

Circumstances and institutions:
Notes on monetary policy in Brazil in the last 14 years
Gustavo H. B. Franco

Looking back to the record of monetary policy in Brazil in the recent past it occurred to me that Brazilian policy makers are entering into the seventh year of the Real Plan, an effort which ended a hyperinflation process that, according to Michael Bruno's criteria^[1], lasted a little more than seven years. It would be interesting, therefore, to go back in time for exact fourteen years in order to observe as much time under hyperinflation as to its extermination.

In light of my experience at the Central Bank of Brazil in the second half of that period, two elements seem to stand as key to explain monetary policy in Brazil during these turbulent fourteen years: circumstances and institutions. This may sound somewhat of platitude since, on the one hand, after all, "money is not a mechanism; it is a human institution, one of the most remarkable human institutions", according to John Hicks (1967, p. 59), so that all questions of monetary policy could be seen ultimately as institutional in nature. On the other, is it not public policy, and monetary policy more specifically, mostly an effort to respond to circumstances?

But the problem with the Brazilian experience during these years was that actions and policies of the Central Bank seemed either overwhelmed by circumstances or severely constrained by existing institutions. So much that policy choices always appeared exceedingly limited, or even minor, in view of available alternatives. Emergencies seemed the rule rather than the exception on the one hand and also, on the other, it was common to see second or third best, or even outright bad policies being "traded for" institutional advances, or rules to preclude such policies in the future. Building institutions in order to be able to practice monetary policy along conventional lines was always a key consideration throughout these years.

Indeed, fourteen years ago monetary policy in Brazil could hardly deserve this designation. Brazil was entering hyperinflation as the Cruzado Plan, the first of the "heterodox" stabilization plans of the late 1980s, was bound to disaster. To be precise, and again using Bruno's definition, hyperinflation started in the Summer of 1987 and finished in July 1994, seven years plus a couple of months. The record of monetary policy, or non-policy, during these years is very interesting, at least insofar we learn how policies and practices are molded by a storm they are not meant to interfere. In addition, as commonly argued by those researching hyperinflations, there is much to learn from extreme cases about the nature of monetary phenomena.

It is never too much to repeat how serious a pathology a hyperinflation is, and how near this traumatic experience still is to Brazilians. There have been a little more than a dozen cases in History of such a phenomenon, almost always in the presence of wars, revolutions and the like. Invariably fiscal conditions are disastrous and political paralysis adds insult to injury. A detailed record of the Brazilian hyperinflation evolution is not to be presented here, where our attention is focused on the key aspects of monetary policy.

It is very important to keep in mind that world-class inflation is novel situation that many Brazilian adults have not experienced in their lifetime. Histories of how amazingly the economy worked while inflation was running at 40% per month are no distant memories of old men barely recollecting memories of the 1920s. We are yet to celebrate the seventh anniversary of the Real, the new currency that was introduced partly in February, and fully in July 1994, to terminate with the disease. And many of the practices, habits and institutions, as well as wounds and scars of hyperinflation are very much alive. In fact, one can aptly describe the seven years starting in July 1994 as dedicated to the institutional reconstruction of the currency, that is, the rebuilding of an institutional framework within which monetary policy in the conventional sense is increasingly possible. It is also important to stress that this process is far from being completed.

As we recall the key elements of monetary policy in force in 1986, right before we entered the storm, we may indeed feel it was a long time ago, as if conceptual distance was time past:

