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How to create a financial crisis by trying to avoid one:

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ABSTRACT

Brazil, as the rest of Latin America, has experienced three cycles of capital inflows since the collapse of the Bretton Woods system. The first two ended in financial crises, and at the time of writing the third one is still unfolding, although already showing considerable signs of distress. The first started with the aftermath of the oil-price increase that followed the 1973 'Yom Kippur' war; consisted mostly of bank lending; and finished with Mexico's 1982 default (and the 1980s 'debt-crisis'). The second took place between the 1989 'Brady bonds' agreement (which also marked the beginning of neo-liberal reforms in most of Latin America) and the Argentinian 2001 crisis. This second cycle saw a sharp increase in portfolio flows and a rise of FDI, and ended up with four major crises (as well as the 1997 one in East Asia) as newly-liberalised middle-income countries struggled to deal with the problems created by the absorption of those sudden surges of inflows — Mexico (1994), Brazil (1999), and two in Argentina (1995 and 2001). Finally, the third inflow-cycle began in 2003 as soon as international financial markets felt reassured by the surprisingly neo-liberal orientation of President Lula's government; this cycle intensified in 2004 with a (mostly speculative) commodity price-boom, and actually strengthened after a brief interlude following the 2008 global financial crash. The main aim of this paper is to analyse the Brazilian 1999-financial crises during the second inflow-cycle from the perspective of Keynesian/ Minskyian/ Kindlebergian financial economics. I will attempt to show that no matter how diversely the above mentioned countries tried to deal with the inflow-absorption problem — and they did follow different routes, none more unique than Brazil — they invariably ended up in a major financial crisis. As a result (and despite the insistence of mainstream analysis and different 'generation' models of financial crises), these crises took place mostly due to factors that were 'intrinsic' ('endogenous' or 'inherent') to middle-income countries that opened up their capital account indiscriminately to over-liquid and excessively 'friendly-regulated' international financial markets. As such, these crises were both fully *deserved* and fairly *predictable*. Therefore, I shall argue that the general mechanisms that led to Brazil's 1999-financial crisis were in essence endogenous to the workings of an economy facing i) full financial liberalisation; ii) several surges of inflows, especially immediately *after* the Mexican 1994 and the East Asian 1997 crises — and as a *spillover* of the respective rescue packages —, following a new 'bubble thy neighbour' speculative-strategy by international financial markets, as ever more liquid, volatile, politically-reassured, and progressively unregulated financial markets were anxiously seeking (and allowed to create artificially) new high-yield investment opportunities via a new *sequential* speculative-strategy; and iii) ineffective domestic financial regulation — especially lack of effective capital controls. I shall also argue that within this general framework, the specificity of the Brazilian crisis was given by having been affected by i) several external shocks; ii) by a naïve ideology directing economic reform; iii) by a exuberant (post-'second generation' models)-style monetarism, or 'macho-monetarism', that although successful in achieving initially price-stabilisation, and in avoiding that Brazil became 'another Mexico' (in terms of keeping Brazil away from an inflow-led Kindlebergian-mania), it did so at a growing (and mostly unnecessary) cost; iv) the creation of several major financial fragilities in the banking sector (private and public) and in State finances — leading the Federal Government to sleepwalk into a Minskyian 'Ponzi-finance'; and v) by this 'Ponzi' being turbo-charged by both the Government's indiscriminate absorption of non-performing debt, and by it paying a huge amount (mostly in the form of subsidies) in order to get the constitutional reform that would allow the President to run for a second term.

"The problem is that [...] the theories embedded in general equilibrium dynamics [...] don't let us think about [issues such as ...] financial crises, and their real consequences in Asian and Latin America [...]."

Robert Lucas

"We will never use capital controls: we want to be a First-World nation."

Fernando Henrique Cardoso

"Globalization opened up opportunities to find new people to exploit their ignorance. And we found them."

Joseph Stiglitz

"In reality our fellow-citizens have not sunk so low as we feared, because they had never risen so high as we believed."

Sigmund Freud

"Domination is more effective if it delegates the violence on which it rests to the dominated."

"Today the appeal to newness, of no matter what kind, provided only that it is archaic enough, has become universal."

Theodor Adorno

"Worldly wisdom teaches that it is better [...] to fail conventionally than to succeed unconventionally."

"[...] and, above all, let finance be primarily national."

John Maynard Keynes

1. Introduction

Latin America has experienced three cycles of capital inflows since the collapse of the Bretton Woods system. The first two ended in financial crises, and at the time of writing the third one is still unfolding, although already showing considerable signs of distress. The first started with the aftermath of the oil-price increase that followed the 1973 'Yom Kippur' war; consisted mostly of bank lending; and finished with Mexico's 1982 default (and the 1980s 'debt-crisis'). The second took place between the 1989 'Brady bonds' agreement (which also marked the beginning of neo-liberal reforms in most of Latin America) and the Argentinian 2001 crisis. This second cycle saw a sharp increase in portfolio flows and a rise of FDI, and ended up with four major crises (as well as the 1997 one in East Asia) as newly-liberalised middle-income countries struggled to deal with the problems created by the absorption of those sudden surges of inflows — Mexico (1994), Brazil (1999), and two in Argentina (1995 and 2001). Finally, the third inflow-cycle began in 2003 as soon as international financial markets felt reassured by the surprisingly neo-liberal orientation of President Lula's government; this cycle intensified in 2004 with a (mostly speculative) commodity price-boom, and actually strengthened after a brief interlude following the 2008 global financial crash.[2] The main aim of this paper is to analyse the Brazilian 1999-financial crises during the second inflow-cycle from the perspective of Keynesian/ Minskyian/ Kindlebergian financial economics.

From this perspective, this paper attempts to understand the Brazilian 1999-

[2] Some have argued that the third cycle finished in 2008, and a fourth cycle began after the downturn in 2009; however, for LA the so-called fourth cycle is nothing else but the resumption of the third after a brief pause in 2008 — led by *the same* type of inflows, and by *the same* (mostly speculative) commodity-price boom. For how these three financial cycles relate to the long-term 'technology cycle', see Pérez (2002).

financial crisis mainly from an 'endogenous-failure' perspective. It argues that the general mechanisms that led to this financial crisis were in essence *inherent* (or intrinsic) to the workings of an economy facing full financial liberalisation; several surges of capital inflows, especially immediately *after* the Mexican 1994 and the East Asian 1997 financial crises — as a spillover of their respective rescue packages —, following a new 'bubble thy neighbour' speculative-strategy by international financial markets, as ever more liquid, volatile, politically-reassured, and progressively unregulated financial markets were anxiously seeking (and artificially creating in a sequential progression) new high-yield investment opportunities; and ineffective domestic financial regulation (especially lack of capital controls).

I shall also argue that within this general framework, the specificity of the Brazilian crisis was given by having been affected by several major external shocks (the Mexican-1994 crisis, the East Asian-1997 one, and the Russian-1998 default); by a naïve — and narcissistic — ideology rigidly directing economic reform; by an exuberant (post-'second generation' models of financial crises)-style monetarism, or 'macho-monetarist' macro (one characterised by a 'one should not be afraid to do what it takes'-type of monetary policy), which although successful in initially achieving price-stabilisation, and in avoiding that Brazil became 'another Mexico' (in terms of keeping Brazil away from a post-liberalisation inflow-led Kindlebergian-mania), it did so at a growing (and mostly unnecessary) cost: the creation of several major financial fragilities in the private and public sector (especially in banking) and in State finances — leading the Federal Government to sleepwalk into an unsustainable Minskyian 'Ponzi-finance' [3] — one that not even a set of remarkably 'untransparent' fiscal accounts could hide;[4] and by this 'Ponzi' being turbo-charged by weak governance that led the Government to absorb indiscriminately large amounts of non-performing debt, to overlook and cover-up wrongdoing and corruption in financial institutions, and pay a huge price to approve the constitutional reform that would allow the President to run for a second term (mostly in the form of additional subsidies to State governments and State banks — in particular those controlled by opposition parties whose support was needed in order to get the necessary majority for the reform).

From this point of view, I shall argue that there is a very specific 'Minskyian' feature to the Brazilian crisis, which made it different from other financial crises at the time both in Latin America (LA) and in East Asia: how a particularly radical monetary policy, weak governance, an overambitious President, and a bit more than their fair share of bad luck (in the form of continued external shocks), led to an unmanageable Ponzi finance in the accounts of the Federal Government and Central Bank.[5]

In Brazil, the absorption of inflows and the dynamic that it generated were uniquely conditioned by an environment characterised by remarkably high and unstable domestic interest rates. These were the result of the Brazilian government's attempts to sterilise inflows and defend the exchange rate and its stabilisation programme from huge levels of inflows and continuous external shocks. These high interest rates — sometimes the Brazilian authorities chose to set base rates over *20* percentage points above international interest rates plus country risk (an attitude I have elsewhere called "macho-monetarism"; see Palma, 2006) — and the peculiar

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[3] According to Minsky, an agent runs into 'Ponzi' finance when it is forced to borrow to keep up with payments on its existing debt obligations; i.e., the agent has to capitalise interest and thereby add to its total debt. See Minsky (1982).

[4] One of the problems with working on the Brazilian economy is the quality of its public accounts (and overall national accounts). For example, in the last report of ECLAC on the distribution of Brazilian output per sector (using official statistics), the sum of sectoral contributions adds up to 73.5% of GDP. Then, adding net taxes on output, the total adds up to 88.3% — leaving a statistical 'discrepancy' of no less than 11.7% of GDP (about one-quarter of a trillion *dollars*...).

[5] As someone said, "poor decisions and bad luck are contingencies of most horror films."

(and self-defeating) way in which the Federal Government and Central Bank dealt with the resulting fragilities in the financial sector and State Governments, meant that among the Latin American and East Asian crisis-countries of the 1990s it was only Brazil that saw its pre-crisis public sector sleepwalking into a major Minskyian 'Ponzi-finance'.

From this perspective, the Brazilian financial crisis seems to contradict one of the key propositions of the mainstream 'moral hazard' literature. As is well known, one of the characteristics of this popular mainstream literature is to blame artificially *low* interest rates for the financial crises in middle-income developing countries during the 1990s. Low rates would have created a general macro-micro dynamic which ultimately rendered both lenders and borrowers unable to assess and price their risks properly — leading them to accumulate more risk than was privately (let alone socially) efficient. It was not the case that under a special set of circumstances international and domestic agents were intrinsically unable to assess and price their risk properly; artificially low interest rates would have taken away most of the incentives to do so. These low rates would have been the result of the combination of moral hazards (supposedly created by issues such as government guarantees on deposits), and of the near-certainty in international financial markets that they would be rescued if there was any threat of default or closing down of the capital account. In short, according to this narrative, if only these moral hazards had not existed, interest rates would have been higher, the 'over'-lending and 'over'-borrowing would have been averted, and the financial crisis could have been avoided.[6] What the case of Brazil clearly shows us is the dangers of the alternative scenario: high interest rates in the context of an open capital account and a surge of inflows can just as easily lead to a financial crisis via a different route: by creating unsustainable financial fragilities in the private sector and a public 'Ponzi-finance'.

This paper concentrates on the period between the beginning of the Brazilian experiment with financial liberalisation and economic reform proper and the outbreak of the 1999-financial crisis — i.e., between the Cardoso 'Real Plan' of mid-1994 and the financial crisis of January 1999. However, some attention will also be given to the period between the 1990 'Collor Plan' and the 1994 'Real Plan', since it was with the 'Collor Plan' (or 'New Brazil' programme) that economic reforms first began to be implemented. Throughout the paper, the mid-1994 to January-1999 period (i.e., between financial liberalisation and financial crisis) will be compared and contrasted with similar events in LA and East Asia, in particular the cases of Chile (1975-82), Mexico (1988-94), Korea, Malaysia and Thailand (1988-97), and Argentina (1990-1995, and 1995-2001).[7]

In this paper, I shall argue that Brazil's 1999-financial crisis is a direct reflection of the weakness of its post-1990 neo-liberal paradigm; and that these weaknesses were rooted as much in the intrinsic flaws of this paradigm, as in the particular way in which it was implemented in LA. A case in point is Pedro Malan, Brazil's Finance Minister at a time of the beginning of financial liberalisation, who tells us with disarming candour how one of the aims of economic policy under the Cardoso administration was to bring back foreign capital at any cost: according to him "The logic of the exchange rate policy is to reduce exports, increase imports and the current account deficit and, therefore, make the country import capital again. This capital and the domestic savings accumulated by the private sector will finance economic growth"

[6] See, for example, McKinnon and Pill (1997).

[7] Although Chile's 1982-crisis belongs to a different inflow-cycle than Brazil's 1999-one, as Chile opened up its capital account two decades before the rest of the region, its 1982 crisis resembles a second-cycle-crisis (for a full account of the process of economic reform in Chile, see Ffrench-Davis, 2010).

(*Gazeta Mercantil*, 24th October, 1994).[8] In other words, let's create artificially an unnecessary current account imbalance (and hit exports) so as to produce a magnet that would attract foreign capital again — with all its supposed magical powers. From this perspective, perhaps what led to economic reforms being implemented so differently in LA and in many countries in Asia (remarkably market-naïve in the former, pragmatically in the latter) is that in the former policy-makers of most political persuasions, including the 'new' left, were eager to believe that neo-liberalism and the Washington Consensus were a set of ingenious tricks devised by Dumbledore, while in the latter they instinctively knew that (most likely) they were the work of Voldemort…

Keynes once said (discussing Say's Law) that Ricardo conquered England as completely as the Holy Inquisition conquered Spain; the same could be said for neo-liberalism in LA: it has conquered the region, including many in its left-wing intelligentsia, as completely (and fiercely) as the Inquisition conquered Spain. This process has been so successful that it has actually had the effect of 'closing the imagination' to conceptualising alternatives.

In Brazil (and LA in general) the genesis of the new neo-liberal development strategy can be located in a series of negative external and domestic shocks c.1980, when the region was particularly vulnerable.[9] As had happened in the 1930s, these laid the foundations for a radical ideological transformation that led to a new paradigm, this time along the lines of Thatcher's (Anglo-Saxon-style) neo-liberalism, and Reagan's US neo-conservatism. This was quite distinct from what was happening in Asia, where reforms were implemented in a much more pragmatic and imaginative way. From this perspective, what differentiated LA from Asia as well was not just the strength with which the new neo-liberal ideology was adopted, but also the form in which the previous one (ISI — or state-led industrialisation) was given up. So, perhaps it should not be surprising that the discourse of the reforms ended up resembling a compass whose 'magnetic north' was simply the reversal of as many aspects of the previous development strategy as possible — as Gustavo Franco (when President of Brazil's Central Bank) explained, the main task of economic reform in Cardoso's first government was "[...] to undo forty years of stupidity [besteira] […]" (Veja, 15/11/1996).[10] With this 'reverse-gear' attitude (in which almost anything previously considered as 'virtue' became 'vice', and vice-versa), the Brazilian experiment in economic reform and financial liberalisation almost inevitably ended up as an exercise in 'not-very-creative-destruction'. The mere idea that alternatives to neo-liberal paradigm could exist increasingly met with a mixture of amusement and contempt. Franco again: "[The alternative now] is to be neo-liberal or neo-idiotic [neo-burros]."[11] (Ibid.) The key point here is that this type of narcissistic ideology led

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[8] On this point, see also Bresser Pereira (2002), and Saad-Filho and Morais (2002).

[9] See Díaz-Alejandro (2005).

[10] Neo-liberalism was not the first ideology of the 20th Century that helped channelling the destructive power (or 'death instinct') of individuals...

[11] This is an important point in order to understand the fundamentalistic nature of the neo-liberal ideology among the 'new converts' in LA. Many in the 'old left' felt that events during the 1980s (from the fall of the Berlin Wall to the collapse of most 'alternative' political experiments in the South) led to a catastrophic collapse of all sort of 'progressive' ideologies (in LA from structuralism to dependency analyses — see Palma, 2009a). The impact of those events transformed many in the 'old left' into a collation of 'crashed egos' (as it were). There was, therefore, a common state of mind among many of those identified before with 'progressive' ideologies. What neo-liberalism offered them (among other things) was the chance to acquire again an explicit sense of value; i.e., the restoration of the old idea of the 'supremacy of free markets' seemed to offer the possibility of saving the identity of those individual egos (particularly if they could make a contribution to that ideology by mixing it with a bit of social conscience). As Britton and Steiner remind us (1994), "an overvalued idea is more likely to be sought when uncertainty cannot adequately be contained." (Quoted in Hinshelwood, 2009). So,

to such rigidity in policy making (the two rarely mix well) that the Cardoso government stuck with policies well after they have achieved their aims (i.e., the need for a 'tough-macro' in order to get an abrupt price-stabilisation), and those policies have become highly counterproductive.

