economia*, v. 5, n. 1, ago. 1995 (*)

J. FERRAZ, D. Kupfer, L. Haguenauer *Made in Brazil : Desafios Competitivos para a Indústria*, Rio de Janeiro : Campus, 1996

L. COUTINHO, J. FERRAZ. *Estudo da Competitividade da Indústria Brasileira*, Campinas : Papirus, 1994.

M TAVARES Auge, Declínio do Processo de Sustituição de Importações no Brasil, In: M. TAVARES. *Da Substituição de Importações ao Capitalismo Financeiro*, Rio de Janeiro : Zahar, 1975.

FRANKLIN Serrano, Inflação Inercial e Desindexacao Neutra. *Texto para Discussão IEI-UFRJ* n. 106, 1986

Maria da Conceicao TAVARES, Inflação : Os Limites do Liberalismo, *Ciencia Hoje*, V. 10, n. 55, Jul. 1989

Maria da Conceição TAVARES, As Politicas de Ajuste no Brasil : Os Limites da Resistencia, *Texto para discussao, n. 9 IESP-FUNDAP* , Sao Paulo, n .9, 1993