- State owned *Banco do Brasil*, the largest commercial bank in the country, could lend with no limitations, to government or to the private sector, and credit itself at the Central Bank on that same amount with a simple accounting entry in a device known as “*conta movimento*”; the Central Bank worked, therefore, as a discount window for *Banco do Brasil*.
- A “parallel” budget was drafted by a public body called “*Conselho Monetário Nacional*” (known by the acronym CMN), to which the Central Bank was subordinated, in which “revenues” were ultimately the issuance of money, the reserve requirements captured from private banks and “spending” was composed of several credit programs conducted by the public banks, federal and state, and even directly by ministries. This “budget” was known as the “Monetary Budget” (“*orçamento monetário*”) and bore no relationship with the fiscal budget approved by the Congress. It was like an autonomous “budget” to allocate seigniorage revenues;
- CMN was the lawful monetary authority of the country, responsible for conception and guidelines of monetary policy. It was a council formed by several ministers (Finance, Planning, Labor, Social Security, Industry and Commerce), the Central Bank’s governor, the Presidents of the five federal banks and five representatives of the private sector, including the president of the National Federation of Banks (*Febraban*) and a nominee by the unions.
- “Financial repression” was increasingly strong, understood as “taxation” (direct and disguised) of the banking system in order to capture part of the inflation tax banks were earning by the non-remuneration of demand deposits. Reserve requirements on demand deposits were incredibly high (never below 80%), and also imposed on savings deposits and even mutual funds. Savings deposits were, in addition, “directed” to compulsory housing lending at rates below market. Several rounds measures creating mismatching between asset and liability indexation in savings deposits and housing loans worked like “forced loans” to banks to be recognized as Treasury’s obligations, and securitized, only years later.

There were several reasons, not to be detailed here, to explain why the fiscal situation in Brazil experienced a profound deterioration with the initiation of the first civilian government in two decades^[2]. The seeds of hyperinflation were sowed and the

process exploded as the price freeze implemented during the Cruzado Plan collapsed late in 1986. It appears as a paradox that it was precisely in this same year, as part of the attempt to save the otherwise doomed Cruzado Plan, that the accounting device known as “*conta movimento*” and also the “*orçamento monetário*” were both extinct.

Interestingly, what was intended to be a progress turned out to produce the opposite effect: public banks, federal and state, all assumed a yet unknown degree of autonomy, most notably state banks, all practicing very aggressive “development finance” only to come to the Central Bank’s window individually when liquidity problems appeared. Rediscount loans were granted and afterwards consolidated, or transferred to states or to the federal government, or “capitalized”. Mechanisms to finance states, the Federal Treasury and development programs only became decentralized and less transparent.

It is easy to miss the important point that the “*conta movimento*” and the “*orçamento monetário*” were mechanisms through which the Federal Government concentrated all power to control the use of seigniorage. Such centralization of responsibilities was typical of the years of military rule that ended in 1985. One can interpret the abolition of these mechanisms as part of a movement that “democratized” the use of seigniorage especially among states and also by the federal development banks. The most diverse political constituencies (state banks, regionally focused federal banks, sectoral funds fed by budgetary allocations and *Banco do Brasil* loans and under the influence of private sector federations, etc.) wanted to exercise “money-issuing” capabilities without the discipline imposed by the CMN. The result was that the deterioration of public finances seemed unprecedented as the discretionary control exercised by the Finance Ministry was altogether destroyed. In this connection, it is also interesting that 1986 was the year of the creation of the Secretary of the Treasury at the Finance Ministry. No doubt an advance as far as institutions are concerned, but for the first five years or so, this secretary had no structure and staff. Institutions are crucial but they need people to make them live.

Two years later in 1988, a new Constitution was promulgated and its spirit was to reconstruct Democracy by advancing the “fragmentation” of the central government, or the “decentralization” of the state. In many ways the process is similar to the disaggregation of the Soviet Empire: the strong central power, the Federal Government, lost control over tax revenues (through sharing mechanisms) and spending (with earmarking of federal money to regional and sectoral uses) and became the weak part of a diverse federation. In addition, the resentment against the military produced an urge towards “redeeming the social debt” that amplified very considerably social spending, especially social security and health benefits.