2.- The Brazilian reforms

Brazil's remarkable pre-1980 economic growth period was brought to an abrupt end by the 1982 'debt crisis'. The country first experienced a severe recession, made more acute by inexorably rising inflation and a heavy foreign debt burden; it then expanded again, but this time only slowly and erratically until the end of the decade. As events of the 1980s placed the model of state-led development under considerable strain, in March 1990 the incoming President, Collor de Mello, announced a set of reforms in his 'New Brazil' Programme — in particular, the removal of subsidies for exports and phased reductions in tariffs.[12] In addition, a privatisation programme was begun in 1991, the fuel market was deregulated (ending years of state support for ethanol production), and the dissolution of the coffee and sugar trading boards was announced. The most contentious measure was the temporary freezing of virtually all deposits (with limits of US$ 1,000 on bank and savings account withdrawals), but by the middle of the year this was subject to increasingly corrupt evasions and was subsequently abandoned.

Despite the political weakness of Collor de Mello's short presidency, its unsure handling of macroeconomic policy and the humiliating way in which he was thrown out of office, the initiatives he launched marked the beginning of a radical changed in the direction of Brazilian economic development.

In 1992, escalating corruption charges and several extraordinarily bizarre private scandals led to the forced resignation of President Collor de Mello. His deputy, Itamar Franco, became Acting President in September and President in December. Economic policy continued largely unchanged during the first year of President Franco's Government, with its principal objectives being the liberalisation of most prices, control over public expenditure and a strict monetary policy. However, political and economic uncertainty continued after the change of president and inflation increased in late 1992, reaching almost 2,500% in 1993.

In May 1993, after several changes of finance minister, President Franco appointed senator (and well-known sociologist) Fernando Henrique Cardoso to the position. Together with a group of economists, including Edmar Bacha, Pérsio Arida, André Lara Resende, Gustavo Franco, Pedro Malan, Winston Fritsch and Francisco Pinto, Cardoso devised an all-encompassing stabilisation plan, which came into operation on 1 July 1994 (the 'Real Plan', which took its name after the new currency, which it introduced, the *real* — the fourth in 9 years) The main characteristic of this new plan was that, as opposed to most of its predecessors, it intended to avoid 'shock treatments', price freezes or surprise announcements. The 'Real Plan' took a long time to be prepared and was announced in detail several months in advance of its implementation. It was an attempt to stabilise prices gradually by reducing both inflationary expectations (through the *real* being 'pegged' to the US dollar at a rate of

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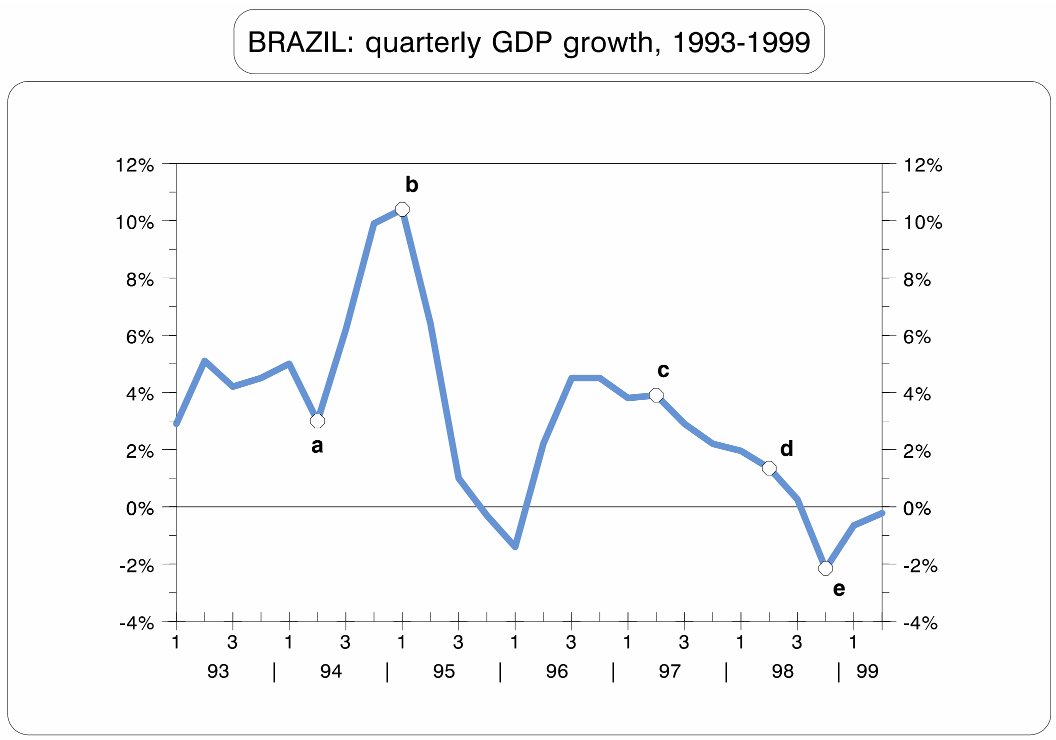
the 'rescuing idea' was shared by many individuals in such a way that it became a 'marker' of their identity, as did the above quoted extreme value judgement against alternative ideologies (those held by the "neo-idiotic" — or "neo-burros": basically, some of their 'old-comrades', to whom any projection of own bad feelings and regrets was allowed).

[12] Tariffs would halve in three years, with no nominal tariff exceeding 35% by the end of that period. Of equal significance was the commitment to remove the cumbersome system of import licensing.

around one *real* to US$ 1, but allowed to move in a narrow band), and inflationary 'inertia' (indexation). Simultaneously, there was the aim of a progressive achievement of internal and external macroeconomic equilibrium.[13] However, the real strength of this new 'Plan' was political: the fact that it succeeded in gathering an overwhelming degree of consensus and public support — and as Díaz-Alejandro (1983) had rightly predicted, in terms of programmes of price stabilisation what really matters is not so much the details of the policies implemented, but the degree of consensus support that they managed to gather. Its initial successes in mid-1994 significantly helped Cardoso's own campaign for the presidency.

In terms of growth, after the 1982 crisis Brazil first experienced a severe recession, and then expanded slowly and erratically until the beginning of the 'Real Plan', when growth accelerated rapidly (but briefly), reaching a rate of 10.4% in the first quarter of 1995 (vis-à-vis the same quarter the year before) — see Figure 1. The main growth-stimulus was brought about by the massive reduction of the 'inflationary tax' that followed the implementation of the new stabilisation plan.

FIGURE 1

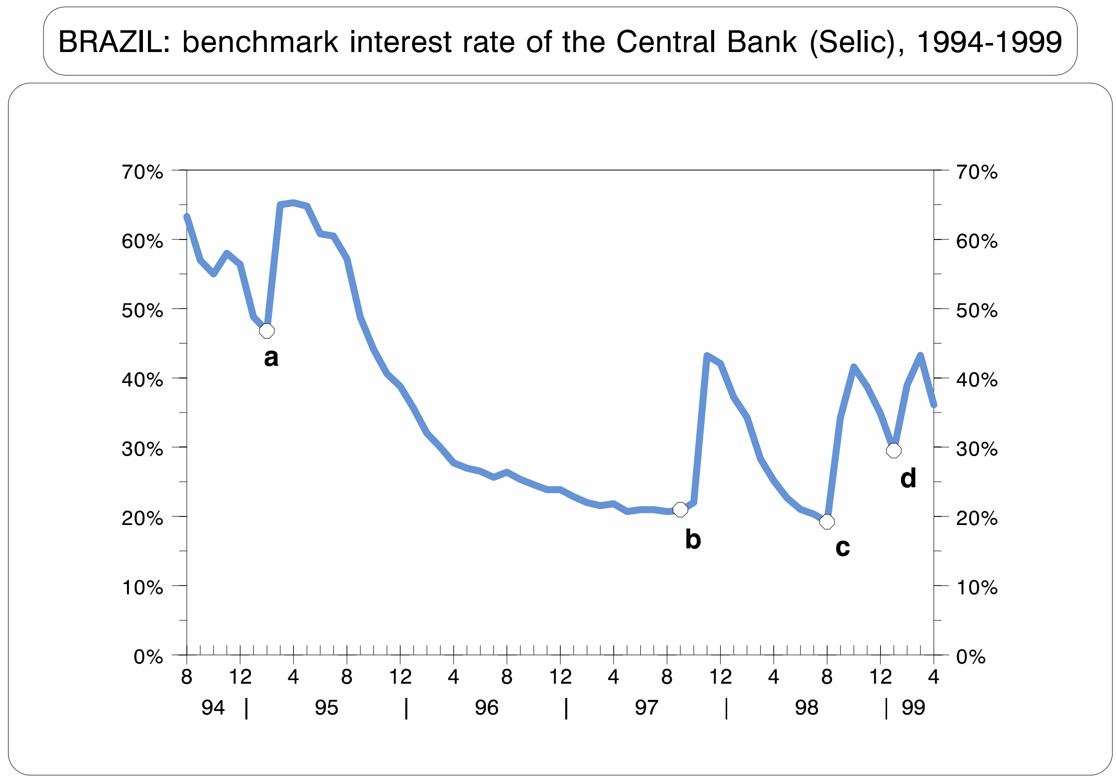


- [**a**] = Beginning of the 'Real Plan'; [**b**] = Mexican crisis; [**c**] = East Asian crisis; [**d**] = Russian default; and [**e**] = State of Minas Gerais' moratorium on its debts to the Federal Government.
- *Source*: BCDB (2012).

[13] The 'Real Plan' was implemented in three stages between March and July 1994. In so far as monetary policy was concerned, instruments and rules were devised to guarantee price stability. Quarterly quantitative goals were established for the monetary base to indicate the Government's intention of not utilising inflationary financing. To keep consumption to levels compatible with price stability, special attention was to be paid to credit expansion. New reserve requirements were imposed on the banking system, including those affecting additional demand deposit to 100%. A relatively fixed exchange-rate system was introduced, in which the Central Bank would intervene to avoid destabilising speculation with the new currency. Several measures were adopted which were aimed at attaining fiscal balance, such as the Federal Securities Debt Amortisation Fund. Furthermore, the system of guarantees and endorsements granted by the national treasury was to be discontinued.

However, as growth accelerated initially at such speed, the balance of payments deteriorated rapidly. Furthermore, soon afterwards the 'Tequila effect', which followed the Mexican crisis of December 1994, began to bite and the Central Bank panicked — an attitude that would become its trademark between then and the 1999 crisis. As a result, the government curtailed aggregate demand so hastily (see Figure 2) that the annualised growth-rate of the economy fell by nearly *12 percentage points* between then (first quarter of 1995) and the first one in 1996. Following this contraction, monetary and fiscal conditions had to be eased, and growth began to recover again in the second quarter of 1996. However, it was then the turn of the East Asian crisis to hit the Brazilian economy, and the Central bank over-reacted again to such an extent, that the base rates doubled to an annualised rate of more than 40%. Not surprisingly, with this degree of monetary policy-tightening growth fell once more. This fall accelerated in 1998 as a result of a new jump of base rates to (again) an annualised rate of about 40%, following the repercussions of the Russian default. Finally, when the newly-elected Minas Gerais State Governor (former President Itamar Franco) declared a moratorium on the State debts to the Federal Government (of about US$ 15 billion) at the turn of the year (a measure that got the support of the Governors of Rio de Janeiro and Rio Grande do Sul), the Central Bank reacted in the only way it seemed to know: by bringing back, yet again, its base rate to an annualised rate of about 40%. However, by then, no monetary policy could do the trick, no matter how tough it was, and the political crisis that followed brought Brazil into its January 1999 financial crisis (see Figure 2).

FIGURE 2



- [**a**] = Interest rate increase following the Mexican crisis; [**b**] = following the East Asian crisis; [**c**] = following the Russian default; and [**d**] = following the State of Minas Gerais' moratorium on its debts to the Federal Government.
- *Source*: BCDB (2012).

With this crisis it became evident, once again, that no matter how large the levels of reserves may be, and no matter how high the levels of interest rates, they can never be large enough and high enough to withstand a sudden collapse in confidence and withdrawal of funds by restless international fund managers in an economy with a fully liberalised capital account. Unless, of course, the government is prepared to use capital controls on inwards and/or outwards flows — but as President Cardoso remarked, "[w]e will never use capital controls: we want to be a First-World nation."[14] This reminds us of Stiglitz comments: "Globalization opened up opportunities to find new people to exploit their ignorance. And we found them" (see epigraphs at the beginning of the paper).

By the end of the year, the Central Bank had acknowledged the loss of half its reserves and had a substantial proportion of those left committed in forward operations to support the *real*. Therefore, the government had little option but to devalue. By then it had become rather obvious that a monetary policy that reacts to external shocks in this exuberant way almost inevitably leads to an interest rate 'trap' (Lopes, 2009), further banking sector fragilities, and to an unsustainable public sector 'Ponzi' finance. Furthermore, the President of the Central Bank (Gustavo Franco) — and later his successor (Chico Lopes) too — had to resign in the midst of alleged mismanagement and corruption scandals.[15] To calm the markets Cardoso appointed Arminio Fraga (Soros' right-hand man) to the Presidency of the Bank. Almost immediately, he abandoned the policies of 'exuberant monetarism' that had characterised monetary policy since the beginning of the 'Real Plan' for one mostly aimed at maintaining the stability of the exchange rate. This new policy, however, did not last long, and after a relatively short spell, the ideological 'gravity-pull' of the time led the Brazilian Central Bank to switch its strategy from the aiming at the stability of the exchange rate to a traditional one of inflation-targeting.

The crucial ideological point regarding monetary policy to understand here is that these were post 1992 'UK-ERM-crisis' times, when 'collective memories' (and 'second-generation' models of financial crises) were directing *all* the blame for financial crises toward central banks' trepidation in relation to interest-rate hikes. That is, the post-1992 political economy scenario was characterised by the strong belief that financial crises were the *exclusive* territory of feeble central bankers/finance ministers — for example, in the case of the United Kingdom, Norman Lamont's imperfect commitment to a currency peg. The uniqueness of the Brazilian political economy scenario is that it was the only country of those studied here that followed this post-1992 "macho-monetarism" macro ("one should not be afraid to do what it takes"-type of thinking in terms of interest rates). Furthermore, this type of exuberant monetary policy left a much longer-lasting effect in Brazil than anywhere else in the world where it was applied — in fact, with other factors, it generated a path-dependent dynamic that still lasts today, leading Brazil to the highest interest rates spreads in the world in the formal financial markets.[16]

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[14] Even a recent paper by the IMF concluded that: "Capital controls are an important part of the policy toolkit for managing surges in capital inflows [...]" Ostry, Ghosh, Habermeier, Chamon, Qureshi, Reinhardt (2011),

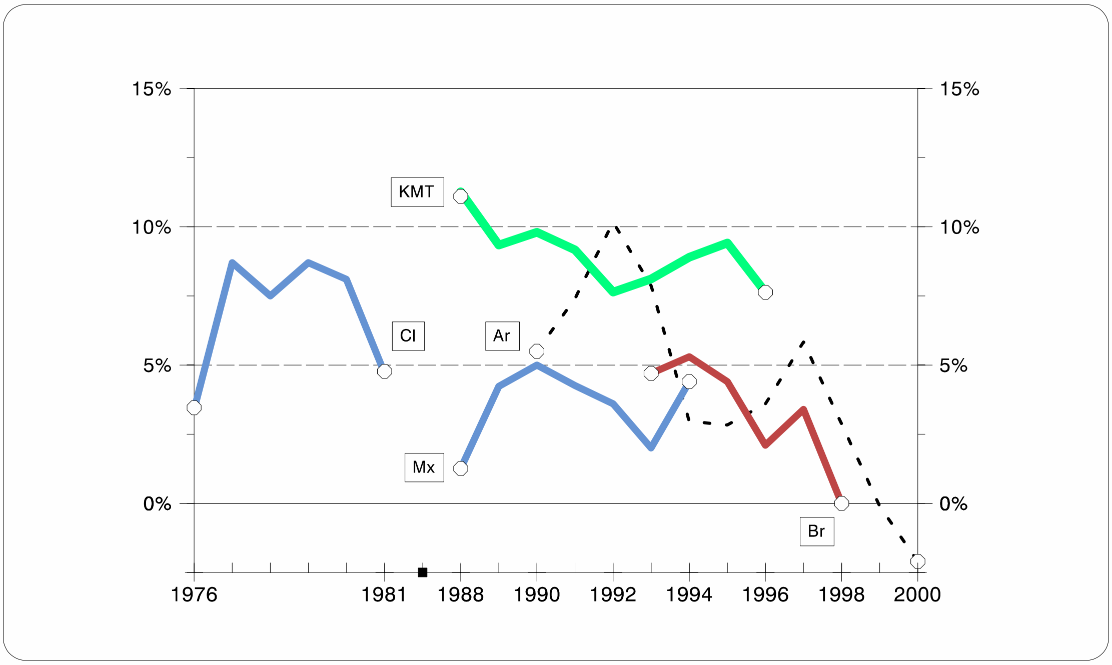
[15] Gustavo Franco had to resign almost immediately after receiving the prize "Central Banker of the year, 1998", presented by Euromoney.

