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Capital inflows into Brazil, 1992-98: the nature and effects of controls and restrictions

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TEXTO PARA DISCUSSÃO

No. 517

Capital inflows into Brazil, 1992-98: the nature and effects of controls and restrictions

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Capital inflows into Brazil, 1992-98: the nature and effects of controls and restrictions

(comments on B. Carvalho & M. Garcia "Ineffective controls on capital inflows under sophisticated financial markets: Brazil in the nineties")

Gustavo H. B. Franco[1]
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The effectiveness of capital and foreign exchange controls in general, and their relevance for emerging markets in particular, has always been object of a high temperature debate. Yet, the more specific issue of the usage of *ex ante* selective restrictions on capital *inflows* has been served a more benign treatment, in view of circumstances such as capital surges, destabilizing hedge fund's behavior, banking and financial crises and the regulatory innovations introduced by the worldwide adoption of the Basle Accord. While old style foreign exchange controls are being phased out around the world, adversaries of globalization increasingly align capital controls - among which an international "Tobin Tax" - as one crucial mechanism to sand the wheels of international finance. Mainstream economists and central bankers do not generally take proposals along these lines very seriously, most usually dismissing capital controls across the board with the same arguments normally thrown at price freezes and other forms of artificial intervention in the working of markets.

It is true, however, that the velocity with which anti-globalization proposals to limit capital mobility are sidelined is not the same at which public policy has advanced in the topic of capital account convertibility as a general proposition, and is in no way proportional to the sympathy of regulators towards hedge funds. In fact, the 1997 defeat of the proposal to advance in this realm in the context of the Articles of Agreement of the IMF can be taken as an eloquent demonstration that there was less certainty in this field than many people thought. Indeed, an indication towards this ambiguity is the

[1] The author wishes to thank José Maria Carvalho, Marcio Garcia and Bernardo Carvalho, as well as the other participants of the IASE Meeting in Rio de Janeiro for many suggestions to this note. Views herein are mine, under the usual caveats.

development of two distinct branches of empirical literature, one, positive, on the association of measures of capital mobility, or convertibility, and economic growth, and other, negative, on the association between capital mobility and currency crises; neither, actually, especially conclusive. Indeed, the successive episodes of instability, sudden stops, banking and currency crises, not to mention the growing concern with money laundering and terrorism's money, have made deregulation in the financial industry, especially when it involves international transactions, a very cautious process. Yet, in one way or the other, the debate on the regulation of foreign exchange transactions, and within which the scrutiny on capital flows, including *inflows*, has been kidnapped into the grand world controversy around globalization where it was torn by ideological misconception and prejudice. While anti-globalization groups intend to save the world with capital controls, mainstream economics seems unprepared to concede *any* role for capital controls, even regulatory limits to inflows, even in times of unambiguous exuberance.

The question to address, in connection with Carvalho & Garcia's (CG) paper, is very much circumscribed to a specific context, namely, whether there is some middle ground between these extremes, when one considers a brief but relevant episode of targeted restrictions to short term capital *inflows* into 1993-98 Brazil, *combined with an aggressive liberalization of outflows*, and during years in which there was little doubt that a "capital surge" was taken place. My personal position at the Central Bank, starting in October, 1993, as Deputy Governor in charge of International Affairs, and directly responsible for the creation and implementation of the regulatory changes in the field of foreign exchange regulation, through 1997, when I was elected Governor, position I held until early 1999, places me at a privileged position to look back at the episode from a first hand practitioner's point of view, though in a somewhat uncomfortable position to judge "ineffectiveness", as argued by CG. The reader should be warned of the presence of bias in the views expressed in what follows, which, I guess, might be a redundant advice in this profession.

Some context is also very much required. In the early 1990s, Brazil was still enforcing old style foreign exchange controls, though with great strides towards liberalization. Foreign exchange shortage seemed to be the rule since the 1950s, and the

notion of *excessive inflows,* bound to deserve *restrictions* rather than incentives, was by all means novel. Indeed, in the early to mid 1990s, these were times in which the concern with "capital surges" and its consequences to exchange rates (and the possible threat of capital account induced "Dutch Disease" phenomenon) led to academic production and also practical experiences with various sorts of impediments to capital inflows, generally of an *ex ante* nature, deemed of a "lesser quality", as in Calvo *et al.* (1993), Corbo & Hernandez (1996), Dooley (1995), Gavin *et al.* (1995) and Schadler *et al.* (1993)[2]. More specifically, the experience of Chile, and also of some Asian countries, received some attention in the late 1980s and early 1990s while excess liquidity had been there, in some cases, for more than a decade, and there are mixed reviews as to the effectiveness of controls, however measured. Yet, as the pendulum of world liquidity retreated from abundance to scarcity a few years later, after the Asian, Russian and other crisis that followed, it was curious to see that capital account convertibility fell into disregard and the idea of restriction to inflows, as a way to reduce the impact of sudden stops, regained some popularity even where it was previously criticized. As put by Fischer (2002, pp. 12-13):

> The IMF has cautiously supported the use of *market-based capital inflow controls*[3], Chilean style. These could be helpful for a country seeking to avoid the difficulties posed for domestic policy by capital inflows. The typical instance occurs when a country is trying to reduce inflation using an exchange rate anchor, and for anti-inflationary purposes needs interest rates higher than those implied by the sum of the foreign interest rate and the expected rate of currency depreciation. A tax on capital inflows can help maintain a wedge between the two interest rates. In addition, by taxing short-term capital inflows more than longer-term inflows, capital inflow controls can also in principle influence the composition of inflows. …In a nutshell: capital controls may be useful provided they are exercised with care; they are likely to be transitional – albeit possibly in use for a long time – and caution is likely to be necessary in removing them.

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[2] The conclusion of Calvo *et al.* (1993, p. 149) may offer a fair summary of the wisdom of these years: "To summarize, there are grounds to support a mix of policy intervention based on the imposition of a tax on short term capital imports, on enhancing the flexibility of exchange rates, and on raising marginal reserve requirements on short term bank deposits. Given the likely fiscal cost, it is hard to make a strong case in favor of sterilized intervention, unless countries exhibit a strong fiscal stance and capital inflows are expected to be short lived. In any case, we believe that none of the above policies will drastically change the behavior of the real exchange rate or interest rate. The choice of appropriate policies, however, could decidedly attenuate the detrimental effects of sudden and substantial future capital outflows." See also Reinhart & Smith (1998).

[3] My italics. Perhaps it would be more appropriate to say that, as to the restrictions to capital inflows in Brazil, the Fund had mixed views and loudly ignored what was going on for quite some time. By 1997, in view of the commitment to the attempt to amend the Articles of Agreement towards capital account convertibility, there was some indication that the Fund did not like the "Brazilian style" restrictions.