The most common descriptions of the fiscal consequences of the 1988 Constitution were “disaster” or “catastrophe”. Under the new constitutional rules one could easily see a huge mismatch between aspirations, seen as obligations to spend imposed on the state, most notably on the Federal Government, and possibilities, which were limited to the amount of taxes that society would agree to transfer to all levels of government. Again, a revealing paradox was visible: together with all the directives condemning Brazil to fiscal disaster, the 1988 Constitution would introduce the prohibition to the Central Bank to finance the Treasury directly and indirectly in any form. No doubt, the measure should be seen as a progress, yet with two caveats. First, like the extinction of the “*orçamento monetário*”, the new measure would “decentralize” access to

seigniorage at the Central Bank, so that state and federal banks could continue to work as unfunded development banks seeking finance ultimately at the Central Bank.

Second, the Central Bank had a sizeable portfolio of Treasury bonds; when they would fall due, would the Central Bank be prohibited to renew them? Could these bonds be exchanged with others, with the same face value? Lawyers answered yes to both questions, so that, as a result, the new directives' effective result was to create a "quota" of Central Bank's financing of the Treasury, and to the extent that the Treasury could exchange the existing bonds with others with longer tenors and lower rates, and renew them with no restriction.

The latter examples only show that even the most conventional measures towards fiscal discipline, and towards the separation of the Central Bank from the Treasury, could have the opposite effect on public finances and monetary policy at least on the short run. It is interesting to note that there was a considerable amount of pragmatism in this Faustian bargain through which fiscal and monetary laxity in the present was surrendered in exchange for the future austerity or for institutions that would narrow the options for fiscal irresponsibility.

As hyperinflation progressed, new and interesting practices would develop in the field of monetary policy that, in fact, would mark a substantial difference between Brazil and Argentina. During the pre-hyperinflation years one could say that the only target to monetary policy was to finance government. Now there was something else. As Brazil seemed to slide towards the "wrong side" of the inflation tax Laffer curve, higher and higher levels of inflation seemed necessary to finance the budget deficit. The issuance of indexed domestic debt assumed crucial importance to finance what could no longer be done only with the revenues from printing money. A variety of indexed instruments were offered, but maturities shortened to the very minimum, as the rapidly deteriorating fiscal situation offered no confidence to savers on these new bonds. As things turned out, the whole stock of domestic debt was bought and sold every day under repurchase ("repo") agreements by the Central Bank. Technically, the average maturity of the domestic debt was shortened to one single day and the yield was the overnight rate.

In this context, high powered money was shrunk to a meager 0,5% of GDP or less, which, evidently meant that money, or at least this form of "unindexed money" was disappearing while "quasi-money" or "highly liquid indexed debt" reached 20% of GDP or more. Since indexed debt was readily convertible by the Central Bank into the conventional unindexed means of payment, it was not inappropriate to say the "indexed money" replaced the conventional one. Many people sought unusual definitions of money to encompass these liquid instruments, in order to enforce the control of monetary aggregates in the conventional form. None such attempts ever progressed much as for reasons to be explained below, in order to prevent dollarization under the Brazilian hyperinflation environment it was necessary to fix interest rates.

This "system" of monetary policy was one in which the Central Bank would turn whatever portion of existing quasi-money, as desired by the public, into conventional money in the morning, and revert the operation in the evening so that everyone could rightly use unindexed means of payments to complete transactions during the day, but sleep with their financial wealth protected from inflation. This regime was once aptly described as a "domestic currency substitution regime"^[3]. Its base was the abundance of

“quasi money” or debt instruments subject to daily indexation by the overnight interest rate, which was, ultimately, the carrying cost of all the “repo” operations done with all sorts of bonds in circulation.

The interest rate was fixed in a simple form: since these were times in which a crawling peg was practiced to devalue the exchange rate, and interest rate parity was to be obeyed, the overnight rate was set equal to the international (Fed funds) overnight rates, plus the devaluation (or the inflation rates differential) plus “a sound margin” to account for “country risk”. “Monetary policy” was, therefore, (i) providing fluid substitutability between conventional (unindexed) money and indexed bonds (quasi money) and (ii) generously rewarding the holders of the indexed bonds for not dollarizing their wealth fixing interest rates according to the formula described above.