[16] For example, a recent study by Brazil's "Fecomercio" indicated that the interest rate on credit cards in Brazil's financial hub, Sao Paulo, averaged 238% p.a. (see http://finance.yahoo.com/news/Creditcard-debt-may-threaten-apf-3046211331.html?x=0). And HSBC's rate reached the staggering level of 490% (http://blogs.ft.com/beyond-brics/2012/09/27/the-battle-of-brazilian-interest-rates/). With such 'lightly-touched' (or 'friendly-touched') financial regulation and lack of enforcement of competition policy (that allows this type of absurd interest rates), no wonder the Brazilian 'new left' is so often paraded in international financial markets as an example of moderation and soundness.

As a result of this 'tough' monetarist reaction to external and internal shocks, a peculiarity of the Brazilian January 1999 crisis is that the growth rate of the economy was brought down well before the financial crisis. In fact, (with the partial exception of Argentina) this crisis is unique among those in LA and East Asia during the 1990s not only in that it took place during a period of recession, but also in that growth actually picked up almost immediately after the crisis — in 1999, Brazil posted an overall small positive growth figure for the whole year (0.8%). In the other crises the opposite was the case — see Figure 3.

FIGURE 3

LATIN AMERICA and EAST ASIA: annual real rate of growth between the beginning of financial liberalization and respective financial crisis



- [**Cl**] = Chile; [**Mx**] = Mexico; [**Ar**] = Argentina (for presentational purposes, data for this country is shown as a 3-year moving average); [**Br**] = Brazil; and [**KMT**] = average of Korea, Malaysia and Thailand.[17]
- *Source*: World Bank (2012a).

In LA, in the year before their respective financial crisis, Chile was growing at 4.7% (1981) and Mexico at 4.5% (1994); this was also true of Argentina before its first crisis (the 'Tequila' one), when its economy grew at 5.8 % (1994). And in East Asia, Korea did so at 7% (1996), Malaysia at 10% and Thailand at 5.9%. In all these countries output fell massively only after their financial crises, while in Brazil it was the other way round.[18]

As will be discussed below in detail, the continuous external shocks and the monetarist overreaction — and the resulting downward growth trajectory — are directly associated with the other peculiarities of Brazil's experiment with economic reform and liberalisation, especially with its much higher interest rates, its growing

[17] Throughout the paper, averages of ratios are always harmonic means (more appropriate for the mean of ratios).

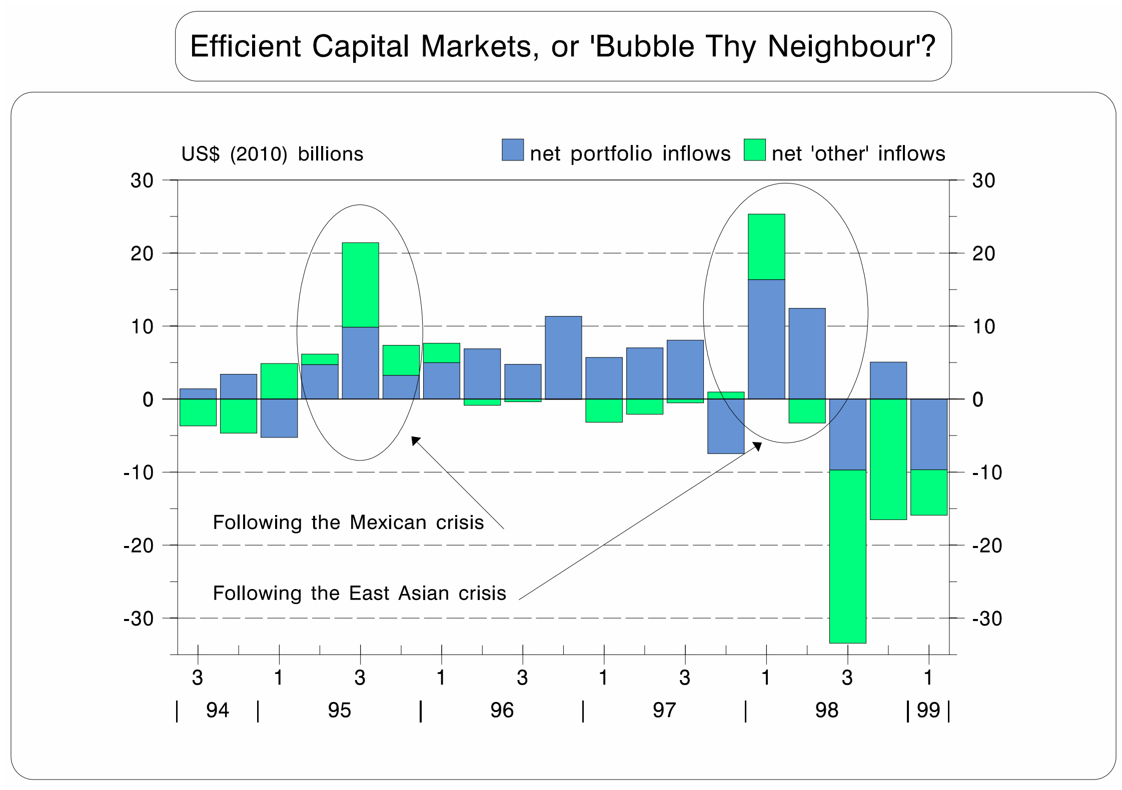
[18] In Argentina's 2001 case, output was also falling before the crisis (-0.8% in 2000), but it took until 2003 for its GDP to post a positive rate again (after a major collapse in-between).

public sector deficit and, in particular, its public sector 'Ponzi' finance.

As mentioned above, the main peculiarity of the 'Real Plan' is that it was implemented during a period in which Brazil had experienced three major external shocks, which had severe implications for its external accounts (and fiscal position). As a direct result of the 'Tequila effect' that followed the sudden devaluation of the Mexican peso, in Brazil (not surprisingly) the first quarter of 1995 saw a US$ 5.3 billion net outflow of portfolio funds (in 2010-US$; from now on US*). The figure for the same quarter in 1994 had been a net inflow of US$* 6 billion. Also, the stock exchange suffered a significant fall (see Figure 11 below). Foreign reserves also fell by US$* 10 billion in early 1995.

However, following a most remarkable financial twist, not only these trends did not last long, but almost immediately (from the second quarter of 1995) — and despite the already evident growing financial fragilities of Brazil — there was a rapid return of private inflows following Clinton's US$* 70 billion 'Mexican rescue' package (or, rather, Clinton's package to rescue his "cuates" in the US financial community, whose guess on their Mexican exposure had been seriously wrong). Apparently, it was as if Brazil had suddenly become immune to the financial fragilities that had brought down Mexico; however, nothing could be further from the truth. And the same happened again three years later, this time after the East Asian 1997-finanial crisis and the respective IMF-led rescue package, when Brazil's growing financial fragilities were about to explode (see Figure 4).

FIGURE 4

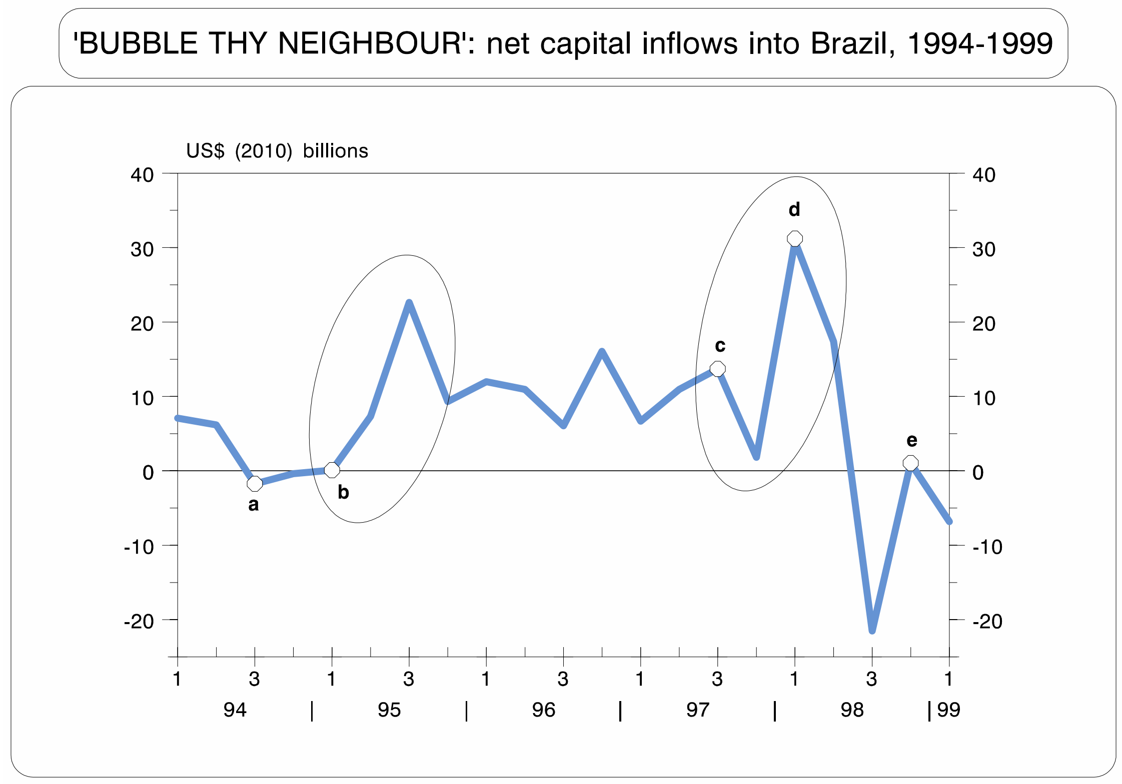


● *Sources*: ECLAC (2012; see this source for the definition of the three components of capital inflows, which are different from those of the World Bank above). **'other'** = 'other investment' (net). The figure excludes FDI.

Basically, the Mexican crisis, instead of highlighting Brazil's growing private and public financial fragilities (and the risks and uncertainties of financial liberalisation in middle-incomes countries in general), proved to be a remarkable 'magnet' attracting speculative flows into Brazil. Foreign investors (or rather, foreign speculators) that had just been rescued by Clinton in Mexico decided that (after having exhausted their capacity to profit from asset bubbles there) there was nothing more profitable than 'to bubble' another Latin American economy with their large funds — a rather transparent 'bubble thy neighbour'-type of sequential investment strategy (in part, as a spillover effect of Clinton's rescue package). And the same happened in Brazil in 1998, following the East Asian 1997-financial crisis, as a (rather perverse) spillover of the IMF-led rescue packages later in the year — especially immediately after the December US$* 72 billion rescue package for Korea.[19]

In fact, following Clinton's Mexican package, by the second quarter of 1995 net portfolio inflows into Brazil already increased to US$* 5 billion, and by the third quarter to US$* 10 billion — until then, the largest inflow of this kind in Brazilian financial history. And adding net FDI and 'other' inflows, the third quarter of 1995 posted a total net inflows of US$* 23 billion — again, an all time record. It would take another financial crisis somewhere else in the world (East Asia in 1997) for this record to be broken yet again — with the first quarter of 1998 posting net portfolio inflows of US$* 16.3 billion, and overall net inflows of US$* 31 billion (an all time record in both cases — see Figure 5).

FIGURE 5



- [**a**] = 'Plan Real'; [**b**] = Mexican crisis; [**c**] = East Asian crisis; [**d**] = Russian default; and [**e**] = State of Minas Gerais' moratorium on its debts to the Federal Government.
- *Sources*: ECLAC (2012; see this source for the definition of the three components of capital

[19] It is important to note that this spillover effect (following rescue-packages) is totally different from that identified by Forbes et.al. (2011); the latter resulted from investors switching their portfolio allocation *away* from a country that imposes a tax on foreign investors (as a form of capital control), and into countries that are unlikely to follow suit. The one I identify in Brazil at this time is about speculators switching their portfolio allocation *into* a country that still has 'bubble-potentials', following rescue packages from other financial crises (which have helped them exit economies in trouble — one that they have helped to create).

inflows, which are different from those of the World Bank above).

So, after the December 1997 IMF-led package Korea got all the conditionalities, and Brazil got most of the inflows.[20]

And these post-rescue-package-somewhere-else inflows — in their 'bubble thy neighbour' progression across the newly financially liberalised middle-income countries — were coming in this case into an economy that was already struggling in practically every front. In fact, its own major financial crisis was just round the corner (a crisis that had been predicted well before the Russian default — see Palma, 1998). In fact, as Figure 4 indicated above, already by the third quarter of 1989 the post-Korea-rescue-package inflow-stampede had turned into an even larger outflow-stampede, following the Russian default, with a net exit of portfolio and 'other' funds reaching (yet again) an all time record of US$* 34 billions.[21] And Figure 5 shows that overall net inflows (including FDI) switched from a positive figure of US$* 31 billion in the first quarter of 1988, to a negative one of US$* 22 billion in the third quarter of that year — another record for Brazil (as well as probably another record for the successive numbers of records).

This exemplifies the difficulties confronted by economic authorities in the implementation of whatever macro-policies they choose to follow when they voluntarily operate with a fully liberalised capital account; in a world of high degree of 'contagion'; ever growing asymmetric information (especially due to the lack of local knowledge by information-challenged foreign speculators, a situation that makes them even more prone to oscillate from manias to panics); all leading to highly volatile flows — that like to profit from artificially created bubbles and moral hazards, following financial

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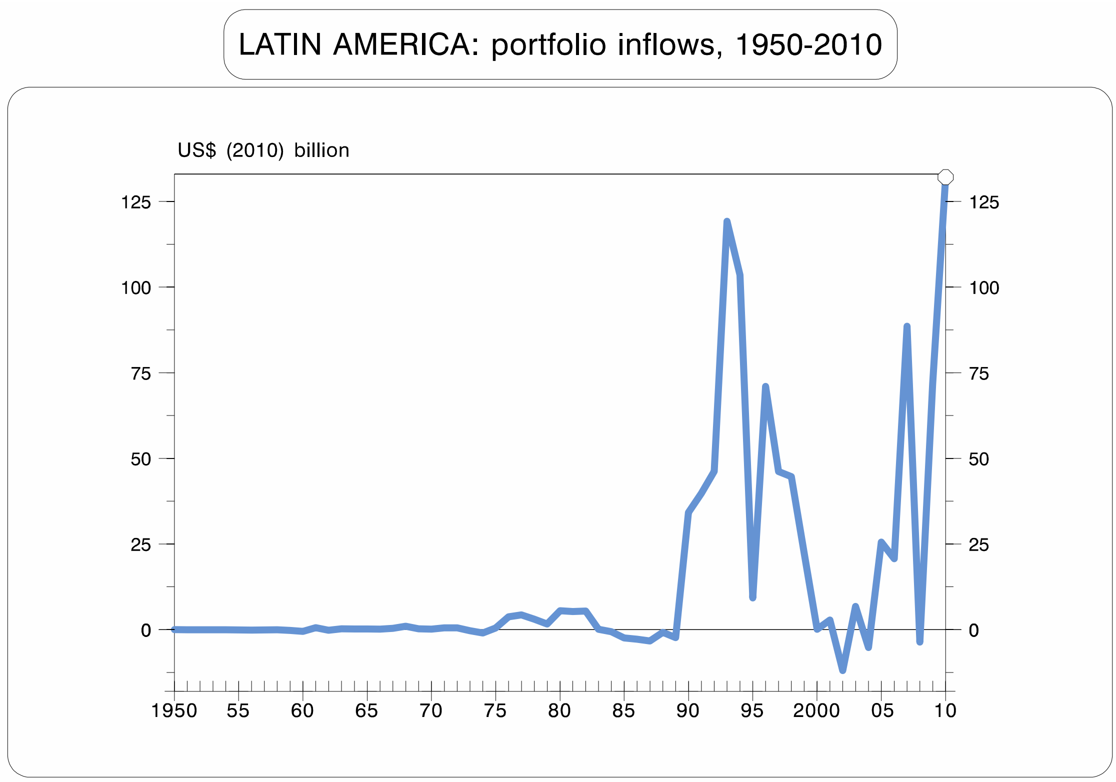
[20] This IMF-led rescue package for Korea took some time to be negotiated as the IMF attached a long list of totally unrelated political and ideological conditions, such as Korea having to agree i) to abolish nearly all restrictions on foreign investments in its financial markets and banking sector (foreign banks and brokerage houses could establish full operations from March 1998); ii) to allow foreign investors to acquire up to 55% of listed companies from 30 December, and up to 100% by the end of 1998 (one months previously, the IMF had asked, and Korea had agreed, on a maximum limit of 55% by end-1998; before the IMF deal, the shareholding limit for foreign individuals was 7% in a specific Korean company stock, while the combined foreign shareholding limit was 26% in a stock); iii) to open up the bond market fully by the end of 1998; iv) to repeal its interest rate ceiling of 40% in two months; v) to reform labour laws in order to permit (among other things) the sacking of workers in corporate takeovers; and vi) to allow Japanese products greater access to its market (previously, imports of Japanese goods had been restricted because of Japan's large trade surplus with South Korea). How any of these issues had been related to the actual 1997 crisis (let alone caused it) is still a mystery. See, for example, http://www.twnside.org.sg/title/cont-cn.htm.