Restrictions are never popular in this profession, nevertheless; and looking back at the specific Brazilian 1993-98 experience with *ex ante controls imposed on inflows,* even considering that this was *combined with an aggressive deregulation on the outflow side*, it is unfortunately not so rare, and by no means fair, to see attempts to fit these measures into the stereotype of bureaucrats trying to fight market fundamentals with pointless controls. Capital and foreign exchange controls are easy targets and mainstream profession would always be willing to welcome the claim of "ineffectiveness of controls" in general, and this was the template sought by CG to fit the 1993-98 Brazilian experience in particular. CG's paper sought to supplement their econometric work with an attempt to penetrate the obscure realm of the trading desks, and their interaction with the regulator, to see what *actually* takes place in response to specific policy or regulatory measures. As a matter of fact, however, practical intricacies of Brazilian Forex legislation and institutions, on which this note is primarily focused, can be very confusing to academic researchers with incidental contact with the practitioners' world. It is argued below that CG did not succeed in grasping a workable understanding of the Brazilian Forex legislation[4] and forming a comprehensive picture and a fair judgment of the 1993-99 regulatory measures. More specifically, in what follows, it is argued first that the econometric work is seriously flawed by their key component, an "index of controls" that can hardly be taken as a serious and reliable summary of regulatory trends repeatedly described by CG with adjectives such as "complex" and even "inconsistent". Second, one should not miss that CG produced accounts of "impressionistic" nature, apparently testimonials, of cases of alleged circumvention of controls, from zealously protected "off the records" market sources, with very little by means of concrete numbers, names, dates or any other quantitative indication of the relevance of the theoretical possibilities they raised. Academic standards would require somewhat more than market "hearsay"; questions such as "who?", "when?", "where?", "how?", "how much?" must be answered if these suppositions are to be seriously considered even at the journalistic terrain. In what follows, each of the possibilities will be reviewed as theoretical possibilities and it

[4] One example could be CG claim that the Central Bank holds a "monopoly of foreign exchange transactions", which is very clearly not a fact, and very clearly a misinterpretation of existing legislation, or more specifically a confusion between the power to regulate, which belongs to the public sector, and the right to transact, that is given to everyone that fits regulatory requirements.

will be showed that they did not really exist, that when something similar was documented, it was not as nearly relevant as argued, or, it was such as to deserve so many qualifications that the conclusion would be mostly invalidated.

Let it be clear that, in arguing along these lines, one does *not* intend to make a case for exchange controls or capital controls *in general*, neither a case for the effectiveness of restrictions to inflows as a general proposition, in times of capital surges. The point here is that under the particularly exuberant circumstances lived by Brazil in the mid 1990s, and having in mind a number of institutional features of the relevant market environment and associated regulation and institutions, the regulatory innovations for both inflows and outflows were relevant and effective *given their terms of reference*. Indeed, the relevant metric to assess "effectiveness", as we move further the second best realm, where the practitioners are found, are difficult to define. Yet, more fundamentally, one should definitively not miss the very basic facts when one discusses measures designed to increase the "quality" (tenors, spreads) of capital inflows, and to tax short term capital inflows: how much was actually collected from the tax allegedly nobody paid? What happened to average tenors and spreads? Has the "quality" of inflows increased as envisaged? These are simple questions that go at the very heart of the issues being discussed and are very clearly overlooked in CG's paper. Indeed, a look at these basic figures points to a conclusion opposite of CG's, which, of course, render totally useless even the presumption that undocumented and yet supposedly relevant "circumvention" operations could have been relevant at all.

The rest of this note is divided into three sections: the first draws attention to the new regulatory realities and particularly to the role of controls to banking operations in a world ruled by the Basle Accord within which it is quite important to have in mind the regulator's discretion to interrupt any dealing that would appear unfit, the size of the penalties, and even criminal implications, of evading or "circumventing" the regulator's directives. Section 2 provides specific clarifications on each of the "circumvention" possibilities, and indications on how the Central Bank acted on each situation. Section 3 address the shortcomings of the "index of controls", and the last section present numbers for the collection of taxes on capital inflows of several types and the data on the nature of the mainstream capital inflows into Brazil 1992-98. The amounts collected were the ones

expected in a world in which compliance is the rule, and the figures for inflows reveal a clear trend towards extended maturities in external loans, even with significantly decreasing spreads. The aim of restrictions, or more specifically, of the regulatory policy mix comprising restrictions to short term inflows and the dismantling of old style foreign exchange controls on outflows - the improvement in the "quality" of inflows - was fully accomplished.

1. Controls and compliance after the Basle Accord

As a background to more specific observations as to the alleged eleven ways to "circumvent" controls to inflows one should bear in mind that, notwithstanding undisputed "sophisticated financial markets" creativity, and the fact that capital can move around under countless types of disguises, foreign exchange transactions are basically *banking transactions* and, as such, subject to the scrutiny of regulators on several grounds. As one asks whether capital controls on inflows are *possible at all*, and further, whether *selective* controls on capital inflows are feasible, or even when one argues that such controls are effective *only in the short run*, what is at stake is whether the Central Bank is capable of looking into specific operations of banks and impose discretionary limitations to certain families of transactions. In fact, there is no reason to assume that Forex transactions are any less an object of the regulators surveillance than any other banking transaction. In fact, these days past the Basle Accord, most "controls" directed to banking activities have been internalized through compliance rules that aim at aligning interests of the regulator and its subjects. Internal compliance rules have been created and developed by all banks around the globe with the more specific objective of minimizing problems with the regulator in all its areas of concern, from risk weighted capital, credit scoring, derivatives exposure, to the precise identification of clients and the nature of foreign exchange operations. Indeed, the control of capital inflows can be seen as an activity conducted by banking supervision departments, which are perfectly capable of monitoring individual transactions and exercising the discretionary power to veto specific trades or deals as they are seen as possible violations in existing regulations, whether targeting risk, crime or other endeavors.

It is a fact that banks comply with directives of central banks as a general proposition, even when they restrain their activities and profit possibilities. In many cases banks go beyond Central Bank's directives in order to preempt the regulator's discretion, which often brings some overkill. If, for instance, the Central Bank issues guidelines regarding foreign exchange transactions aiming at preventing money laundering, it is common to see banks *expanding* the directive into their compliance departments in order to prevent any questioning that might be transformed into very costly liabilities or damages to the bank's reputation. It is rare to see anyone questioning the overall compliance, for instance, to Basel rules regarding risk weighted capital, even though the by-passing may be as profitable as the by passing of capital controls. Why then one should assume that banks would be willing to jump at any possibility to by-pass regulatory directives in the subject of foreign exchange operations, in particular some limitations to capital inflows of certain kinds, when banks tend to be "well behaved" in other areas?