In every other hyperinflation case, domestic financial wealth sought foreign currencies for shelter, and the economy was said to “dollarize”. Inflations of this sort seem driven by the exchange rate: as wealth holders fly towards the Dollar, the exchange rate is pressured down, which produces inflation on the one hand, and the current account surplus necessary to “transfer out” the emigration of the national financial wealth on the other. Here is where the Brazilian hyperinflation differed from the Argentine, and most of the others. It is typical of the latter, the see “dollarization” accompanied by current account surpluses of 3% of GDP or more, so that the difference between M4 and M1 is “transferred” into dollars in a few years. In seven years, 20% of GDP or more could have migrated into dollar denominated instruments; residents then have their financial wealth off shore, and may and usually repatriate portions of it as “foreign investment”. The government could tap these resources as if it was contracting “external debt”, as it is the case in Argentina. In fact, in “dollarized” economies the distinction between domestic and foreign debt loses its meaning.

To summarize, monetary policy during the hyperinflation years was guided by two crucial considerations: (i) to finance government by the most efficient combination of money and indexed debt issuance, and by maintaining open a “window” for state and development banks, for sectoral funds in the regular budget and for special programs; (ii) to prevent dollarization by means of the abundance of well remunerated indexed instruments to outcompete foreign currencies as defenses from inflation mostly by virtue of the easy substitutability between “regular” and “indexed” money. No doubt these policies were successful to prevent dollarization, but as it is common to hear from the Argentine, the costs of the “domestic” debt under the “domestic currency substitution” regime were far superior to the costs of financing government tapping resources from off-shore pools of previously exported savings of nationals. The comparison is interesting but needs much more elaboration: there are costs and benefits in preserving a national currency, both going beyond computations of seigniorage.

It is also interesting to note that during these years (1987-93) four “heterodox” stabilization plans were attempted: *Plano Bresser*, *Plano Verão*, *Plano Collor 1* and *Plano Collor 2*. All involved price freezes, and some involving debt defaults (on three occasions according to Standard & Poors), “*tablitas*” and the introduction of a new currency. All these plans failed, despite being always capable of obtaining a temporary reduction of inflation at the cost of producing sometimes huge dislocations and losses to be claimed and recognized only years later. All these situations produced shocks in the demand for money in addition to departures from the “domestic currency

substitution regime”, that turned out to be only temporary, but produced impacts (liabilities and damages) in the years to come.

Progresses in the field of fiscal policies, and more specifically on institutions and practices that could isolate monetary policy from fiscal considerations, were mostly conceptual, even though the elements for a better, if not a sound, monetary policy were slowly built. With the right institutional constraints in place, or at least partially there, the feasibility of fiscal and monetary policy in line with stabilization would become a matter of enforceability, or of political will, and of opportunity.

But despite the progresses in previous years, in 1993, when preparations for the Real Plan started, one knew that the reconstruction of a national currency would require huge new steps towards the reinvention of institutions, practices and mechanisms of monetary policy. Some bases were built but there should be no illusions that money was to be reconstructed from scratch.

The policy mix responsible for defeating hyperinflation, to which monetary policy was a key component, was composed of several elements:

- A monetary reform consisting of the introduction of an “interim money of account” with the purpose of accomplishing the “deindexation” or the “nominalization” of all prices, wages and contracts and later to be issued” as a full currency^[4];
- Enforce to public banks a disposition forgotten in a 1986 “White Collar Crime” Act, through which banks were forbidden to lend to their controlling partners. That was to apply to state banks and to federal banks as of 1993. Later, federal banks got a legal opinion from the Brazilian equivalent of the Attorney General that was approved by the President (then it becomes binding like a decree) waiving federal banks from the prohibition. At this point, however, with the right appointments to key positions in these banks, they were put under strict control of the Finance Ministry;
- Very high nominal interest rates combined by flexible exchange rates and sound, or at least much better fiscal policies, produced very powerful “anchors” to stabilization even though little change was engineered in the mechanics of monetary policy at first;
- Take political control of the CMN by reducing its membership to three, maintaining the Finance Minister as president and the Central Bank governor as secretary, the third member being the Planning Minister;
- Establish ceilings on credit granted by private banks to public entities of any sort (known as “*contingenciamento*”);
- Pass Constitutional Amendment to weaken earmarking of revenues thus strengthening the Secretary of the Treasury’s ability to undertake “fiscal repression”, or not to execute the budget;

This policy mix was very powerful to secure a good start to the Real Plan. Annual inflation rates at the last month of hyperinflation – June 1994 – were at 5,500% approximately. In 1995, the first full year under the new currency, inflation was slightly over 20% for the year on consumer prices and around 7% for wholesale prices, and GDP grew 4,2% after 5.9% in 1994.

It is crucial to note that the “hard budget constraint” resulted from measures taken “below the line”, that is, introducing restrictions to financing of deficits, either through the increased ability of the Treasury to deny money to budget allocations, or through the closing of windows in public and private banks. For several reasons not to be detailed here it was impossible to enforce fiscal discipline through budgetary instruments; in fact the budget was and to a certain extent still is a major source of *lack of discipline*. In consequence, the battle to be fought was on the financing area, and mostly in connection with banks.

One knows that banks would face turbulent times with the end of hyperinflation, as they would lose their ability to benefit from the inflation tax. Revenues from demand deposits and also from what was called “the float” and “resources in transit” represented sizeable proportions (more than half sometimes) of total bank revenues, and such revenues would disappear entirely. This, however, was only the surface, or what could be seen at a distance. Soon it would be clear that two different banking crises were latent. The first had to do with public banks, almost all of them, federal and state, with serious problems as their capital had been seriously eroded through the years in disguised fiscal spending. The second, related to private banks, comprised the above mentioned need to replace inflation as source of revenue, but also a recasting of the several forms of “taxation” created over the years to capture the excess profits created by inflation, including reserve requirements and “forced loans”. Besides, for a banking system that was mostly geared to finance government, the degree of compliance with Basle Guidelines was almost zero even under the assumption that public banks should not be considered as “true banks”.

In summary, the fiscal crisis that was part and parcel of hyperinflation was turned into a banking crisis, in the context of which the introduction of banking supervision and capital requirements was at the very least a large cultural shock. No question, monetary policy during these crucial years had to be conducted with a keen eye on their impact on a very fragile system. Interest rates should be kept high, but the banking system should be spared from the damages caused by “wealth effects”.

The years of 1995 and 1996 were spent on a state of near emergency, as the Central Bank was trying to prevent bank failures to develop into an open crisis. After the July 1994, 158 financial institutions suffered intervention or liquidation, 52 of which were banks and 69 were broker-dealers.

Two large government sponsored programs to prevent a crisis were created:

- The PROER program was designed to finance the sale of the “good part” of private banks under acute distress (negative net worth) provided that the buyer would take all liabilities with the public and would buy an equal amount of assets and liabilities. The loans were made to the “bad part”, or the “bad bank” that would buy heavily discounted government securities that would secure a zero net worth when taken at nominal value. Approximately US\$ 10 billion would be disbursed under the program, and some part of the loans, possibly a substantial part, will most likely return.
- The PROES program was designed to privatize, capitalize or liquidate state banks. Its concept was based on financing from the Federal Government for states to acquire “bad assets” and capitalize their banks provided that they sell or liquidate them. In case states want to retain the bank, half of the amount

necessary was to be provided by the state. To date seven such banks were privatized (including the largest ones from the states of São Paulo, Rio de Janeiro, Minas Gerais, and Paraná), seven were liquidated, and seven were taken over by the federal government to be sold. Only five subsist independently. The total amount disbursed may reach US\$ 50 billion.