[21] Following the East Asian crisis, the price of oil and non-ferrous metals plummeted, hitting the Russian economy badly; on 13 July 1998, a US$23 billion IMF/World Bank emergency package was approved 'to support reforms' and stabilise the rubble; as it happened, it was later revealed that probably as much as US$10 billion of this fund was stolen upon its arrival in Russia (http://web.archive.org/web/20101107164507/http://www.worldbank.org/html/prddr/trans/julaug99/pgs11-13.htm). The political and economic crisis that followed the deterioration of the external accounts ended up in a government default and devaluation of the rubble (17 August). The sequence of events (probably inspired by a Mexican soap) started on 23 March 1998, when Boris Yeltsin suddenly dismissed Prime Minister Viktor Chernomyrdin and his entire cabinet, and named a 35-year-old political novice (Sergei Kiriyenko) as acting prime minister. From January to August of that year, the stock market lost more than three-quarters of its value. At the height of the crisis, just two weeks before the default, Yeltsin appointed another relatively political novice, a former KGB Lieutenant Colonel, as Chief of the Federal Security Service, the main successor-agency to the KGB — one Vladimir Putin. The rest, as they say, is history.

markets' new-style 'bubble thy neighbour' profit-maximisation strategy, made safe by the certainty that no matter how much damage they cause, life could continue ever more enjoyably as there was the guarantee that the Fed/IMF/World Bank would always be available at the other end of a 911 call. See Figure 6.

FIGURE 6



• ***Source***: ECLAC (2012; total portfolio inflows — debits).

The irony is that according to mainstream economic theory (and the Washington Consensus discourse), full integration into international capital markets should be highly beneficial to developing countries for a number of reasons, but especially because the integration should pool risk and provide countercyclical access to finance. Well, there's little evidence of that. In fact, Looking at LA's overall scenario since 1990, if I was asked to put forward the argument for capital controls as an effective mechanism for dealing with the problem of the volatility of inflows *at source*, figure 6 would be my "exhibit A."

Chile's and Colombia's experiences in the 1990s with controlling short-term capital flows via price controls, or Malaysia's short experiment with quantitative inflow-controls in 1994, seem to be among the few effective policy options open to policy-makers wishing to minimise this kind of instability but still operating with a relatively open capital account (see Palma, 2000b, and Ocampo and Palma, 2005).

In actual fact, even before the Russian devaluation (mid-1998), Brazil already needed to borrow at a higher interest rate than many other Latin American countries, while coping with reduced demand for its exports from Asia and Argentina; and its public-sector accounts were already totally out of control. Furthermore, 1998 was a year of presidential, state government, and municipal elections. Not surprisingly, little was done, especially in relation to sorting out the public accounts, with the political manoeuvres to negotiate the constitutional reform that would allow the President to run for a second term taking pride of place in government's concerns, and already being responsible for a long political stalemate regarding fiscal reforms and for a huge amount of subsidies to state governments and state banks — in particular those controlled by opposition parties whose support was needed to approve the constitutional reform (making Cardoso probably the most expensive 'ego' in Brazilian political history; see Appendix 1).

As usual, those mainstream analysts that so easily dismiss the irrationality of the surges of inflows into Brazil following other financial crisis as pure 'moral hazards' — the above mentioned near certainty in international financial markets that, as in every old Western, the cavalry, in the form of a vast international rescue operation, could be counted upon to arrive in the nick of time should the 'natives' threaten to default or close their capital account — forget to follow up their analysis and conclude that this only shows how easy it is, and how little it takes, to derail international and domestic financial markets completely. And, therefore, given that that is the nature of the world in which we live (and how small the chance that it will ever change is), it only probes how much developing countries need strong financial regulation and effective capital controls.

In fact, the real world could hardly be more different than the Paretian one assumed by the 'efficient capital market theory' — one in which there cannot be an *endogenous* gap between asset prices and fundamentals — let alone a bubble (even less a 'bubble thy neighbour' speculative progression). That is, in the 'efficient capital market' world, asset prices deserve a pedestal, and stock options are the most rational reward for good performance. The foundation of Fama's 'efficient market' world is the assumption that if financial markets get misaligned, they always 'self-correct'. Smart market players would simply force asset prices to become rational by doing exactly the opposite of what they do in real life: take the other side of trades if prices begin to develop a pattern (as this is bound to have no substance). In other words, for the efficient market theology a 'rational surfer' is not the one that has fun riding waves (including the 'bubble thy neighbour' progression), but the one that gets drowned trying to create undertows.

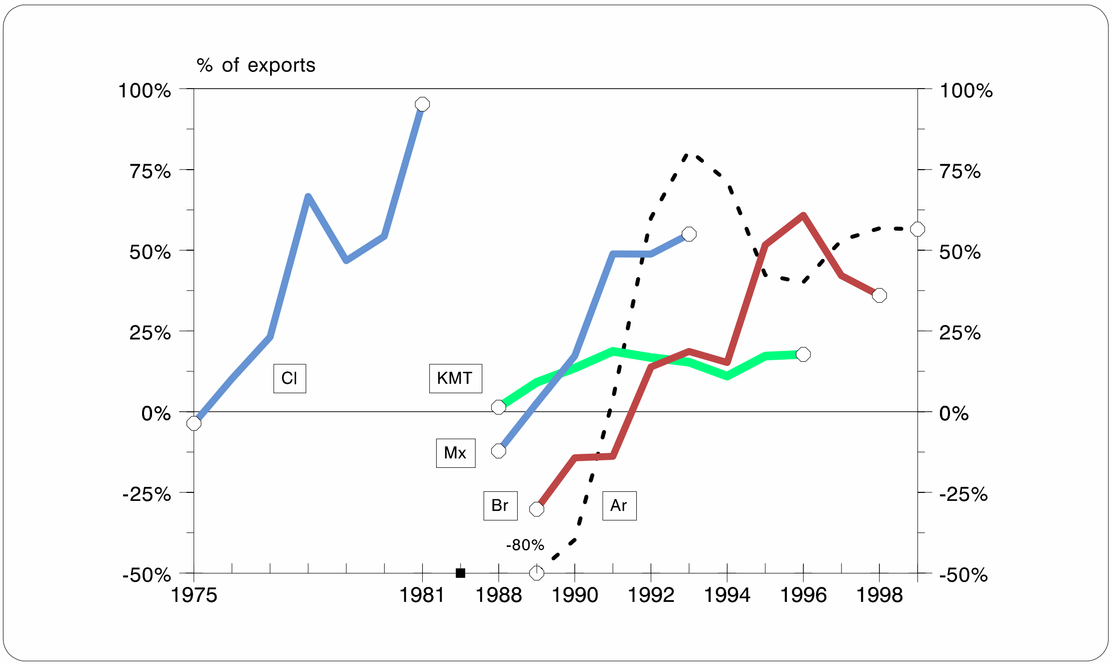
Probably there is no other area in economics where mainstream analysis idealises markets in such a surreal way. And this is the main theoretical foundation that has informed economic and financial policies in LA since the early 1990s — and in most cases it continues to do so today.

3.- How Brazil avoided becoming 'another Mexico'?

The Brazilian authorities opted to use extremely high interest rates not only to defend their stabilisation programme and exchange rate from the continuous external shocks which they were experiencing, but also in order to avoid the worst excesses that had characterised previous experiences of financial liberalisation and inflow-surges in LA (e.g., in Chile and Mexico). First, the Brazilian authorities had to face a reversal of fortune in their financial account as remarkable as those of other middle-income countries that opened their capital account at that time, particularly in LA and East Asia: between the year before the 'Collor Plan' and 1996 its balance switched from a deficit equivalent to 30% of exports, to a surplus equivalent to 60% of exports — see Figure 7).

FIGURE 7

LATIN AMERICA and EAST ASIA: financial account between the beginning of financial liberalization and respective financial crises



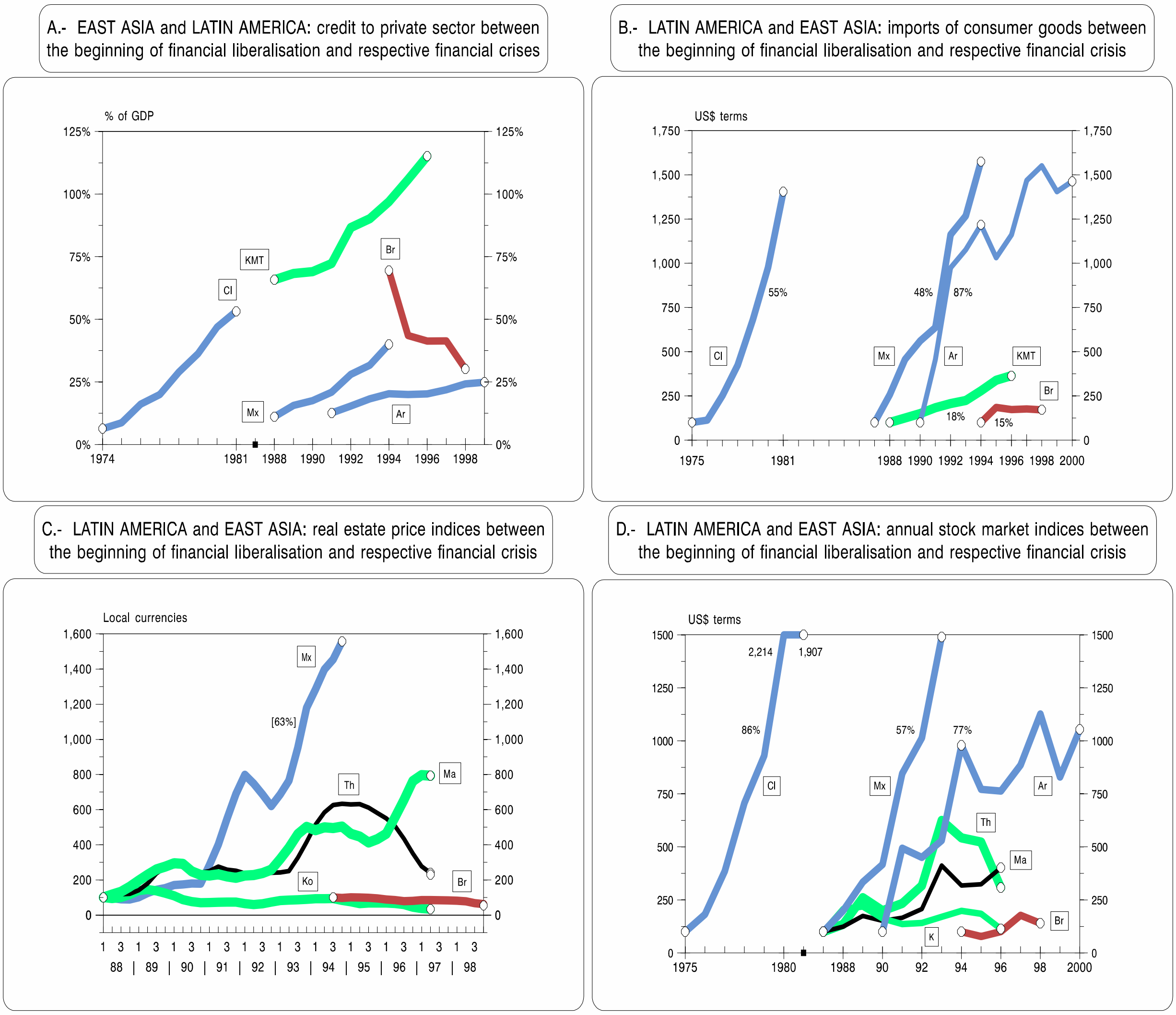
- [**Cl**] = Chile; [**Mx**] = Mexico; [**Ar**] = Argentina (data for this country is shown as a 3-year moving average); [**Br**] = Brazil; and [**KMT**] = average of Korea, Malaysia and Thailand.
- *Source*: World Bank (2012a).

The key issue was that similar surges of inflows had led to rather damaging Kindlebergian mania-type dynamics — mostly via credit expansion, consumption booms and asset bubbles (the result of increased liquidity, running away expectations, ineffective financial regulation, and pro-cyclical macros).[22] As a result, the Brazilian authorities — whose successful price stabilisation, and its financial liberalisation, coincided with the 1994 Mexican crisis — became determined to prevent such outcome. Therefore, second, with the helpful sterilisation of inflows, high interest rates and tight credit-regulation they made sure that the massive inflow of foreign capital would not end up being transformed into a credit boom for the private sector — as happened in other crisis-countries. Figure 8, panel A shows how successful Brazilian authorities were in preventing this credit-boom.[23]

[22] For an analysis of this cycle see Kindleberger (1996), and Palma (2000b).

[23] As discussed below (see, for example, footnote 35), an added problem of this credit boom in other crisis-countries was the growing balance-sheet fragilities that it created in the baking sector — the growing asymmetry between foreign-exchange-denominated liabilities, and local-currency-denominated assets. This asymmetry proved particularly toxic in Thailand.

FIGURE 8



• [**Cl**] = Chile; [**Mx**] = Mexico; [**Ar**] = Argentina; [**Br**] = Brazil; [**K**] = Korea; [**Ma**] = Malaysia; and [**Th**] = Thailand; and [**KMT**] = average of Korea, Malaysia and Thailand. The percentages shown in panels B, C and D are average *annual* growth-rates (in panel D, Chile's rate refers to 1975-1980, Mexico's between 1987 and 1993; and Argentina's to its pre-'Tequila'-crisis period (1990 and 1994). In panels B, C and D, base year = 100 in each case. In panel C, data for Thailand is shown as a 3-year moving average.

• *Sources*: Panel A, World Bank (2012a). Panel B, for LA, ECLAC (2012); and for East Asia, UN-Comtrade database (2012). Panel C, DataStream (2012) for Mexico and East Asia, and 'Jonas Lang LaSalle Index' for Brazil (personal communication); the Brazilian index is a mixture of a price-increase in Rio, price-stagnation in São Paulo and a price-fall in Brasilia. (There are no similar data for Chile or Argentina in the relevant periods; however, Chilean Central Bank statistics, though using a different methodology, gives evidence of an increase similar to that of Mexico — see Chile, 1988); and in panel D, DataStream (2012), and IFC (2006).

Third, high interest rates and a successful control of credit expansion, together with a more moderate policy of trade liberalisation, also succeeded in restraining a potential boom of imports of consumer goods — which so much characterised the other Latin contemporary experiments with financial and trade liberalisation, such as Chile (where imports of consumer goods grew at an average of 55% p.a. between its financial and trade liberalisation and its financial crisis), Mexico (48% p.a. in its respective period), and Argentina (87% p.a. in its pre-'Tequila'-crisis period). The irony, of course, is that in mainstream macroeconomic textbooks it is still taught today that one of the main benefits for a middle-income country of opening up the capital account is that it helps smooth consumption over time— see Figure 8, panel B).