Indeed, there is no literature, or bias, in the issue of alleged ineffectiveness of Basel rules, or banking regulation at large, as there is in the case of capital controls. However, as it is common to see in the regulation and in the "crime and punishment" literature, one may say compliance is a game involving a payoff highly dependent on not being caught breaking the law. Yet, in the "repeated game" between banks and their regulators, and in view of the importance of reputation in this business, and also for the normal flow of banking, one hardly see banks challenging aggressively and repeatedly regulatory directives, especially when the negative payoff of a controversy with the regulator may be very costly penalties possibly endangering the continuity of the bank. It is common to see controversies and discrepancies in views, during the course of the banking supervision activity and a wide range of activities, from credit scoring and associated provisioning, to foreign exchange transactions; but the instruction of the regulator is always the final word in practically all matters related to banking supervision. Why this propensity to discipline would not exist when directives are concerning controls to capital inflows? Why this particular subset of regulations is less effective than the rest?

It is true that there were times past, long ago, in which foreign exchange regulation was so unrealistically restrictive that one would see the development of "black

markets" and "curb markets", yet not usually within the banking system, and mostly involving cash transactions. It is hard to imagine that controls to capital inflows would be such as to provoke any major dislocation towards the "black market", or that the "restricted portions" of the capital account of the balance of payments could be channeled into transaction technologies and platforms mostly used by criminals. As a practical matter, it is not possible in Brazil for the "parallel market" to develop outside the financial systems in a dimension large enough to disturb macroeconomic policies. It is well known that a "black market" remains in existence in Brazil, as in any other country in the world, in which transactions are almost exclusively in cash and related to crime[5].

In addition to the argument made above that banks strive to preserve a good working relationship with the regulator when it comes to compliance, it is also important to clarify the exact nature of penalties and problems related to the violations that may be involved in the eleven alleged circumvention operations described by CG. All the cases in which a foreign exchange contract in involved[6], the "circumvention" involves penalties defined in Article 23 of Law 4.131/62, according to which, the misrepresentation, or the furnishing of "false information" (paragraph 2) in foreign exchange operations contracts and "fraudulent misstatement" (or "false identity") (paragraph 3) in such contracts would trigger penalties of up to 100% and up to 300% of the value of the contract respectively. In all cases, penalties are applicable not only to the seller of foreign exchange but *also to the bank (the buyer), sometimes to their individual directors*, and to the broker, if acting on the operation. This is an incredibly powerful directive as it makes the bank a partner to the sponsor of any wrongdoings associated with the foreign exchange transaction. This is reason enough for banks and brokers to be very selective when it comes to "creative" operations, or more compliance prone in this area than they normally are[7].

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[5] For a review of empirical findings on the size and scope of "black markets" around the world, with much consideration given to developed countries, see Galbis (1996).

[6] Technically all eleven cases should, except the "back to back" (BTB) deals described below. In these cases the penalties had another terms of reference – it is termed "private netting" – but are purposefully commensurate in value, i. e. also 100% of amounts involved.

[7] The established legal interpretation of these directives is very clear: the intention was to make banks and brokers co-responsible for any misrepresentation as to the nature of the operation and the identity of the parts. *Cf.* Andrade Junior (2001, pp. 259-263).

It is also important to note that on top of violations of foreign exchange regulations applied by the Central Bank, these "circumventions" also involve violations in tax laws, as they result in evading the tax due at the time of the foreign exchange sale (often the IOF, tax on financial operations, but also, sometimes, the withholding tax on income earned), and the attempt to disguise the liability. Penalties are implemented by the tax authorities and are a multiple of the tax values due and unpaid, and comparable to the ones applicable by the Central Bank for the violation of foreign exchange regulations (which are proportional to the principal amount involved) but their consequences are far worse as tax evasion is also a crime. Furthermore, in these transactions, in addition to tax evasion, there are also other crimes involved such as financial fraud and conspiracy. In fact, both the foreign exchange (Central Bank) and the tax (*Secretaria da Receita Federal*) authorities are obliged to inform the Public Prosecutor (*Ministério Público*) of the *possible* presence of crime (if not informing, these authorities may face criminal charges themselves). Based in such reports, Prosecutors usually do not hesitate in starting criminal investigations often followed by wide press coverage, on the parts involved[8]. It is not hard to imagine the size of the damage that could do to banks and the effort of compliance units to prevent any occurrence that might possibly entail such course of events.

In view of the above, it seems hardly likely that any significant number of banks would enter in any significant amounts of transactions of these types considering the risks of getting caught and the consequences of such conducts. Compliance units exist with the sole aim at avoiding conducts that might lead to confrontations with the regulator. One may say that hedge funds are different, but the fact is that it is impossible for a hedge fund, or anybody else, to conduct a foreign exchange operation without a bank. In fact, in every other instance, around the world, in which the regulation of hedge funds is raised, there always comes the point that it is through banks that regulation is exercised.

It is true, also, that lots of anecdotal evidence may be collected on ideas or attempts of "by passing" regulations on capital inflows, on tax laws and foreign exchange regulations more generally, especially amongst traders. Within this specific group one4

[8] For a vivid account of such procedures, from lawyer's point of view, see Mendes (2005).

may say there is an agency problem that evolves as traders try to force quasi or even fully illegal transactions into their employers as they would earn the bonuses before the regulatory, tax and criminal charges and liabilities are presented later on, when traders have already moved on into different banks. These were the years in which Nick Leason was active in Singapore; some sad individual story along these lines may have taken place in Brazil, though with little macroeconomic relevance. The collective memory of trading desks in times of volatility and regulatory change must be treated with considerable caution as it one moves into the realm of the academic debate on the effectiveness, however defined, of the regulatory policy mix implemented in 1993-99 Brazil.

2. The accounts of "circumventions"

After these general comments we turn to specific observations on the eleven models of transactions depicted as ways to circumvent controls or taxes on inflows of capital. It is useful to group the transaction according to their nature, and examine what took place separately.

(i) "Disguised" FDI.

From the onset, one should squarely disregard "cases" 1 and 2 that, in the point of view of the undersigned and of Central Bank officials heard on these possibilities, belong in the realm of fantasy. Given the documentary needs of companies with foreign ownership in Brazil the "disguise" is very simply impossible, and also way too risky in view of the sanctions mentioned above. It is true that the Central Bank saw a more intensive usage of inter company loans, and very specifically in 1993, but the increase in foreign direct investment was much larger, dissolving the impression that multinationals could have been using loans to undertake financial arbitrage and in excess of what would be normal to expect in light of their equity investments into Brazil. In any event, no case and no data was mentioned to support the existence of such operations.