Also as chapters of the effort to prevent a banking crisis one should mention that the Federal Government capitalized *Banco do Brasil* in approximately US\$ 7 billion. *Caixa Econômica Federal*, the federal mortgage bank, still needs similar treatment and *Banco do Nordeste* and *Banco da Amazônia* will be most likely transformed into development agencies after the recognition and assumption of their losses by the Treasury. It is also noteworthy that during these crucial years the relaxation in the restrictions to foreign direct investment into the banking industry was crucial to secure transactions under the PROER and PROES programs could be completed. The share of assets owned by foreign banks rose to approximately 25% in 1999 from less than 10% in 1993.

While the banking crisis was being averted progresses in the field of monetary policy were considerable. One of the most important advances was the creation of a Monetary Policy Committee (COPOM) within the Central Bank, in June 1996 following the example of countless other central banks around the world. Even though independence was simply not secured in law, the creation of such a popular institution with its accompanying rituals of pre-scheduled meetings and publication of minutes was key to protect decisions on the interest rate from political influence.

Also of crucial importance to monetary policy was the fact that the Central Bank would discontinue the practice of granting repurchase of all domestic debt in circulation. In addition, the Central Bank and the Treasury would jointly reduce the share of domestic debt indexed by the overnight rate, i. e. “zero duration” debt and increase the share of fixed interest bonds. In 1997, just before the Asian Crisis, the share of overnight indexed debt in circulation had been reduced to less than 15% and the “repo” arrangements were altogether eliminated. No question, the power of monetary policy was substantially increased as wealth effects would start to be relevant or that the financial system would no longer be fully immunized from variations in interest rates.

Interest rates had been falling gradually since April 1995, but as the Asian Crisis brought the need of a tightening to defend the currency, the issue of the exchange rate regime, and in particular its implications to the interest rate, became more and more contentious. It turned out that exchange rate policy was intimately connected to the success of the stabilization plan. In the first six months of the Real Plan – in the second semester of 1994 – the exchange rate was under a floating rates regime, which was, as mentioned, extremely helpful to stabilization. But in view of the buoyant external situation, the still large fiscal deficit (which established a “crowding out” situation precluding interest rates from falling much without doing severe damage to the always delicate rolling over of domestic debt) and the absolute priority given to stabilization, the exchange rate regime moved towards a “crawling band system”. Why?

In the early phase of the Real, the crucial problem faced by the Central Bank was a capital account bonanza that was taking place on top of a balanced current account thanks to the undervalued currency left as a legacy of hyperinflation. The choice of a

float under capital mobility would leave room for monetary policy autonomy except for the fact that the overly large fiscal deficit would force interest rates up, which would attract far too much capital, on top of already buoyant conditions, and quickly appreciate the exchange rate. These circumstances were not entirely inconvenient, at least for a while, as the exchange rate appreciation would reduce the undervaluation, thus moving towards recreating normalcy as regards the current account and would greatly help reducing inflation. Yet, the continuation of a large budget deficit would result in more and more appreciation, which could not go on much longer. The natural reactions were, at first, to intervene in the foreign exchange market in order to arrest the appreciation, to sterilize the accumulation of reserves and to introduce selective restrictions to capital inflows^[5]. The latter in particular faced criticism on the part of the IMF, for instance, even though influential studies from research associates of the IMF eventually resulted in such restrictions gaining respectability as instruments to deal with capital surges^[6].

In this context, with the mitigation of capital mobility, however imperfect, and with the introduction of a “target zone system” to intervene in the exchange rate, the Central Bank sought to prevent further appreciation of the exchange rate area, and even accomplish some depreciation, while a tough stance as regards monetary policy was maintained. The mix was far from the ideal, but the continued failure to address the budget deficit, left no alternative; it was a matter of controlling the damage done by the lack of a proper fiscal policy and the continuation of the “crowding out” or “fiscal dominance” situation.