Fourth, in Chile, Mexico, Argentina, Malaysia and Thailand there was also a boom in the construction sector. In these countries, large inflows, the liberalisation of domestic finance, almost unlimited access to credit, and low interest rates did set in motion a rather manic rise in real estate prices — with Mexico having this asset price growing at 63% p.a. between its financial liberalisation and its financial crisis (see Figure 8, panel C). In Brazil, instead, the successful control of credit expansion by tight credit regulation, and high interest rates (as well as a private and public banking crisis; see below) also avoided a Kuznets-type cycle led by the construction sector. In fact, in Brazil the stock price index for the construction sector actually fell in the four years between financial liberalisation and the January-1999 financial crisis — in Mexico it had been the best performing sector in the stock market before its 1994-crisis.

Finally, fifth, despite large inflows and a radical privatisation policy Brazil also avoided an asset bubble in the stock market that had characterised other Latin and some Asian experiments of the time — such as those in Chile, where the stock market grew 'tulip-mania' style (an average of 86% p.a. between financial liberalisation and financial crisis), Mexico (57% p.a.), and Argentina (77% p.a. pre-1995), as well as those in Malaysia and Thailand (see Figure 8, panel D).

Chile, Mexico, Argentina (as well as Thailand and Malaysia) are clear examples in which 'rational' stock market participants, instead of dutifully following "non-trending random walks", were quite happy to systematically profit from 'irrational' bubbles. The key point here is that these are clear cases of stock markets that are driven by buyers who take little notice of underlying values — i.e., markets in which investors have powerful incentives to interpret information in a biased fashion *in a systematic way*. Not surprisingly, under these circumstances there is a higher than normal likelihood of entirely self-made catastrophic events ("fat tails").

This not exactly what the 'efficient-market hypothesis' proponents had in mind when they asserted that in liberalised and friendly-regulated financial markets "prices at all times fully reflect all available information — public and private" (Fama, 1976). Basically, what was the 'information' in that led market players to increase stock prices by a factor of 22 in Chile in just five years, by a factor of 15 in Mexico in six years, or by a factor of 10 in Argentina in just four years? Or what was happening in Malaysia and Thailand, but not in Korea that led to such diverse asset prices?

Most likely, when students are still taught these days that smart market players are bound to force stock prices to become rational, LA is not in the syllabus — nor is the European periphery.[24]

In the case of Brazil, instead, full sterilisation of inflows, high interest rates and credit controls helped avoid a bubble in the stock markets; in fact, at the time, the only period in Brazil of rapid growth in stock-prices took place between the first quarter of 1996 and the second quarter of 1997, and was almost entirely led by just one sector (telecommunications). However, the East Asian crisis soon brought it to an end — see Figure 9.

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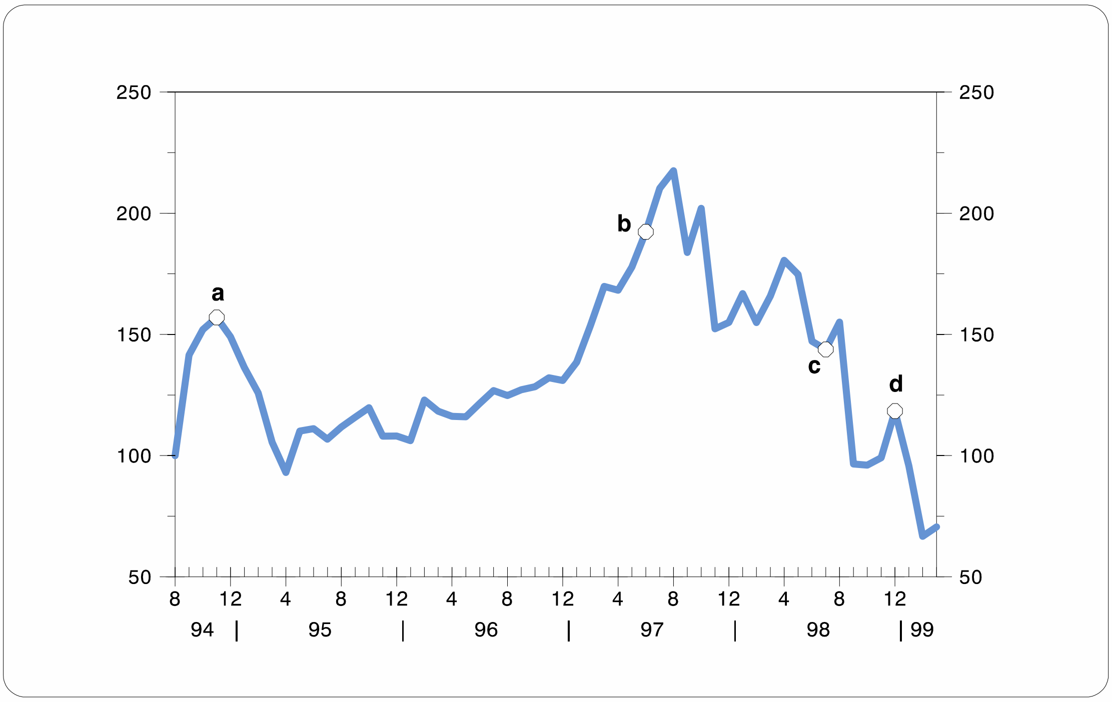
[24] During the five years that preceded the current global financial crisis, in Greece, Spain and Portugal the capitalisation of the stock market was grew in real terms twice as fast than in the UK, and faster than almost any other EU country — with average real annual rates of growth of 28%, 28%, and 23%, respectively (i.e., doubling every three years; see Palma, 2012a).

FIGURE 9

BRAZIL: stock exchange index, 1994-1999

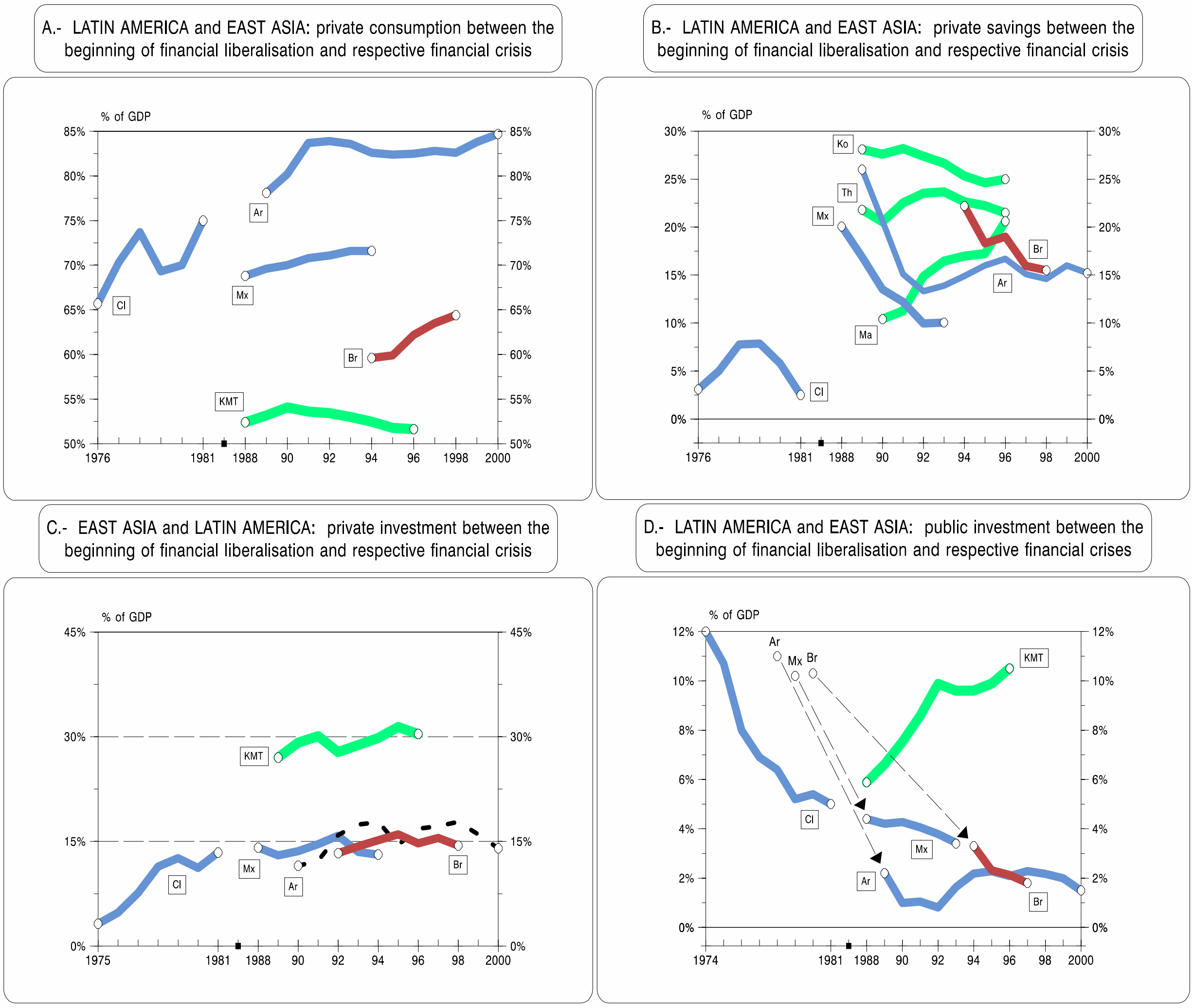


- [**a**] = Interest rate increase following the Mexican crisis; [**b**] = following the East Asian crisis; [**c**] = following the Russian default; and [**d**] = following the State of Minas Gerais' moratorium on its debts to the Federal Government.
- *Source*: BCDB (2012).

4.- However, helping Brazil to avoid becoming 'another Mexico' came at a huge cost

The particular way in which the Brazilian authorities chose to keep away from becoming 'another Mexico' (or 'another Chile'), though very successful in the crucial issue of avoiding a Kindlebergian-mania cycle, was not as successful in other fronts. First, as is often the case in LA (but not in Asia), an inflow surge of the magnitude of the one faced by Brazil during the 1990s (despite all the counterbalancing macro) is bound to increase the share of consumption in GDP; second, it is also bound to reduce that of savings; third, it is also bound to have little or no impact in private investment (despite booming FDI); and fourth, it is also bound to lead to a curtailment in public investment (in the case of Brazil at the time, mainly due to the need to compensate for the increase expenditure associated with full sterilisation of inflows, and with the policy of bad-debt-absorption and other subsidies to the private sector and State governments followed by the federal Government and Central Bank). See Figure 10.

FIGURE 10



- [**Cl**] = Chile; [**Mx**] = Mexico; [**Ar**] = Argentina; [**Br**] = Brazil; [**Ko**] = Korea; [**Ma**] = Malaysia; [**Th**] = Thailand; and [**KMT**] = average of Korea, Malaysia and Thailand. In panel D, the arrows show the decline in public expenditure in Argentina, Brazil and Mexico that had already taken place between c.1980 and the beginning of financial liberalisation. For the clarity of the graph, in panel B Chile's savings ratio is drawn as a 3-year moving average.
- *Sources*: World Bank (2012a); and IMF (2012a).

Regarding the first and second issues, despite all the promises of McKinnon and Shaw, in LA financial 'liberalisation' (and domestic financial de-regulation) brought overall consumption up (panel A), and domestic savings down (panel B). Furthermore, regarding the third issue above, it only managed to keep private investment at about its meagre historical level, despite practically unlimited access to external finance, record levels of FDI, and significant amounts of BNDS-subsidised domestic finance for industry (panel C). finally, it led to a further decline in public investment (panel D) — which had already experienced savage cuts since 1980.

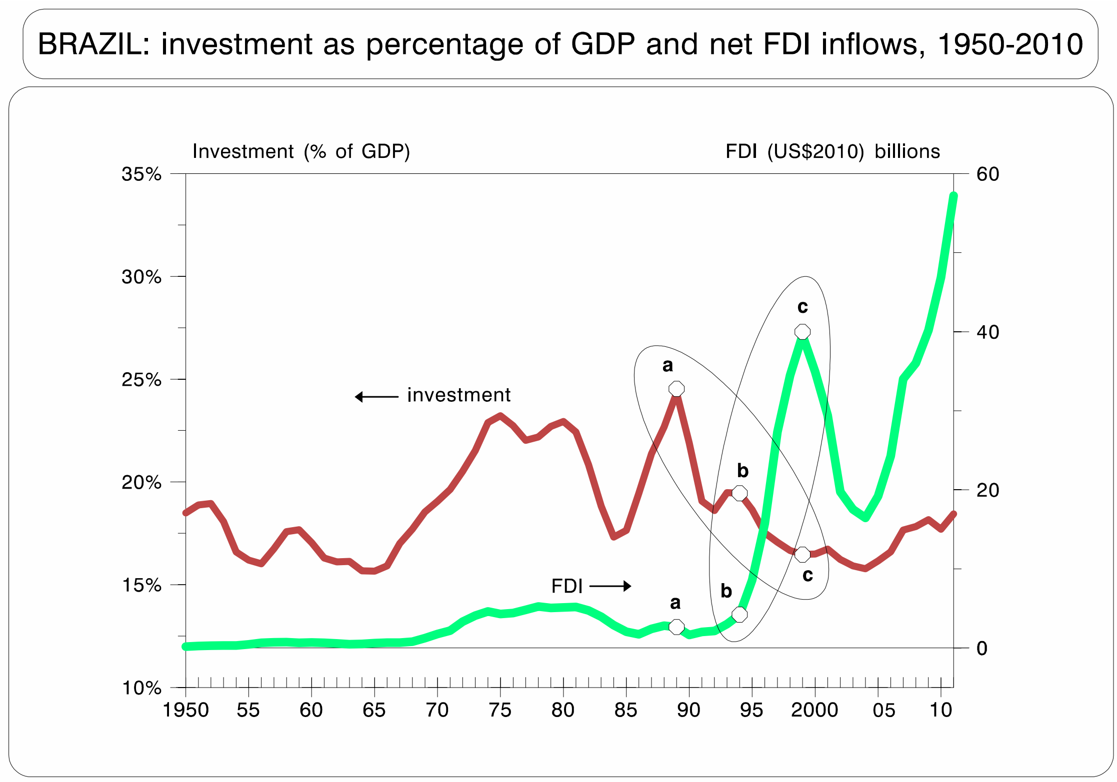
Thus, in Brazil between financial liberalisation and the 1999-financial crisis the share of consumption in GDP grew from 59% of GDP (1994) to 64.4% (1998); private savings fell from 20.3% of GDP in 1994 to 15.2% in 1998;[25] private investment

[25] The collapse of savings in LA after financial liberalisation is also definitely not the 'Promised Land' of McKinnon and Shaw — who (misinterpreting Schumpeter) famously declared in 1973

remained relatively stable around 15% of GDP; and public investment — which had already collapsed from 10.3% of GDP in 1979 to just 3.3% in 1994 — fell yet again, to reach just a trivial 1.8% of GDP (1997).

From the perspective of these variables, what is still most intriguing is what is shown in panel C: why is it that every time private investment in Brazil (or in the rest of LA) manages to raise above 15% of GDP its capitalist élite starts experiencing feelings of vertigo? Some of the most remarkable peculiarities of this variable at the time are highlighted in Figures 11 and 12.

FIGURE 11



• [**a**] = year of the 'Brady bonds' agreement that helped convert unwanted US bank loans to Latin American countries into a variety of new bonds; at the same time this agreement marked the beginning of economic reform and financial liberalisation in most countries in the region; [**b**] = 'Plan Real'; and [**c**] = financial crisis. 3-year moving averages.

• Source: ECLAC (2012); and World Bank (2012a). Investment rate in constant US$ 2000 prices.

Few would have predicted at the time of the Brady-bonds agreement (1989) that a quick return of inflows (marking the end of the 1980s 'debt-crisis'), especially of FDI, would be associated in Brazil with a collapse of investment of the magnitude shown in Figure 11. That is, while FDI jumped from US$* 1.8 to US$* 41.3 billion (1989-1998), investment as a share of GDP fell by ten percentage points of GDP (from 26.9% to 16.9%, respectively). One thing is for FDI not to have the 'Midas-touch' predicted (rather optimistically) by Pedro Malan in 1994;[26] another is to have an apparent strong

that in developing countries the main constraint on savings was financial 'repression': in their respective periods between financial liberalisation and financial crises, gross domestic savings as a share of GDP fell in all four Latin American countries.