(ii) Portfolio investment under "Annex IV".

Foreign investment into some specific fixed income instruments in Brazil, before December 1993, could take place through the portfolio investment foreign exchange "window" - "Annex IV"[9] – without any misrepresentation or risk of penalty. Commodities mutual funds, debentures, privatization "currency" (securitized Treasury bonds), and derivatives (entailing constructions such as the "box with options" deals, producing a synthetic of a fixed income instrument) were all permitted up to mid 1993. From then on, each such instruments was "withdrawn" from the list of eligible fixed income investments under Annex IV in a sequence and monies invested thereof had to be reallocated. In each case, as time was given to investors to reinvest their resources into different instruments, one saw a sequence of shifts of monies, in a succession, as resources into commodities mutual funds flew partly into debentures, then partly to "box with options", until all varieties of fixed income instruments were formally forbidden. The fact that these restrictions were not done all at once, but in sequence, produced these shifts, which gave the impression of a "cat and mouse" game. The problem here was not circumvention but *grandfathering fixed income investments made before the restrictions*, thus avoiding complaints along the lines of "disrespect of contracts" and preserve the *ex ante* character of the restrictions[10]. More essentially, however, there was little or no "circumvention" as resources *had already been invested within the country* in Real denominated instruments.

At the end of 1994, all new flows into the portfolio investment window fell to US$ 5,0 billion, from US$ 6,5 billion in 1993[11], while the inflows into the special class of

[9] Resolution 1,289 of the National Monetary Council regulated portfolio investment in its varied forms. The annexes of the Resolution had regulations for each family of investments. The most popular was Annex number IV regulating investments into the Brazilian stock exchange.

[10] In fact, in order to be worthy of what Stanley Fischer described as "market based" restrictions (and this was very important in this case as these were the first high profile restrictions to inflows in these years), a key aspect of the restrictions would be that their nature and cost should be fully known *before* the foreign investor decides to invest. In this connection, Brazil preferred to work with a tax paid at the moment of entry, with no other obligations in the future, than the Chilean system of a "quarantine", necessarily involving the Central Bank receiving, managing and remunerating deposits from investors for prolonged periods of time

[11] Chart 1 in CG's paper misrepresents the reality of inflows of portfolio investment into Brazil as they report "gross" inflows, without controlling for the accounting effects of the Brady Plan bond exchange. The latter produced a big statistical distortion for 1994 as the part of the Brady Plan exchange of newly issued bonds for existing balances within Brazil, worth approximately US$ 42 billion, implied a theoretical "inflow" though "Annex IV" and an "outflow" in the form of the amortization of all outstanding loans

fixed income funds, created for the specific purpose of removing all fixed instruments, even synthetics, from the portfolio investment rules, received US$ 1,3 billion, with all taxes duly paid, as seen in Table 1 below. Other vehicle, "Privatization funds", ended up capturing investors' interest in privatization[12]; it received US$ 1,9 billion in 1994, as also shown in Table 1. The fact was that, after the "grandfathering" was completed, through 1994 and after, there was practically no claim or indication of any fixed income investments into "Annex IV", except for operations known as "Blue Ship Swaps" (BCS) examined later and rumors that "box of options" continued to be made. CG's claim that "this legislation loophole rendered the capital control completely ineffective" is unwarranted. There is no base, no evidence, no example or testimonial to substantiate this claim. Furthermore, since all deals were registered on an organized exchange, it would be very easy for the Central Bank and the tax authorities to revise every bank derivatives book, request the necessary clarifications and levy penalties discretionarily if they see fit. After December 1993, the conduct of "box of options" with resources under Annex IV would involve misrepresentation, on the part of the investor and the bank undertaking the Forex transaction, and would involve the violations and penalties as described above. It is highly unlikely that any compliance unit would authorize box deals within Annex IV, thus it is difficult to claim that such deal happened in any significant scale after December 1993. Again, not a tiny bit of evidence to that respect is offered by CG.

(iii) "Leads" and "lags".

"Case" number 3 in CG treats as "circumvention" what may at the very best be described as an "exception". In Brazil, exporters are allowed to enjoy "leads", that is, to anticipate export revenues through bank lines offered by local banks against the collateral of export receivables, and also, on a pre-shipment mode, to raise funds based on export commitments. Thus, local banks draw international bank lines to supply working capital to exporters against the credit risk of a receivable as good as the credit of the importer

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being restructured. An innocent look at CG's Chart 1 as is suggests an explosion of inflows in 1994 that did not happen at all.

[12] CG confuse investments through Annex IV in privatization currencies with privatization funds. These are very different things. The latter were created by the National Monetary Council Resolution 1806 in 1991 to invest in stock and debt instruments issued by companies to be privatized, later made operational by CVM (the Brazilian equivalent to the US Securities and Exchanges Commission) (*Instrução* 222/94).

abroad and enhanced by the local bank[13]. These advances were made, and continue to be made at international costs, as the credit risk is prime, and indexed to the dollar. These are the classic "leads", which were done in Brazil also for the pre-shipment phase of the export cycle. These are perfect instruments to allow exporters to arbitrate interest rate differentials and surely a very relevant part of the profitability of exporting from Brazil is related to this possibility.

Many saw the absence or the moderation of restrictions on "leads" and "lags", in the years of restrictions to short term inflows (which they indeed are) as an exception or as a financial "subsidy" to exporters and importers, as both were capable of undertaking interest rate arbitrage in ways that were forbidden to financial players more generally by this time. Yet, the fact that taxes to short term inflows were not enacted to affect "leads" and "lags" undertaken by exporters and importers did not mean that such flows were entirely free of restrictions. The key control variable was the maturity both for advances against receivables in the export side and for import financing; many changes occurred in these rules through these years in order to reduce the "financial gain" motivation in exporters and importers, which, however, true to the matter, was not that much of a concern to the regulator. In fact, any help into exporters' profitability, and into the increase in import penetration ratios, was warmly welcome in the years in which the "foreign exchange anchor" was deemed crucial to end hyperinflation.