After the Russian crisis one could safely argue that these conditions had changed: the external situation had changed for the worse, the fiscal situation for the better, especially after the agreement with the Fund, and deindexation had progressed to such an extent that one could be less concerned with the inflationary repercussions of a float that was likely to produce a sizeable depreciation. These new circumstances would seem to point towards coming back to a float, and the Central Bank was effectively trying to move to this direction, yet on a gradual fashion. Exiting regimes with rigidities is no simple matter especially under strained conditions^[7]. Brazil had agreed with IMF in the December 1998 that the gradual flexibilization was to continue. It was unfortunate that the Central Bank’s strategy was interrupted by the President’s decision to move more aggressively towards lower interest rates in his second term, which would be made possible, as argued, with a new exchange rate system: the “endogenous diagonal band” as it was called^[8].

The first quarter of 1999 was a time of great turmoil. The new exchange rate policy was a failure and the Central Bank was forced into an uncontrolled float. Interest rates had to be raised over 40% for the third time in less than two years, the agreement with the IMF was reinforced and the situation fell under control by mid-year. The exchange rate moved to R\$ 2,20 in February 1999 from R\$1,20 to the dollar in December 1998 only to fall to R\$ 1,65 in July.

Monetary policy was crucial to tame the dislocations produced by the devaluation. But apart from simply increasing interest rates to 45%, as normalcy got re-established, a new system of inflation targets was introduced. As of mid 2000 one could describe the crucial aspects of monetary policy as follows:

- “Fiscal dominance” would seem to be less important than ever before, as the consolidated fiscal deficit finally reached the level of 3,0% of GDP. Debt overhang, however, would still constrain the Central Bank’s ability to reduce interest rates. The share of domestic debt in “zero duration” debt was kept at about half, with great market resistance to move to pre-fixed interest rates.
- Banks are now almost entirely in line with Basle discipline, except perhaps for the federal banks and the state banks in the privatization pipeline. Compliance is increasing and the system is its best shape ever, though still plagued by fiscal repression though in a much smaller scale. Reserve requirements are about half today, at around 3% of GDP approximately.
- A presidential decree established that the CMN would adopt inflation targets system to be enforced by the Central Bank through the use of the instruments it would see fit. An “inflation report” would be offered by the Central Bank, along with the usual ritual of procedures and justifications typical of inflation targets’ regimes.
- Exchange rates were under a float, though the Central Bank intervened occasionally in a direct manner and more often indirectly through sales of domestic debt indexed by the exchange rate.

A long way, and many obstacles, had to be overcome for Brazil to reach the situation of adopting what appears to be a simple and widely adopted system for monetary policy. No question we had a remarkable progress here, but the institutional fragility of the existing situation raises concerns. Basically, Central Bank independence does not exist in Brazil yet. In the laws creating the Real, an imposition of then President Itamar Franco had to be accepted: that the CMN would be “subject to directives from the President”. Since CMN is the monetary authority of the country, nothing really prevents a new president from revoking the inflation targets decree and from establishing new “development oriented” missions to the Central Bank. Since Central Bank board members do not have fixed terms in office, all can be replaceable *ad nutum* by the President, and also, since the privatization of public banks has been slow, many will survive at the end of the Cardoso presidency in 2002 ready to be re-launched in the old fashioned way.

These risks are no panacea. As a new presidential election looms large, concerns about a backlash in the field of monetary policy are raising. Institutional protection should be given to practices that now are only based on Cardoso’s will and on the agreement with the IMF. The way to go, however, is quite cumbersome. As a matter of fact, a constitutional amendment would have to be approved in order to allow the regulation of Central Bank independence, and to supply the much needed institutional bases to currency stability. In addition, a consolidation of monetary and banking laws would be necessary to cut the ties between the President and the CMN and establish to the latter the mission to defend the currency.