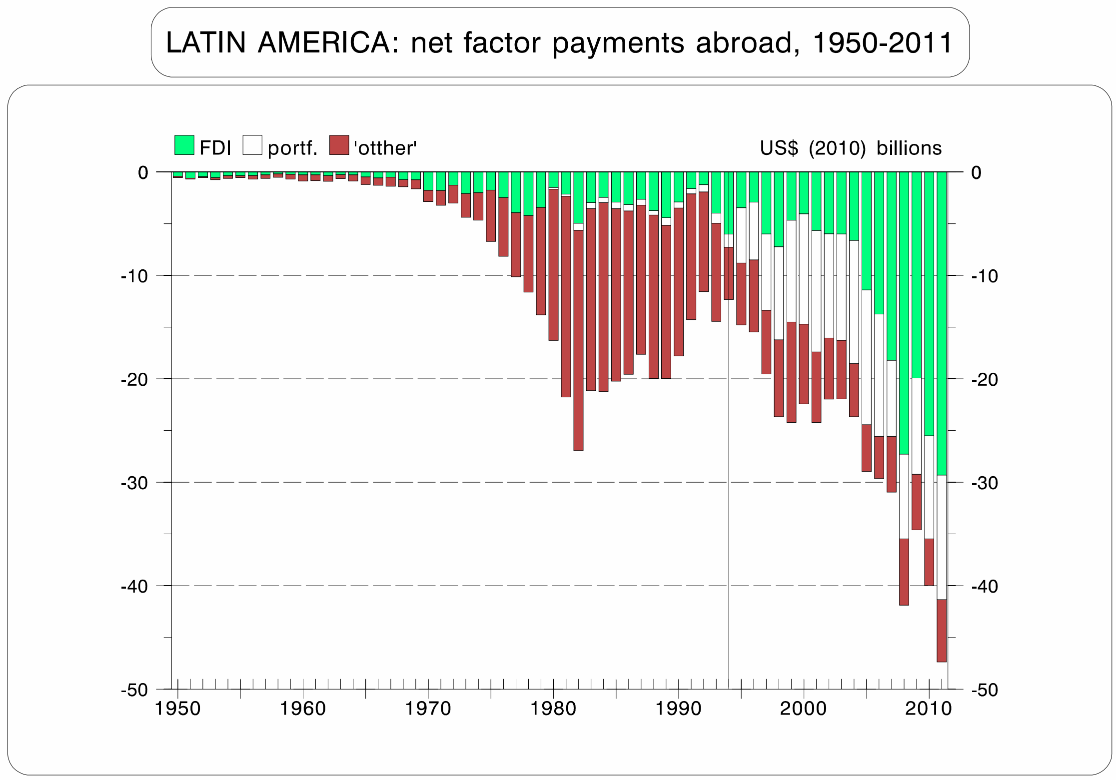
[26] For his views on exchange rate and FDI, see above in the Introduction.

'*anti*-Midas-touch' vis-à-vis investment for the whole first decade of economic reform (the 1990s), and then an almost unnoticeable mild positive one during the 2000s.

So the usual argument that one of the main reasons why LA needs capital inflows is because its many investment opportunities are constrained by finance is shown to be rather hollow. It is not that in LA lacks investment opportunities (e.g., those associated with forward and backward linkages of commodity production); the issue that still needs a more elaborate answer is why is it that neither domestic nor foreign capital shows much interest in taking advantage of them? And, again, post-reform LA has shown little support for the mainstream argument that says that all that is required for the happy union between these investment opportunities and foreign finance are 'prices right' and 'institutions right'. The experience of EA shows that effective trade and industrial policies, pro-growth macros, and so on — in order to get an structure of relative prices that would help transfer resources towards activities with more long-term potentials of productivity growth —, and a state capable of some 'disciplining' of the capitalist élite — so that they would take up those opportunities —, are probably more relevant.

And 'Midas-touch' or not, FDI and other inflows are certainly not a free-lunch. As Figure 12 indicates, net factor payments abroad began to grow at quite a remarkable pace after the 'Real Plan' in 1994 — first, they doubled between financial liberalisation and financial crisis (from US$* 12.5 billion in 1994 to US$* 24 billion in 1998), to then double again between 1998 and 2011 (to US$* 47 billion).

FIGURE 12



• Source: ECLAC (2012).

In all, between 1990 and 2011 in Brazil the aggregate balance of the financial account reached US$* 654 billion; but as the aggregate balance of the 'net factor payments abroad' reached US$* 534, the 'net transfer of resources' during this 21-year period amounted to a rather modest US$* 120 billion. If one takes into account that just in

2011 the trade-deficit in manufacturing amounted to US$50 billion, the overall 'net transfer of resources' during this 21-year period does not seem to be a large figure.[27]

Returning to investment (FDI or not), while investment-rates in China, India and many other Asian economies during the long period shown in the graph are stationary around a positive trend (see Figure 13; they are also positively correlated with FDI), Brazil's rate is stationary around an intercept of just under 20% of GDP (the same is true for LA's average investment rate; see Figure 11 in Palma, 2012b).[28] That is, in LA, despite the huge share of national income appropriated by the top earners (among the highest in the world — see Palma, 2011); the well-defined and enforced property-rights; the many 'pro-market' reforms aiming at incentivising investment (as many as any in Washington Consensus could have wished for); and the tsunami of FDI (nearly half a trillion *dollars* in Brazil alone between the Brady bonds agreement and 2011;[29] about US$* 2 trillions for the region as a whole in net terms), investment rates in Brazil (and LA in general) after economic reform and financial liberalisation (c. 1990) are poor even for the unremarkable historical record of the region. Perhaps one has to try hard to achieve such a poor performance as the one shown in Figure 11!

It seems fairly obvious that LA's capitalist élite has a preference for both sumptuous consumption, and for accumulation via mobile assets (financial ones and capital flight) rather than via 'fixed' capital formation.[30] And neo-liberal reforms, instead of helping reverse this phenomenon, have reinforced it by its vast process of financialisation.[31] What Figure 11 (together with the evidence shown in Figures 13 below) really indicates is that in Brazil — and LA in general — economic reform and financial liberalisation seem to have unleashed more powerfully the predatory and rentier instincts of the region's capitalist élites (the former especially during the privatisation period, and the latter during their financialisation one) rather than their Schumpeterian ones.[32] In many Asian countries, meanwhile, reforms, especially partial financial liberalisation, may have brought complex challenges to the 'macro' and the inevitable financial fragilities (as well as the huge human cost of 'flexible' labour markets, increased inequalities and uncertainties, and so on), but at least in these countries the rate of accumulation increased *after* their implementation. In LA, meanwhile, the cloud did not have even that silver lining — see Figure 13.

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[27] In terms of FDI, between 1990 and 2011 Brazil received net inflows equivalent to US$* 428 billion; but as profit repatriation reached US$* 237, the difference between the two is, again, not a large figure for such a long period of time. Given their little positive impact of overall investment, and the huge outflows of profit repatriation, FDI does not seem to be the 'Mother Teresa' of inflows...

[28] Due to space constraints, some statistics are not reported here; see Palma (2010). In the case of India, the investment-rate is stationary around a positive trend only until 2003 (due to India's investment surge after that date — see Figure 13 below). It is important to note that as investment rates cannot grow forever (certainly not above 100%), they can only be stationary around a positive trend for a specific period of time (see Figure 14 below for the case of Korea).

[29] The Brazilian government kept changing the legislation regulating foreign investment in order to facilitate their operations, as well as kept opening up sectors to FDI; in 1996, for example, it ended state monopolies in the petroleum and telecommunications sectors, and kept privatising other public assets (particularly in the electricity sector). In that year, foreign direct investment more than trebled, to US$* 16 billion.

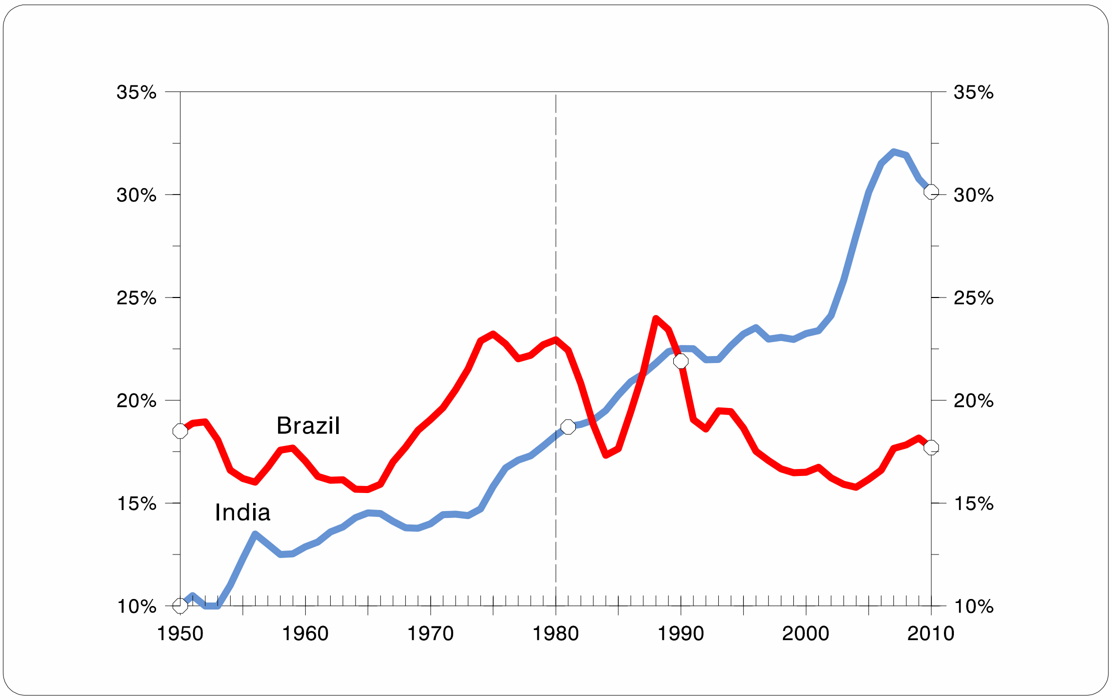
[30] At least easy access to mobile assets helps oligarchies become more democratic (see especially Boix, 2003).

[31] 'Financialisation' is the rise in size and dominance of the financial sector relative to the non-financial sector, as well as the diversification towards financial activities in non-financial corporations.

[32] For the Russian-style predatory process of privatisation in LA, see, for example, Mönckeberg (2001); Wolf (2007); and Winter (2007).

FIGURE 13

Brazil vs India: investment as a percentage of GDP



- White circles in the middle indicate the beginning of economic reform (for India, 1981 — early stages of Indira Gandhi's fourth [and last] term in office; for Brazil, 1990 — beginning of Collor's 'New Brazil' Plan). 3-year moving averages.
- *Sources*: World Bark (2012a). For India before 1960, http://mospi.gov.in/; for Brazil before 1970, ECLAC (2012).

So, not much evidence in LA of the supposed revitalising effects of 'financial-deepening' on investment and productivity growth promised by those circling around the Washington Consensus. Even the slight increase in investment in Brazil during the surprisingly positive environment after 9/11 (particularly in terms of access to finance and terms of trade) is unremarkable.[33] Basically, in LA between 2002 and (pre-global financial crisis) 2007 while the ratio of the stock of financial assets to GDP jumped from 106% to 182%, the average investment rate for the whole region only improved from 18% (2001) to 20.4% (2007; the latter ratio is similar to its historical average since 1970; see Palma, 2009b; and World Bank, 2012a). And in Brazil, while the capitalisation of the stock market grew in the five years between 9/11 and the beginning of the current global financial crisis at a staggering rate (57% p.a. in real dollar term; or by a factor of 10), private investment kept hovering below 15% of GDP (the harmonic mean for this period, at 14.4% of GDP, was low even for Brazilian unremarkable investment standards).[34] So, not surprisingly, in Brazil, the 'coefficient of financialisation' — the ratio of the stock of non-monetary financial assets to the stock of productive capital — increased from 7% at the beginning of economic reform (1991) to 40% in 2009 (See Bruno, 2010).

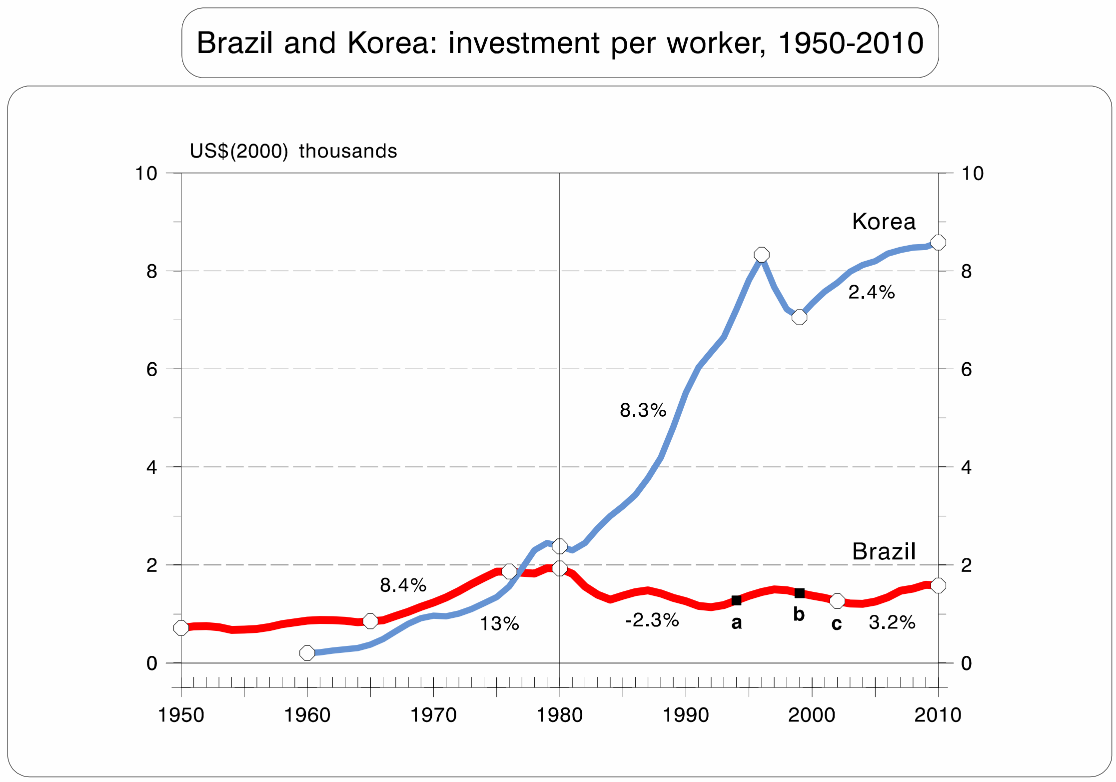
[33] From 17% in 2011, to 18.4% in 2010 in constant 2000-US$ terms, and 17.7% to 20.6% in current US$ terms. See ECLAC (2012), and World Bank (2012a).

[34] During this period, the corresponding averages for private investment in Korea, China, India and Vietnam were 23.5%, 24.6%, 21.7%, and 23.1%, respectively (see IMF, 2012a).

In essence, no theory of investment seems to be able to explain LA's stationarity-around-a-low-intercept behaviour, especially taking place during such a *long* period, such *diverse* domestic and international scenarios, and through such *divergent* development strategies (as those pre- and post-1980). Furthermore, in the very few cases in LA where investment actually increased after reforms, as in Chile (see Palma, 2010), it is not obvious why it took so long for it to happen (over ten years after the beginning of reforms), let alone why it ran out of steam so easily afterwards (post-1998).

Perhaps the most telling aspect of LA's remarkably poor investment record becomes evident in terms of levels of investment per worker — Figure 14.