The behavior of the arbitrageur is also worth mentioning. Anyone, not necessarily an exporter, could go into a Brazilian bank and draw funds from a line backed by export *commitments* (typical pre shipment advance based on receivables he did not have yet) and use the resources to fixed income investments. The only condition this arbitrageur had to obey was to *actually ship exports within 180 days*, just as if he was an exporter. The arbitrageur would have to enter what was called "the performance market", within SISCOMEX (the official export registration system run by the tax authorities), where he could bid for the rights of a given export shipment, even if in goods different than the ones in which he sign his initial export shipment commitment. Exporters with a shipment

[13] When the credit is given on a pre shipment basis, the "collateral" is an export commitment that entails very severe penalties if not honored. The maximum maturity of these pre shipment advances (known by the acronym ACC – *Adiantamento de Contratos de Câmbio*) has been 180 days, though it was shortened a couple of times. The average observed tenor, however, has been around 60 days.

ready, or "performance", for which there was no previous commitment associated with a pre shipment financing, could sell the rights to their shipments, through the transfer of the title of the export registry in SISCOMEX, with a premium ranging from 1% to 5%, depending on a number of elements, most notably the commodities crop cycle, and surely also interest rate differentials[14]. In these operations exporters usually capture most of the gain of the arbitrageur; through the years, this has been a difficult activity for financial players to enter, especially in view of the scarcity of bank lines for pre shipment finance. The exporter, most usually, the big ones and the trading companies, are the ones most usually trading in this market since they are the ones capable of credibly selling commitments to ship against which banks would advance lines at reasonable rates. It is difficult for a financial "middlemen", the arbitrageur, to extract much spread from the owners of the export future flow.

In view of this, it is very hard to see "circumvention" in "leads", or loss of effectiveness of other restrictions to short term inflows, as suggested. The question here, having in mind that restrictions are to be selective, is whether it makes sense to restrict this specific type of inflow ("leads" more specifically[15]), which is of a short term nature but comes to benefit of exporters in the context of an "exchange rate anchor".

In summary, and again, if there is a "window" here, through which financial arbitrageurs would be rendering restrictions to other sorts of capital inflows useless, not only the numbers should be shown, but the precise mechanisms to that regard be explained.

(iv) The "CC5 accounts", Derivatives, BTBs and BCSs

"Case" number 7, involves non resident banking accounts within Brazil (known as "CC5 accounts"), that enjoy full convertibility, combined with other elements. As regards CC5 accounts, the reader should bear in mind that since the non-resident that can open such an account must be a bank, and that this bank can transact on behalf of third

[14] It must be clarified that there is no such a thing as an "underground" or "parallel" market in which these operations are conducted. The "performance market" exists as an interface between SISCOMEX and SISBACEN (the Central Banks electronic environment for forex transactions); nothing could be more transparently priced and regulated.

[15] As for "lags" the position was somewhat more restrictive, as some measures were implemented restricting the maturities of import financing loans.

parties, one is right in pointing out that this vehicle, in theory, represents a full fledged opening of the capital account. The interesting question to raise here is why this platform is not used more widely as there is no restriction whatsoever in the amounts and on the nature of the transactions made *both at the inflow and at the outflow end*[16]. Interestingly, the problem here is disclosure. Any such transactions would necessarily involve the full identification of the parties involved and all explanations as to the nature of the transaction made. And, of course, at the inflow end, if the transaction is identical or even similar to the ones that involve an especial tax payment or any other restriction, the Central Bank will make sure that restrictions are obeyed and taxes paid, or simply instruct the bank not to do or to undo the transaction[17]. The public and the regulator scrutiny on the movements in the CC5 accounts is very severe, given cases of fraud, misuse and money laundering, and for this very reason banks and individuals tend to be extra careful with transaction of this kind; it does not seem plausible that operations to circumvent restrictions to inflows were made in this channel in any significant way; it suffices to look at the flows, that are chronically negative. In any event, explicit taxes on "inflows" through CC5 accounts were enacted by mid 1995 in line with the taxation of fixed income mutual funds, mostly as a clarifying initiative as consultations as to there as an "exemption" there started to mount.

The theoretical freedom entailed by the CC5 channel has often been raised in connection to constructions involving derivatives home and abroad. In the presence of NDFs (non deliverable forwards) traded over the counter in New York, and of futures (also non deliverable) in the CME (Chicago Mercantile Exchange), anything is possible, so the theory goes, namely, a "synthetic" of a fixed income investment can be made in New York or in the Caribbean without anybody bothering with foreign exchange and banking regulations in Brazil. Yet, this is only true if *some connection* is established with the fixed income market in Brazil; if not, how the interest rate arbitrage gains could

[16] For a review on the status of the capital account liberalization in Brazil, see Franco and Pinho Neto (2005).

[17] The legal framework here is somewhat more complex because it involves domestic currency based transactions between residents and non residents, this being why the regulatory denomination of transactions through CC5 accounts is "International Transfer of Reais". The analogy with the forex transaction is made as one considers that an "inflow" occurred when a Real based CC5 account was credited.

possibly be collected? The same question appears time and again with the shortening of the Real from derivatives markets abroad: since there is no actual Reais in New York or Chicago to sell, all trades are “non deliverable” and they must have a connection with some domestic market that “delivers” in order to establish the second half of the arbitrage deal.

In fact, with derivatives, or with loans, or stocks, one can indeed build what has been called a “back to back” (BTB) operation. “Case” number 8 is one deal in this family, not quite the typical one. The most common was what was called the “blue chip swap” (BCS) mentioned in connection with CC5 accounts, and also mentioned above as related to “Annex IV”. It consists of two theoretically unrelated transactions done in Brazil and offshore. A bank buys, for instance, Petrobras ADRs with a repo in New York, and the Brazilian branch of the same bank sells the same stock with a reverse repo agreement. The foreign “leg” of the deal was exactly the opposite of the Brazilian “leg”, the short and long positions in the same asset cancel out, except for the currency exposure, but the different financing cost at both repo and reverse repo operations is where the interest rate differential could be captured, if and only if the same entity could book the two “legs” at the same balance sheet, and other market risks are controlled for, and both banks in both jurisdictions have slack on their risk weighted capital.

As these deals started to appear, or banks consulted on whether they should do it, many regulators, in Brazil and abroad, jumped in to understand the transaction and fit it into their rules. Tax authorities in Brazil grasped the “spirit” of the transaction, as it involved very visible fingerprints in the stock exchange, and attacked very directly all parties suspect of such dealings. The Central Bank, on its turn, leveraged the attack as the foreign exchange regulation forbids what is called “private netting”, or schemes through which parties “evade” a foreign exchange transaction offsetting credits and debits on shore and off shore. Penalties here may go up to 100% of the values transacted.

BCS deals existed much more as legend than fact, and known deals were subject to very high penalties, whose values were made public to further discourage banks from

undertaking such risks[18]. BTB deals have been heavily scrutinized because they became a primary model of laundering monies offshore that could not "enter" the country either in view of tax consideration, or worse. During the course of 2005, for instance, in a high profile Congressional Commission of Inquiry, it was found that the Workers Party appeared to have entered into several BTB transactions to use illegal campaign money held abroad to pay for things and bribe people within the country. This deal certainly belongs to the "circumvention" family described by CG: monies held offshore by PT could have been deposited in an offshore branch (or parallel bank) of a Brazilian bank, which, *quid pro quo*, lent money to PT in Brazil, through an intermediary, entirely out of market conditions, especially regarding collateral.