Times are different now as regards Cardoso’s approval rates and capacity to control the congressional agenda. Central Bank independence is not an easy topic, and opposition parties are wary of the issue being raised exactly as they have increased their chances for 2002. This is not to say that a left wing government would revert all developments described above and restore inflationist policies. But it remains to be seen if the opposition has absorbed notions of fiscal responsibility and sound money so painfully learned in the last fourteen years.

References

- Bruno, Michael, *Crisis, Stabilization, and Economic Reform: Therapy by Consensus*, Oxford, Clarendon, 1993.
- Cagan, Phillip, "Hyperinflation," in John Eatwell, Murray Milgate, and Peter Newman, eds., *The New Palgrave: A Dictionary of Economics*, London, Macmillan, 1987.
- Calvo, Guillermo A., Leonardo Leiderman, and Carmen M. Reinhart, "Capital Inflows and Real Exchange Rate Appreciation in Latin America," *International Monetary Fund Staff Papers*, 40 (March 1993).
- Carneiro, Dionisio Dias, and Marcio Garcia, "Capital Flows and Monetary Control under a Domestic Currency Substitution Regime: the recent Brazilian experience" in Roberto Steiner, ed. *Afluencia de Capitales y Estabilización en América Latina*, Bogota, Fedesarollo, 1994.
- Corbo, Vittorio, and Leonardo Hernández, "Macroeconomic Adjustment to Capital Inflows: Lessons from Recent Latin American and East Asian Experience," *World Bank Research Observer*, 11 (February 1996).
- Eichengreen, Barry, and Albert Fishlow, "Contending with Capital Flows: What Is Different about the 1990s?" in Miles Kahler, ed., *Capital Flows and Financial Crises*, New York, Council of Foreign Relations, Cornell University Press, 1998.
- Franco, Gustavo H.B., "The Real Plan and the Exchange Rate" *Essays in International Finance* 217, International Finance Section, Princeton University (April, 2000).
- _____, *O Plano Real e Outros Ensaios*, Rio de Janeiro, Francisco Alves, 1995.
- Hicks, John, *Critical Essays in Monetary Theory* Oxford, Clarendon Press, 1967.
- International Monetary Fund (IMF), "Exit Strategies: Policy Options for Countries Seeking Greater Exchange Rate Flexibility," Washington, D.C., International Monetary Fund, Research Department, in consultation with the Monetary and Exchange Affairs Department and the Policy Development and Review Department, December 1997.

^[1] The classical hyperinflation definition is due to Philip Cagan's 1956 seminal contribution to Milton Friedman's *Studies in the Quantitative Theory of Money*. According to Cagan's original view a hyperinflation starts when inflation reaches 50% per month, and finishes when it falls below this level for more than a year. Later, in his "hyperinflation" entry in the *Palgrave Dictionary*, he favored a "qualitative" definition, with no threshold. Bruno (1993, p. 272) argued that 20% per month would be a

better threshold as, on the one hand, 20% would be little different from 50% as regards the qualitative aspects of high inflation, and on the other, 20% would better signal the passage to hyperinflation from “chronic” inflation.

^[2] See Franco (1995) for a record of the fiscal crisis in institutional details.

^[3] See Carneiro & Garcia (1994).

^[4] For a detailed description of economic and legal aspects of the 1994 monetary reform see Franco (1995).

^[5] For discussions on how to deal with a capital account bonanza see Corbo & Hernandez (1996) and Eichengreen & Fishlow (1998)

^[6] See, for instance, Calvo *et al.* (1993).

^[7] See IMF (1997) for a comprehensive discussion.

^[8] See Franco (2000) for a description and a discussion of exchange rate policies under the Real Plan, and its abrupt modification in January 1999.