FIGURE 14



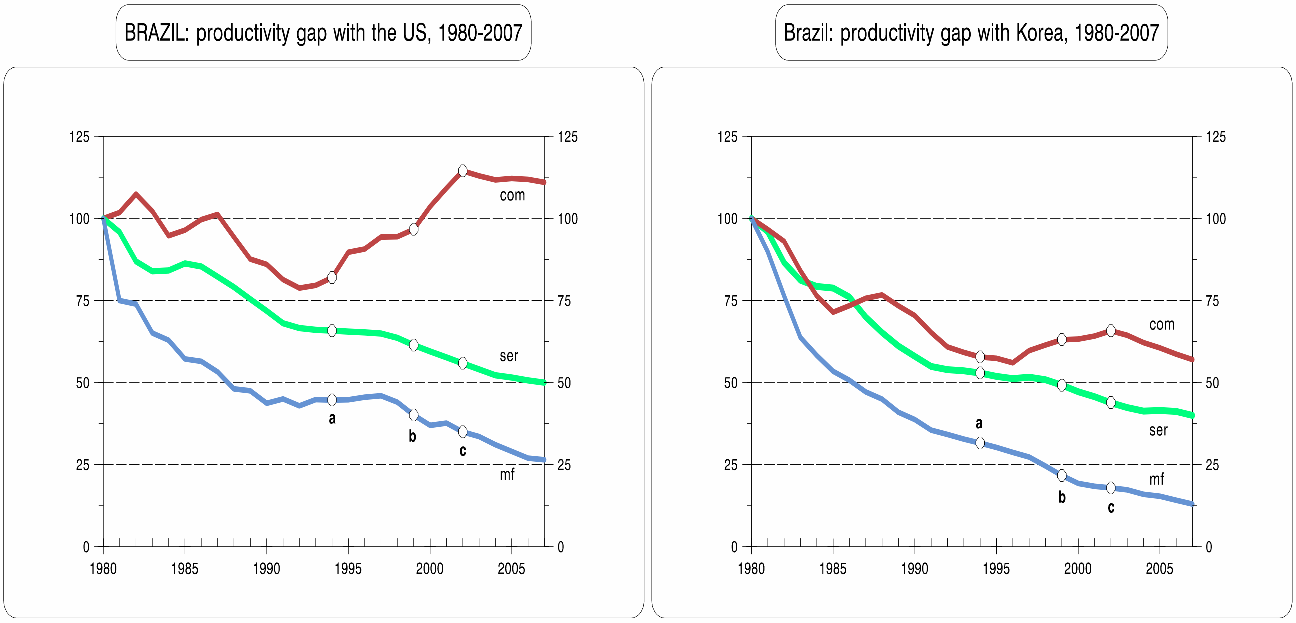
• [**a**] = 'Plan Real'; [**b**] = financial crisis; and [**c**] = election of President Lula da Silva. Percentages shown in the graph are growth rates in the respective periods: for Brazil, 1965-1976 (8.4%), 1980-2002 (-2.3%), and 2002-2010 (3.2%; the overall 1980-2010 period has a negative average growth rate of -0.7%); and for Korea, 1960-80 (13%), 1980-96 (8.3%), and (post-financial crisis) 1998-2010 (2.4%). 3-year moving averages.

• *Sources*: for investment, World Bank (2012a; Korea's data only available since 1960. Brazil's data available since 1970; for before 1970, ECALC, 2012 — all in constant US$2000). For employment, GGDC (2012).

No matter how much one knows about LA, it is still remarkable to learn that in Brazil (and despite the post-2003 recovery) by 2010 investment per worker was still *below* its 1980 level. On average, the rest of LA follows a pattern similar to Brazil's, with its 2010 level still below that of 1980. An extreme example is post-1980 Mexico: despite the highest level of FDI per worker in the world, by 2010 its investment per worker still had not recovered its 1980/1981 level. By then, and despite 1997, Korea had a level 4 times higher, and Malaysia and Thailand 2.5 times higher. In turn, China's 2010 level was more than 12 times higher; India's more than 5 times; and Vietnam had more than trebled this statistic since 1994 (first year that data are available).

Perhaps from this perspective the contrasting productivity growth performance of LA and many in Asia — and the inability of LA *to sustain* productivity growth in the few cases where it did manage to accelerate it in the post-reform period, including Brazil post-2004 (see Palma, 2010, and 2012b) — may not be that difficult to explain after all. The same may be true regarding the region's difficulties with 'catching-up' with the US and Korea; see Figure 15.

FIGURE 15



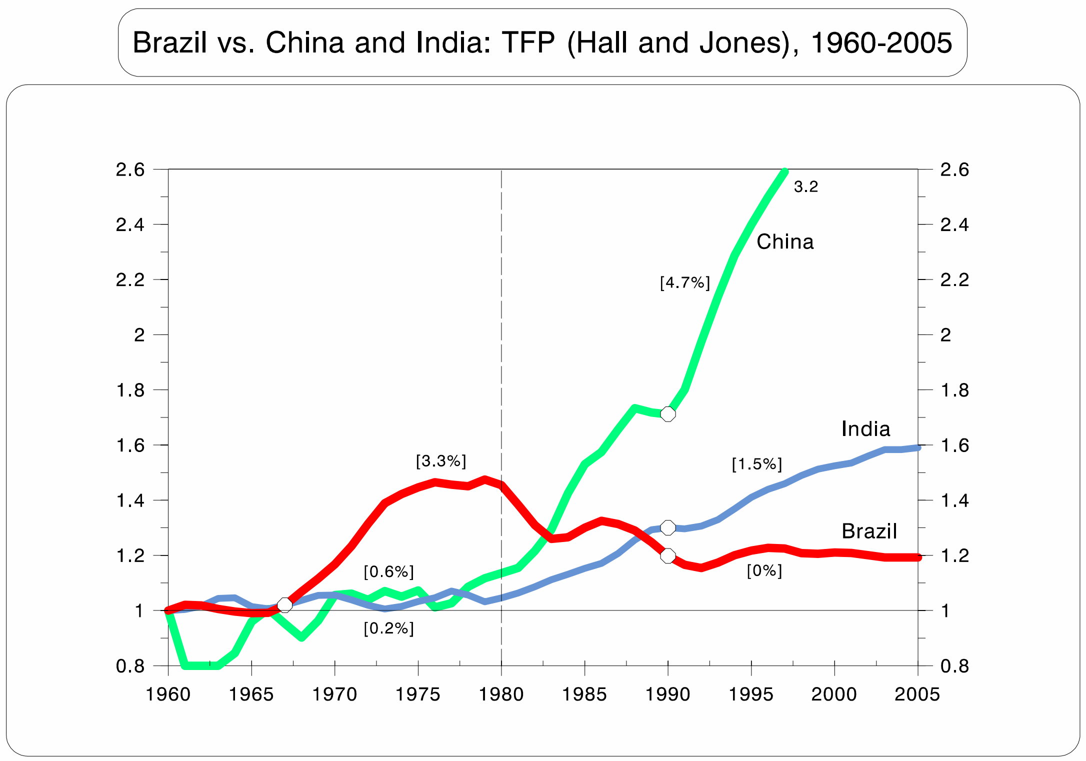
- **com** = commodities (primary sector); **mf** = manufacturing; and **serv** = services. [**a**] = 'Plan Real'; [**b**] = 1999-financial crisis; and [**c**] = election of President Lula da Silva. Each line is an index number (1950 = 100) of the ratio of labour productivities between Brazil and the US, and Brazil and Korea (each in real terms and domestic currencies). An increase implies Brazilian 'catching up' with the respective labour productivity in the US or Korea, and a decline a falling behind. 3-year moving averages (except for manufacturing vis-à-vis the US).
- Source: GGDC (2009; unfortunately, the source has not updated this databank).

The collapse of Brazil's productivity in manufacturing relative to the US or Korea's is truly remarkable. Regarding catching-up with the US (left-hand panel in Figure 15), only commodities did the trick; in fact, among commodities only minerals did so, as the productivity gap with the US vis-à-vis agricultural products actually increased (although by a narrow margin) during this period. And, again, Brazilian manufacturing gets the wooden spoon. Regarding this remarkable neglect of manufacturing in Brazil, as I argued elsewhere (Palma, 2005a, and 2008; see also Blankenburg and Khan, 2009), there is plenty of evidence — particularly from successful Asian countries — to suggest that as one gets closer to the productivity frontier, the need for industrial policy, instead of declining (let alone instead of disappearing, as so many mainstream economists have argued), actually *increases* exponentially. From this perspective, the sad irony is that LA abandoned industrial policy at the very moment it needed it most. And in Brazil, it beggars belief to think what would have happened to manufacturing had it not been for the significant contributions of BNDS.

The collapse of Brazil's productivity in manufacturing relative to Korea is beyond belief: since 1980, manufacturing productivity in Korea has already forged ahead of Brazil's by a factor of *7.5*. In other words, if in 1980 a group of (say) 5 workers produced (say) a car a day in both Brazil and Korea, by 2007 they produced in Korea seven times more cars than in Brazil. And the speed at which Brazilian manufacturing was falling behind Korea's actually accelerated after 1994.[35] And, supposedly, economic reform, financial liberalisation and financial de-regulation, 'flexible' labour markets, 'friendly' regulation, clearly defined and enforced property-rights over physical capital, all sort of incentives for FDI, 'horizontal' policies that would avoid 'picking winners', independent Central Banks that would only target inflation, 'sterilised governments' that would never follow expansionary fiscal policy (as this could cause interest rates to rise, thereby reducing private investment spending), wholesale privatisation and so on would make sure that this would not happen. So, countries (such as Brazil) that applied the Washington Consensus blueprint in full (even the small print) would get their 'prices and institutions right' — as opposed to countries, such as 'crony-capitalist'-Korea, which insist in having their prices and their institutions 'wrong'. In Brazil, instead, 'right' prices and institutions would ensure that they get their resources allocated in the most efficient way — a process that would maximise their TFP growth.

As it happened, TFP growth — at 2.2% p.a. in Brazil between 1960 and 1980 (3.3% in 1967-1980), one of the highest rates in the world[36] — could only managed to remain stagnant in the post-1990 reforms period — see Figure 16.

FIGURE 16



● 1960 = 1. Brazil's pre-1980 rate (3.3% p.a.) corresponds to the period 1967-1980 (2.2% for 1960-1980); China's and India's to 1960-1980. China's 2005 TFP-level was 3.2. Percentages shown in the right-hand side of the graph are TFP growth rates between 1990 and 2005 (i.e.,

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[35] In turn, during the same period (1980-2007) Mexico's manufacturing productivity had fallen behind Taiwan's by a factor of 3; Argentina's vis-à-vis India's by a factor of nearly 2 (and in services by one of 3.4); and Chile's vis-à-vis Malaysia's by a factor of 1.6 (and in services by one of 2.4). And regarding manufacturing in the US (probably not the most dynamic in the world), since 1980 manufacturing productivity in the US has forged ahead of Mexico's by a factor of 2.3; of Argentina's by a factor of 1.7; of Chile's by a factor of 1.6; and of Colombia by one of 2.4.

[36] During that period, the corresponding rate for Taiwan was 1.8%, Singapore 1.2%, Thailand 1.2%, Malaysia 1.1%, Korea 0.8%, China 0.6%, and India 0.2% (see Palma, 2010).

between the 'Collor Plan' [and the beginning of full-blown neo-liberal economic reform throughout LA] and the end of the available data). 3-year moving averages.

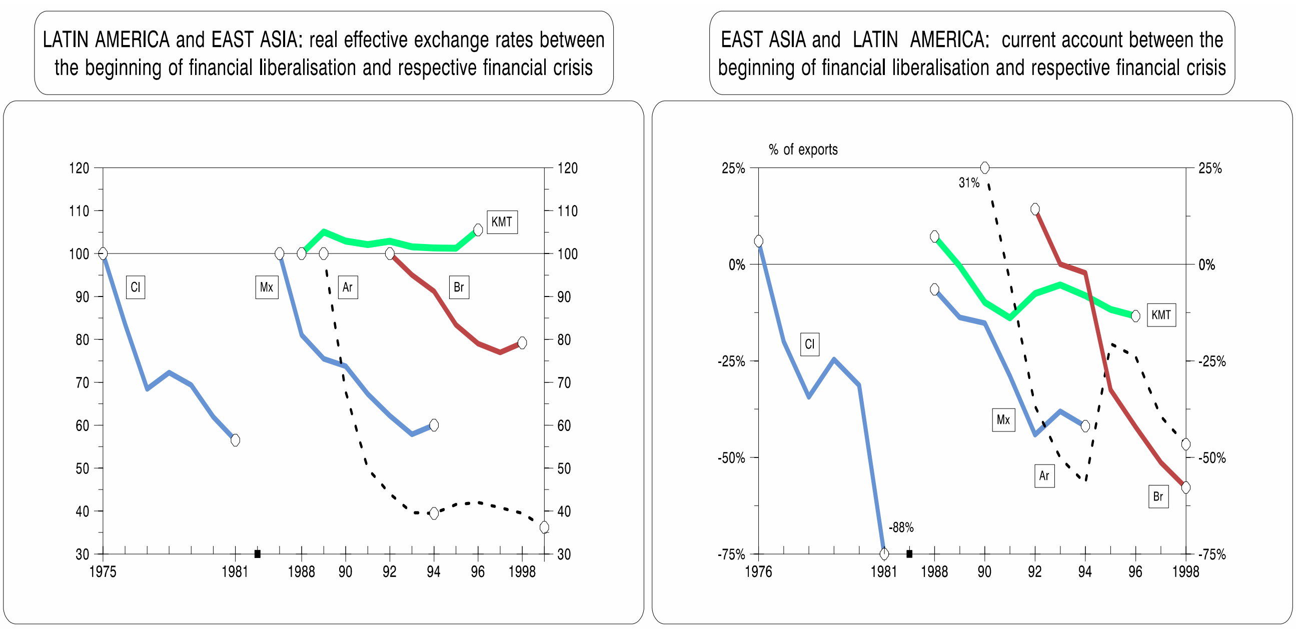
• ***Source***: Calculations made by Anish Acharya and author, using the Hall and Jones (1999) methodology for decomposing output per worker; at the time of constructing the series data were available only until 2005 (2004 for some countries). Acharya (2009), and Palma (2010).

So, for those who follow the Washington Consensus, the most challenging question must be how was it that in Brazil TFP growth became stagnant (after such dynamic growth before 1980) — and in most of LA it actually became negative — well *after* full-blown economic reform? And the well-rehearsed answer that what is needed is yet more of the same neo-liberal reforms sounds increasingly hollow.

In September 2011 *The Economist* joined a most remarkable regional economic euphoria — based exclusively on the fact that after a soft landing from the 2007/2008 global financial crisis, a few countries of the region experienced an acceleration of their growth rate led entirely by a price-boom in commodities, by finance and real estate — and predicted that what was coming might well be a "Latin American decade", with Brazil as its powerhouse. If the subject were football, music, literature, the film industry, cuisine, or exotic tourism that might well be the case; it would also be possible to see this happening in the rôle played by the region, especially Brazil, in certain aspects of international politics. But it looks rather unlikely in terms of economic performance — other than in commodities and finance (see Palma, 2012b).

Finally, as Figure 17 (left-hand panel) indicates, 'tough' monetarism might have helped Brazil's real exchange rate avoid some of the worst excesses (in terms of running away revaluations despite rapidly deteriorating current accounts) of Chile, Mexico and Argentina, but in Brazil this relative 'moderation' was associated with a deterioration in the current account as large as those in Mexico and Argentina (see Figure 17, right-hand panel).

FIGURE 17



• A decrease in the index signifies a revaluation. **Cl**] = Chile; [**Mx**] = Mexico; [**Ar**] = Argentina; [**Br**] = Brazil; and [**KMT**] = average of Korea, Malaysia and Thailand.

• *Sources*: IMF (2012a); World Bank (2012a and b); and ECLAC (2012).

It is really difficult to fit together LA's real effective exchange-rate picture and the basic postulate of the neo-liberal creed regarding the need to liberalise, lift 'artificial' market distortions, and stop governments' 'discretionary' policies in order to allow the economy to get 'its prices right.' Massive inflows into LA, particularly in relation to exports, and the use (as in Brazil) of exchange-rate-based stabilisation policies — based on the oldest macroeconomic law of them all: one can only solve a macroeconomic imbalance by creating another one — brought this crucial price (the exchange rate) to a level that would be rather hard to brand as 'right.'

Moreover, the current account was not the only casualty of the exchange rate overvaluation; the latter was also (not surprisingly) distorting the composition of what little investment there was toward the non-tradable sector. In Mexico, for example, while investment in residential construction doubled between 1981 and 1994, investment in machinery fell by half (and at a time in which trade liberalisation had already rendered a significant amount of the stock of capital in manufacturing obsolete; see Palma, 2005b). And in Brazil the share of manufacturing in GDP fell from 25% the year before the 'Real Plan' (1993 — a level that was already well below its peak of 33.5% in 1980) to just 15.7% in 1998 (World Bank, 2012). A fundamental part of this 'premature de-industrialisation' was the chronic deficiency of effective demand for non-commodity tradable activates, especially manufacturing brought about by huge levels of inflows; this was the outcome of the "deadly triad" of overvalued exchange rates (that switched aggregate demand toward foreign markets — Figure 17); high interest rates (due to 'tough' monetary policies to deal with these inflows — Figure 2); and remarkably low levels of public investment by "sterilised" governments (less than 2% of GDP in Brazil — Figure 10).

This is a rather odd picture: in fact, Latin American economies ended up switching the engine of growth away from their supposedly desired aim — domestically financed private investment in (increasingly technologically-sophisticated) tradable production — toward a more laid-back (postmodernist?) one of externally financed private consumption, private investment in unprocessed commodities and nontradable activities, and a huge process of financialisation. That is, a growth model with a clear bias for "low-hanging-fruit"-type activities!