Again, there is no indication on how much, when and how exactly BTBs, BCSs and arbitrage deals with derivatives were made. All indications are that isolated deals actually that took place, though small and probably involving still on going debates with the Central Bank and the tax authorities as to their legitimacy, as most such deals, in my opinion, are not truly arbitrage deals but "tax oriented" deals.

(v) Puts and calls in foreign borrowing

All through these years, the Central Bank established minimum tenor requirements for foreign borrowing that varied over time according to circumstances. On the tax side, the IOF (Tax on Financial Operations) was levied at rates varying from 1% to 9%, on the foreign exchange operation corresponding to the full principal of a given loan. After September 1995 the IOF rate was levied at rates depending on the maturity of the loan, and the withholding tax on interest of foreign loans also depended on the maturity of the loan. At some point, and not only in response to these rules, there were several cases of "puts" and "calls" designed to "shorten" the maturity of loans taken abroad. All such options, however, had to be registered at the Central Bank, along with all other characteristics of the loan, at the moment the loan was given authorization to take place. Of course, in no circumstance the Central Bank authorized any loan with a "put" against the borrower, or a "call" from the lender, turning the maturity shorter than

[18] Often the Central Bank implemented its penalties and informed the tax authorities which, however, queue the process so as to apply the penalty only at the year before the expiration of the five year prescription period.

the minimum tenor. Besides, once past the minimum tenor, if a “put” or a “call” was exercised, both the IOF and the withholding tax would be accelerated accordingly. This would not be much of penalty, but the tax collection acceleration was designed to be worse than to have the optioned maturity as the original one. It makes no sense to say that “puts” and “calls” were use to “circumvent” the minimum tenor, the IOF or the withholding tax; it is true that they could allow the acceleration of a loan in the case of a crisis, with taxes also accelerating, but always obeying the minimum tenor.

Indeed, as a conclusion to this review of all theoretical possibilities of “circumvention”, one may admit that there are always many ways to “by pass” banking and foreign exchange regulations if it is to undertake fraud and run the risks associated to that. It is an entirely different matter to argue, and without any empirical base, that these possibilities turned into reality on scale large to the point of turning regulations into a pointless exercise. These claims are false, and as a general observation towards all “cases”, the reader should not miss the crucial point that there are no numbers, examples, or any organized evidence to provide empirical support any to claims that “circumvention” was the general rule in these yeas.

3. The “index” of controls

In their regressions CG employed an updated version of an “index” originally created by Cardoso & Goldfajn (1997) to serve as a quantitative measure of the degree of controls exiting for inflows and outflows of capital to/from Brazil. It is somewhat of a paradox that CG insist on the complexity, sometimes the inconsistency, of the Brazilian Forex legislation, a construction based on layers of laws and norms of different hierarchy through the last 60 years, and at the same time accept to describe its degree of restrictions by one single index that very simply associates a *minus* 1 to a “liberalizing” measure, and a *positive* 1, for restrictive measures. What is pointed as too complex in practice, as of a sudden becomes too simple as far as the econometrics goes. It seems there is a clear inconsistency here.

Some more detail on the application of this "metric" can be seen in Goldfajn & Minela (2005), where the reader may find that the index falls by one point, for instance, following a Constitutional Amendment abolishing the difference between foreign and domestic firms for all economic purposes (*Emenda Constitucional* n. 6 of August 8th, 1995). Correspondingly, the index grows by one point with a *Carta Circular*, a legal instrument that publishes a decision of an individual Director of the Central Bank, generally confined to regulate operational aspects of a decision of the Central Bank's board (whose instrument is called *Circular*), that, for instance, established that renewals of foreign loans should obey rules of the date of renewal not the ones with which the original loan was contracted (*Carta Circular* 2,444, March, 14th, 1994). The example is clear enough and could be multiplied many times with many equally absurd "equivalences" of Laws, Decrees, Resolutions and inferior norms; it should be clear that to equate the impact of a change in the Constitution with far reaching consequences with a *Carta Circular* is by all means non-sense.

Other serious distortion is to consider that every legal instrument, regardless of being a Law, a Resolution of the National Monetary Council, a decision of the Board of the Central Bank (*Circular*), a Presidential Decree always contain *one* single "measure", either liberalizing, restrictive or neutral ("regulatory"). There are indeed numerous cases in which a given legal measure brings *several* changes in Forex regulations, laws or resolutions with dozens of dispositions, sometimes combining restrictive with liberalizing measures. Yet, as far as the "index" is concerned, the count is always one, positive or negative. This one shortcoming of the index affects very directly its "size", and consequently could derail all the econometric conclusions.

There should be no question that the lack of weighting of different "measures" – based on legal stature and "size" and "depth" of its content - seriously jeopardize the quality of the index[19].

[19] A cursory examination of the "scores" given to the different "measures" struck me in several cases. Two decisions of the Board of the Central Bank (*Circulares* 2,242, of October 7th, 1992 and 2677 of April 10th, 1996) drastically liberalizing the rules for the international transfers of Reais were given "neutral" grades. Another *Circular* changing these (n. 3,187, of April 16th, 2003) was omitted. All of the dispositions related to Law 9,613, of March 3th, 1998, including Resolutions of the National Monetary Council and other decisions of the Central Bank's Board, all referring to money laundering were omitted too. All would fall

Besides, a closer look at the "scores" given to the different "measures" appears striking in several cases. Two decisions of the Board of the Central Bank (*Circulares* 2,242, of October 7th, 1992 and 2677 of April 10th, 1996), icons of the liberalization effort in these years, changing the rules for the international transfers of Reais, for instance, were given "neutral" grades. Another *Circular* changing these (n. 3,187, of April 16th, 2003) towards a more restrictive stance was omitted. All of the dispositions related to Law 9,613, of March 3th, 1998, including Resolutions of the National Monetary Council and other decisions of the Central Bank's Board, all referring to money laundering were omitted too. All would fall into the "restrictive" category, all published from 1998 onwards, prompting the index to nose up at a moment when it is going down. This is a very interesting case in which a major change in the nature of controls and compliance activity affecting the whole universe of banking transactions, and very directly forex operations, is simply missed by the "index". Besides, every practitioner would admit that there is a growing surveillance of Public Prosecutors on the application of rforeign exchange regulations by the Central Bank since 1999, from which one could see a "tightening" of overall restrictions, yet very clearly oriented to the issue of tax evasion and money laundering. Some observers described that trend as a "recycling" of foreign exchange controls, now based on banking supervision and compliance units and with motivations very clearly different from those of the 1960s[20]. Nothing of this is captured by the "index", which, to the very extent it is missing a big piece of the action, is failing the purpose for which it was invented. Therefore, CG claim that, all this notwithstanding, the index "rightly capture the major trends", is totally unwarranted, and a very cheap price to pay in order to produce raw material to run regressions. The reader should bear in mind that the quality of the econometric result is capped by the one of the data that, in this case, would require a lot of work to became useful.

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into the "restrictive" category, from 1998 onwards, biasing the index. One gets the impression that there was some form of selective choice of "measures" to compose the index.

[20] See Franco and Pinho Neto (2005) for an extended discussion of this topic.

4. IOF collection and the nature of inflows

Lastly, some interesting pieces of evidence could be offered to provide some comfort to Brazilian taxpayers, understandably concerned about CG allegations. As one of the most important restrictions to inflows subject to the accusation of ineffectiveness, given alleged "circumvention" possibilities, is the IOF, the financial transactions tax due after the liquidation of certain foreign exchange transactions, I searched my archives to find the documents used at the time by the Central Bank to indicate the amounts to be collected by the tax authorities. Table 1 offers the estimates of the Central Bank of the amounts collected in the several varieties of incidence of the IOF tax through time. Even though these amounts are *not* the ones reported by tax authorities based on actual collection[21], there is no reason to doubt that these amounts were actually paid as the Central Bank works technically as a "substitute" to the tax authority requesting the proof of tax payment in order to confirm the registration of foreign capital along the lines of existing legislation, and to authorize any remittances such as interest and repatriation.

[21] Which, by the way, are not published with this level of detail.

Table 1

Some forms of capital inflows into Brazil, IOF tax rates (1) and estimates of amounts collected (2), December 1993 to June 1996 (monthly flows, US$ Million)

	Fixed income funds			Privatization funds			Borrowing abroad - all formats (3) (4) (5)				
period	inflows	rate	$	inflows	rate	$	Inflows	agro	taxable	Rate	$
Dec-93	80	5,0%	4	0	0,0%	0	1.714	0	1.714	3,0%	51
January-94	82	5,0%	4	0	0,0%	0	745	0	719	3,0%	22
February-94	82	5,0%	4	0	0,0%	0	770	0	563	3,0%	23
March-94	102	5,0%	5	6	0,0%	0	714	0	710	3,0%	21
April-94	119	5,0%	6	137	0,0%	0	932	0	498	3,0%	28
May-94	68	5,0%	3	232	0,0%	0	283	0	256	3,0%	8
June-94	450	5,0%	23	266	0,0%	0	304	0	241	3,0%	9
July-94	6	5,0%	0	54	0,0%	0	351	0	348	3,0%	11
August-94	81	5,0%	4	87	0,0%	0	349	0	348	3,0%	10
September-94	216	9,0%	19	60	0,0%	0	540	0	529	3,0%	16
October-94	226	9,0%	20	846	0,0%	0	925	0	824	3,0%	28
November-94	0	9,0%	0	174	0,0%	0	1.404	0	1.370	7,0%	96
December-94	2	9,0%	0	77	0,0%	0	1.459	0	1.300	7,0%	102
1994 - total	**1.434**		**89**	**1.939**			**8.776**	**0**	**7.706**		**374**
January-95	0	9,0%	0	16	0,0%	0	401	0	200	7,0%	28
February-95	0	9,0%	0	79	0,0%	0	193	0	193	7,0%	14
March-95	0	5,0%	0	128	0,0%	0	103	0	79	7,0%	7
April-95	1	5,0%	0	67	0,0%	0	650	0	635	0,0%	0
May-95	64	5,0%	3	95	0,0%	0	858	0	850	0,0%	0
June-95	1	5,0%	0	120	0,0%	0	2.839	5	1.804	0,0%	0
July-95	91	5,0%	5	164	0,0%	0	2.383	85	1.497	0,0%	0
August-95	41	5,0%	2	484	0,0%	0	2.318	98	1.832	0,0%	0
September-95	0	7,0%	0	62	0,0%	0	1.121	383	688	2,7%	31
October-95	0	7,0%	0	170	0,0%	0	1.786	112	1.549	2,2%	39
November-95	12	7,0%	1	219	0,0%	0	1.275	187	996	2,9%	37
December-95	1	7,0%	0	351	0,0%	0	1.768	189	1.481	2,5%	45
1995 - total	**211**		**11**	**1.955**		**0**	**15.695**	**1.059**	**11.804**		**201**
January-96	2	7,0%	0	2	0,0%	0	1.359	112	949	2,7%	37
February-96	4	7,0%	0	4	5,0%	0	1.677	203	1.392	3,3%	56
March-96	2	7,0%	0	2	5,0%	0	1.467	258	876	2,1%	30
April-96	3	7,0%	0	3	5,0%	0	1.670	499	1.107	2,1%	35
May-96	0	7,0%	0	0	5,0%	0	2.717	397	2.228	1,2%	33
June-96	0	7,0%	0	0	5,0%	0	3.343	585	2.090	1,7%	58
1996 - total	**11**		**1**	**11**		**0**	**12.233**	**2.054**	**8.642**		**249**
GRAND TOTAL	**1.736**		**105**	**3.905**		**0**	**38.418**	**3.113**	**29.866**		**875**

Notes: (1) Legal instruments: Decree 995, Nov. 25, 1993, 3% IOF on Fixed Income Funds and 3% on foreign borrowing generally defined. Finance Minister Directive ("*Portaria*") n. 534, October 19, 1994, 9% IOF on Fixed Income Funds, 7% on foreign borrowing and 1% on inflows of portfolio investments (stock exchange); *Portaria* n. 95, March 9, 1995, 5% IOF on Fixed Income Funds, zero for all other inflows; *Portaria* n. 202, August 10, 1995, 7% IOF on Fixed Income Funds, 5% on foreign borrowing and 7% on CC5 accounts inflows, and zero for portfolio investments (stock exchange); *Portaria* n. 205, August 15, 1995, zero for loans directed to agriculture; *Portaria* n. 228, September 15, 1995, 5% on foreign borrowing with tenors up to 2 years, 4% for those up to 3 years, 2% for those up to

4 years, 1% for loans up to 5 years and zero if longer; *Portaria* n. 28, February 8, 1996, adds a 5% IOF on inflows to Privatization Funds; *Portaria* n. 149, June 11, 1996, exempts BNDES. (2) Values for taxes due listed according to the date of the inflow, not the date of payment. (3) There are other "non taxable" forms of borrowing not included in the table, such as import financing, leasing contracts and flows from multilateral agencies. (4) After September 1995 rates are averages, as they depended on the maturity of each loan. (5) taxes due might be larger than taxable inflow multiplied by the rate given taxation, not reported in the table, of similar transaction made through CC5 accounts.

SOURCE: Banco Central do Brasil, Personal Archive.

Table 1 provides a history of the IOF usage for that purpose as it covers all changes occurring between November of 1993 - when the first presidential decree was issued creating the possibility of taxing certain foreign exchange transactions at certain rates, and delegating to the Finance Minister limited powers to change the tax rate - until the month of June of 1996. This specific cutoff date is arbitrary; the active use of the IOF continued more or less unchanged at a restrictive stance until the Asian crisis when most restrictions were removed and tax rates changed to zero. Early in 1998, however, after what was seen as a very successful response to the Asian crisis – a combination of a fiscal package with monetary tightening – capital inflows regained momentum very rapidly, international reserves reached their all time high, and, as a consequence, administrative restrictions to inflows were reinstated and the IOF tax on certain types of inflows was reestablished very quickly. A few months later, with the Russian & LTCM crisis, such restrictions were removed, and were not to be seen again[22]. Table 1 does not cover the whole period in which the IOF and other restrictions to inflows were deployed – November 1993 to mid 1998 – but its coverage and numbers provide important indications as to the impacts of the IOF on capital inflows.

During the period covered by Table 1 the total amount collected was slightly over a billion dollars, including what is reported in the table and, in addition: (i) the revenues produced by the IOF on inflows directed to the stock exchange, which were taxed with a rate of 1% between November of 1994 and March 1995, with estimated revenues of US$ 88 million; and (ii) the revenues produced by the 7% IOF on CC5 based inflows in force from September 1995 to the last month covered by the table, with total revenues of US$ 24 million.

[22] The pro-cyclical character of restrictions to capital inflows should be seen as an obvious thing, at least in the minds of those, amongst whom I am included, who created and managed these instruments through time: for what *other* possible reason would the authorities possibly introduce such restrictions? Yet, for those interested in econometric technique to set proof of first hand accounts of declared intentions, as it is common in the cliometrics literature, please refer to Cardoso & Goldfajn (1997).

Table 1 shows that the Fixed Income Funds lost their popularity after the 9% IOF tax, the same happening to Privatization Funds after the 5% IOF tax early in 1996. In any event, given the amounts collected and the ready influence of the IOF rate changes into the targeted inflows, it is hard to argue that IOF evasion was very relevant. It is also important to note that the largest part of the *taxable inflows* was in the foreign borrowing column; it was on this region that most of the Central Bank's action – through the IOF, minimum tenors and other restrictions[23] – was conducted.

Table 2 below, with basic data on loans abroad for 1992-99, helps completing the picture of the impact of restrictions to capital inflows into Brazil during these years.

[23] Other restrictions were mostly sectoral, as, for instance, in the case of public sector entities, for which the stance was increasingly restrictive for fiscal reasons. For agricultural loans, the treatment was favorable at times, neutral oftentimes.

Table 2

Foreign borrowing from Brazilian residents, registered loans: number of issues, volume, average maturity, spreads and costs, from1992-I to 1999-I (quarterly flows, US$ Million)

year	Q	number of issues	value ($MM)	average tenor	average spread	total cost all in (%)
1992	I	49	1.551	2,6		12,02
	II	84	1.763	3,0	568	11,32
	III	38	1.130	3,7	532	10,27
	IV	31	1.127	3,7	614	11,38
1993	I	47	1.879	3,5	704	11,68
	II	81	3.977	3,6	713	11,67
	III	65	2.749	4,8	609	10,7
	IV	74	3.544	4,4	534	9,92
1994	I	79	5.019	4,0	497	10,17
	II	57	1.587	6,0	453	10,9
	III	39	1.813	5,1	526	12,05
	IV	55	3.153	4,8	490	11,87
1995	I	42	1.496	5,1	436	11,82
	II	57	3.325	4,4	527	11,27
	III	91	5.866	4,1	529	11,26
	IV	68	3.630	6,2	517	10,92
1996	I	66	4.688	6,6	462	10,52
	II	113	6.488	7,0	465	11,11
	III	77	3.735	7,2	465	11,28
	IV	110	6.657	7,7	407	10,22
1997	I	71	3.712	8,1	352	9,77
	II	79	9.433	12,4	436	11,02
	III	95	6.865	8,5	386	10,09
	IV	82	5.852	7,4	407	9,94
1998	I	120	12.076	7,1	464	10,12
	II	104	11.121	9,0	571	11,24
	III	96	16.939	8,1	532	10,53
	IV	77	3.094	6,2	779	12,45
1999	I	98	4.165	4,2	604	10,87

SOURCE: Boletim do Banco Central do Brasil, Personal Archive.

The numbers in Table 2 cover the largest part of the capital account, so that if there is any field of play as regards the impact of restrictions, whether taxes or minimum tenors, it is here. The period covered starts when the concern with “excessive” capital inflows started and goes up to the first quarter of 1999, way past the Russian and LTCM crises. It is very clearly visible that the number of issues and volumes grew constantly, with some seasonal variation and also with declines entirely within what would be expected in mid 1994 (critical months of the Real Plan), early 1995 (Tequilla Crisis, very short lived) and 1997-IV (the Asian crisis). The impact of the Russian & LTCM crisis is way much larger than all the other crises, as we all know.

The one interesting aspect of this table in connection to the topic of this note refers to the average maturity and the spreads. The trend towards and lower spreads only highlights the importance of the fact that *tenors are extended more or less constantly through time*, from around three years in 1992 to around ten years right before the Russian crisis. One should note that IOF taxes pictured in Table 1 combines with direct impositions as to minimum tenors, for instance, in order to affect the outcomes reported in Table 2. There seems to be no doubt that, as one looks into the evolution of these flows that the "quality" (tenors and spreads) improved through time, *just as aimed by the regulatory restrictions, whether tax or administrative*. As argued in the beginning of this note, these are the basic facts that one should come to terms before launching the "ineffectiveness" claim. In order to argue that regulatory policies towards improving the quality of capital inflows failed, one has to seek alternative explanations for the developments shown in Table 2, which seems to suggest just the opposite. The course of economic reforms and the success of the Real Plan are surely very relevant explanations to the improved access to international capital markets, the reduction in sovereign risk and the extension of maturities, but most likely with a little help from regulatory restrictions to short term inflows. Indeed, restrictions may very well be effective if they go the same direction of "fundamentals" as in the case in point.

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