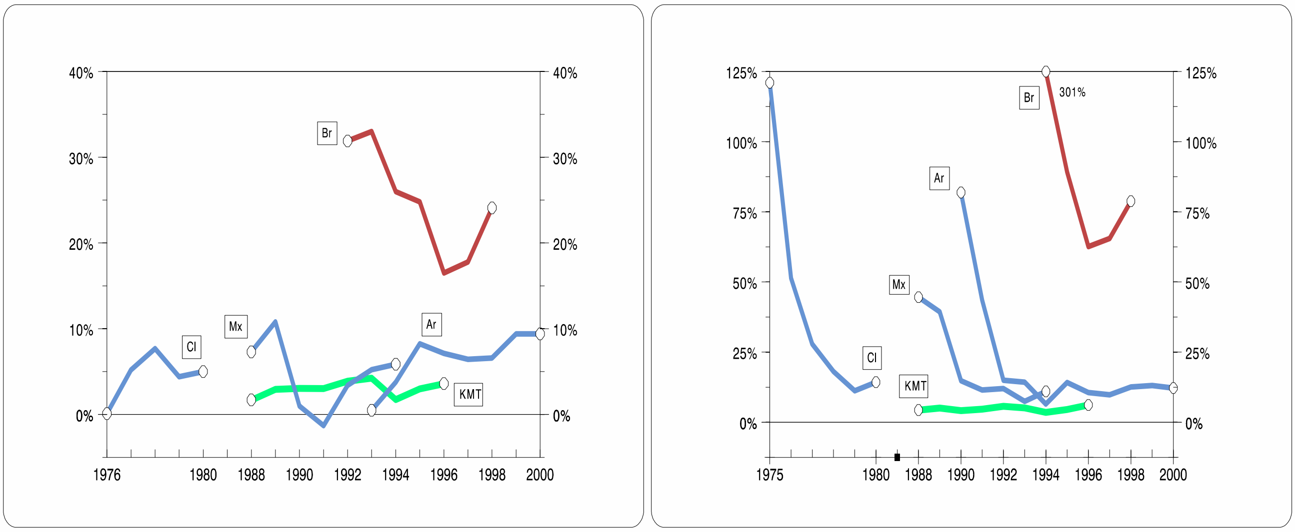
5.- How to create a financial crisis by trying to avoid one. The dynamics of how Brazil sleepwalked into a public sector 'Ponzi' finance

As mentioned above, Brazil's Ponzi has its roots in the feature that most clearly differentiates the Brazilian experience between financial liberalisation and financial crisis vis-à-vis what happened in respective periods in Chile, Mexico, Argentina and East Asia: the high domestic interest rates, both the deposit and lending rates. See Figures 18.

FIGURE 18

LATIN AMERICA and EAST ASIA: domestic real deposit rates between the beginning of financial liberalisation and respective financial crisis

LATIN AMERICA and EAST ASIA: domestic real lending rates between the beginning of financial liberalization and respective financial crisis



• [**Cl**] = Chile; [**Mx**] = Mexico; [**Ar**] = Argentina; [**Br**] = Brazil; and [**KMT**] = average of Korea, Malaysia and Thailand.

• *Sources*: For LA, ECLAC Statistical Division, and World Bank (2012b); for Korea, Malaysia and Thailand, World Bank (2012b).

Although these high interest rates, the sterilisation of inflows, and the successful policies to control credit expansion were able to check the development of an inflow-led Kindlebergian mania, this 'success' came at a huge cost, which equally led to a financial crisis but via a different route.

In relation to the domestic banking system, 'second-generation'-inspired monetary policy led to such remarkably high lending rates that hardly any banking asset could perform — in fact, in this practically inflation-free economy (after the successful price-stabilisation of 1994), interest rates paid for consumer credit peaked towards the end of 1998 at an annualised rate of 123%, and those for credit for working capital at 63%.

Furthermore, as could have been expected at the time, a key legacy of high interests rates during the 1994-1998 period is a path-dependent dynamic that continues until today — as for central bankers it is much easier to increase rates than to bring them down once the economy and international financial markets have adjusted to those rates (not least because the middle-classes get used to rent-seek with their high returns on savings). These rates have starved the Brazilian corporate sector of funds — even working capital —, something that BNDS have been busy trying to redress (often under heavy criticism from the Central Bank — that by doing so, they have been 'undermining' their monetary policy). These rates have also trapped the Brazilian household sector in the worst of all possible worlds: one in which they have low access to credit, but one in which they have a huge debt-servicing ratios. Thus, at the time of the 1999 financial crisis, the Brazilian corporate sector only had a level of debt equivalent to 32% of GDP, while that of China was 108%, and Korea 101%.[37] The same for the household sector: while the Brazilian one only had a level of debt

[37] Perhaps not surprisingly, at the time private investment in Brazil was equivalent to 14.1% of GDP, while that of Korea was 22% (IMF, 2012a).

equivalent to 6% of GDP, that of Korea was 48%, Spain 45%, Canada 64%, Germany 71%, and the US 72%.[38] And by the time of the current global financial crisis, the Brazilian household sector had increase its debt to 13% of GDP, while that of the US to 95% — i.e., a level 7.3 times higher — but no prizes for guessing which one of the two had a higher debt/service ratio: according to a Financial Times analyst, "[…] the debt service burden [of Brazilian households today] has risen to 24 per cent of disposable income. [...] To put this into context, the US consumer "blew up" when the debt service burden hit 14 per cent […]." [39]

Not surprisingly, in its last financial report Banco Santander indicates that about one-quarter of all its worldwide profits came from its Brazilian operations despite this country having only half that share in its overall assets.[40] It's no wonder that the LA's 'new left' is so welcome at Davos.

In sum, between 1994 and 1998 high interest rates may have helped to reduce the credit exposure of the private sector (both household and corporate, and thus reduce the likelihood of consumption booms and asset bubbles), but they certainly did little to help improve the quality of that exposure. So it is hardly surprising that the banking system (which initially had to struggle with the effects of rapid price stabilisation on banking profitability) had later on major problems with non-performing assets. In fact, the ease with which the government could finance its domestic debt was due primarily to private banks falling over themselves to buy public paper, as this was just about the only asset that could perform in such a high interest rate environment. As for the rest of their portfolio, private banks tried to increase profitability by the self-defeating policy of ever-increasing spreads (see Figure 19, panel A).[41]

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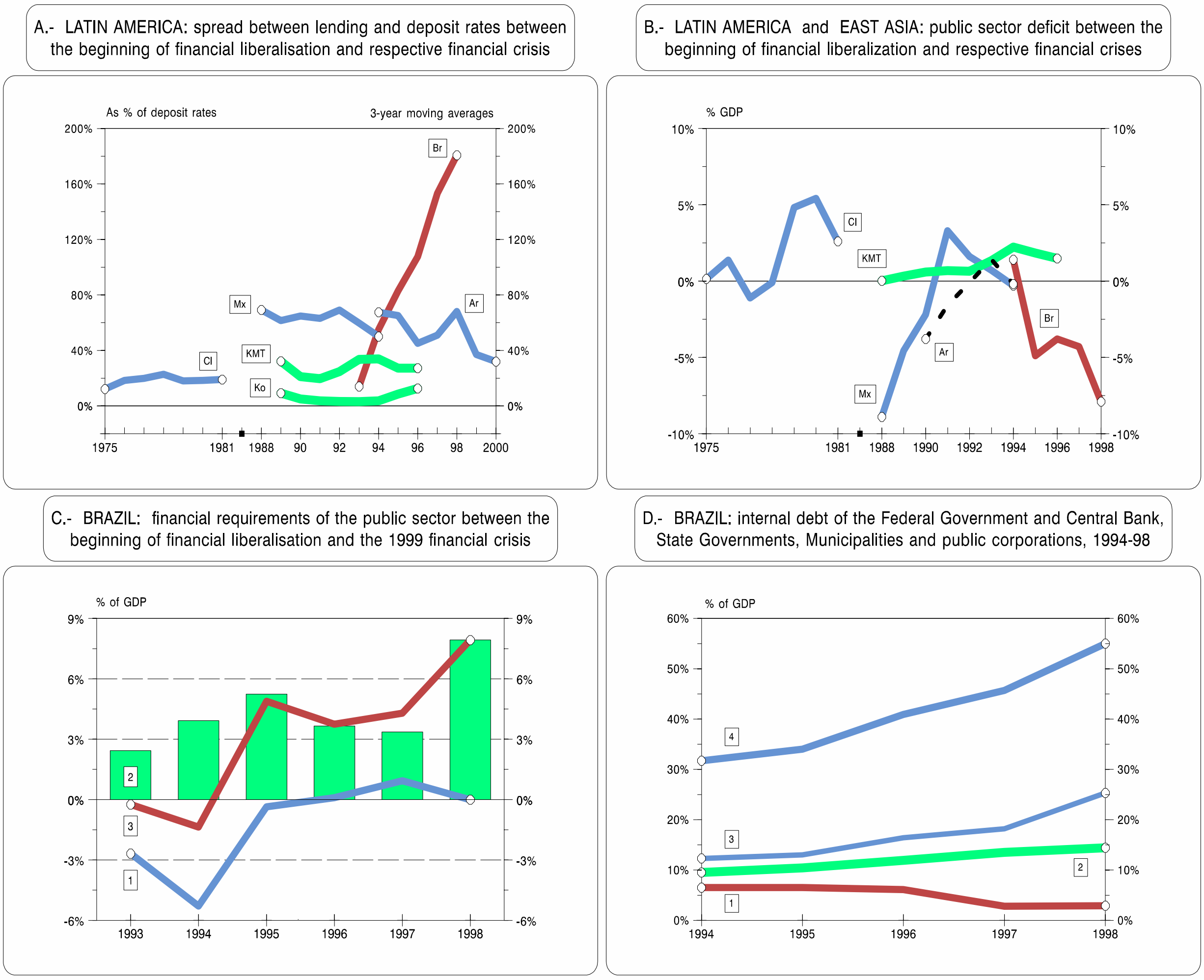
[38] See http://www.mckinsey.com/insights/mgi/research/financial_markets/debt_and_deleveraging_the_global_credit_bubble_update.

[39] http://www.ft.com/cms/s/0/eca47380-3dc4-11e0-ae2a-00144feabdc0.html#axzz1fnWFZDrI.

[40] See http://finance.yahoo.com/q/ks?s=BSBR).

[41] On the double-edge effects of increasing spreads on profitability of the banking sector, see in particular Stiglitz and Weiss (1981).

FIGURE 19



- [**Cl**] = Chile; [**Mx**] Mexico; [**Ar**] = Argentina; [**Br**] = Brazil; [**Ko**] = Korea; [**M&T**] = average of Malaysia and Thailand; [**KMT**] = average of Korea, Malaysia and Thailand. Panel C: [**1**] = primary balance; [**2**] = interest payments; and [**3**] = overall balance. Panel D: [**1**] = internal debt of public corporations; [**2**] = internal debt of State Governments and Municipalities; [**3**] = 'net' internal debt of Federal Government and Central Bank; and [**4**] = overall internal debt of the Federal Government and Central Bank.
- *Sources*: panel A, as Figure 18; panel B, ECLAC (2012) for Chile, Mexico and Brazil; Damill, Frenkel and Juvenal (2003) for Argentina; and World Bank (2012a) for Korea, Malaysia and Thailand; panel C, Macrométrica (various issues); and panel D, BID (2001).

In fact, data on interest rates spreads on their own are able to highlight in which countries (in both regions) the crisis of the domestic banking system came *before* the overall financial crisis, and was a major component that led up to it (Brazil), and in which it only came immediately before the crash (e.g., Thailand and Argentina) [42], or

[42] In Argentina the banking sector nearly collapsed before the December 2001 crisis, but this was due to Cavallo's 'Corralito' — in order to stop a bank run, Cavallo (the Minister of the Economy) imposed an almost complete freeze on bank accounts, and on withdrawals from US$-denominated savings accounts. In the case of Thailand, when Thai financial institutions began to have easy access to international financial markets (in both price, and quantity), they became less dependent on the Central Bank for liquidity support. So, Central bank credit to banks and other financial companies, which had stood at 54% of the monetary base, and at 5.1% of broad money at the end of 1988, stood at just 20% and 1.8%, respectively at the end of 1996. At the same time, over the same period the net foreign liabilities of commercial banks and finance

just after the crash (when bank-portfolio became non-performing due to falling incomes and asset-price deflation, at the same time as banks' foreign liabilities were soaring due to sharp devaluations — e.g., Korea, Chile and Mexico).

As the Brazilian government chose continuously to rescue private and state banks in difficulties (adding an additional component of moral hazard by not making any serious investigation into how these banks had got into trouble in the first place — not even when the bank in question belonged to a senior minister)[43], this policy contributed substantially to the public debt. High interest rates were also at the core of the worsening of the other components of the public sector finance. In fact, while Chile and Mexico had at least managed a significant improvement in their public accounts, being either in equilibrium or in surplus at the time of their financial crisis (as well as East Asia), Brazil shows a growing deficit from practically the very beginning of the 'Real Plan' (see Figure 19, panel B).

Obviously, the key question in Brazil's case is whether what was happening in the private and the public sector balances were inter-related phenomena, or whether the growing imbalance in the public sector was simply the result of a typical weak, 'populist' government unable or unwilling to keep its house in order.

One of the difficulties that those working under the 'Washington Consensus' paradigm have had in explaining other (non-Brazilian) financial crises is that these crisis-countries, particularly in LA, had both opened up their economies and implemented economic reform and done it by the book (including the small print). Furthermore, their public sector had managed to reach balance and their accounts had then been kept in order. Under these conditions, it was not easy to explain following the neo-liberal creed (and, in this case, 'first-generation models of financial crises') why the private sector had run wild, creating such large private macroeconomic imbalances, and accumulating so much financial risk; and even harder to explain why 'friendly'-regulated markets had not been able to deal with those private imbalances (making a financial crisis almost inevitable). As a result the Washington Consensus type of crisis-explanation seems to have had little choice but to fall back onto well-rehearsed arguments of 'exogenous' market interference by governments and international institutions, thus switching the entire debate in the most simplistic way towards issues such as 'moral hazards' and 'cronyism'.

However, Brazil's 1999-financial crisis (and later Argentina's second crisis in 2001) seem to be crises that are apparently 'easy to explain' and easy to dismiss — the growing public sector deficit provides a familiar way out. Under these conditions reforms are not 'credible': in a financially liberalised economy within a growing globalised world, either governments understand that they have to be serious about the way in which they implement their reforms and make the necessary efforts to do so — i.e., keep their accounts at least in balance — or the neo-liberal 'model' will have

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companies, as a percentage of M3, increased from less than 5% in 1986–90 to 25% in 1995/6 (see Jansen, 2001). In the meantime, assets continued to be *baht*-denominated (and non-performing loans as a percentage of total loans of the financial system continued to rise, reaching 13% by the end of 1996 — jumping to nearly twice that figure by the end of 1997; see Ibid.). With this type of growing asymmetry in their balance sheet, and the increasing level of 'delinquency', Thai banks became increasing fragile, and in danger of a run. Financial markets (and clever speculators) turning their attention to Southeast Asia (with some trepidation) due to the British transfer of Hong Kong to China provided the setting for this; and the Thai government was forced to float the baht the day after this transfer, having already spent 90% of its foreign reserves defending the baht against a growing speculative attack (see Palma, 2012a).

[43] In 1997, for example, the Banco Bamerindus, owned by the then Minister for Commerce and Industry, went bust in a very `untransparent' way, leaving a shortfall of about US$* 6.6 billion. The government took over this bad debt without any investigation; it then sold what was left of the bank to the Hong Kong & Shanghai Banking Corporation.

little chance of success.[44] Oddly enough, the private sector is apparently under no such pressure: according to the first law of welfare economics, all that is needed for optimal equilibria is to keep the public finances in balance, as 'markets' (if allowed to operate feely) will resolve any private imbalance by themselves. And no amount of evidence from these financial crises that this is not the case (as pro-cyclical dynamics turn 'automatic stabilisers' into 'automatic de-stabilisers' — see, for example, Figure 18 above for the relationship between current accounts and exchange rates), seems to dent this belief.

In the case of the Brazilian 1999-crisis, the logic that led to the crisis is (as is so often the case) more complex than a typically simplistic 'Washington Consensus' explanation; the two obvious issues that are almost invariably missing from the traditional mainstream explanations of the Brazilian crisis are precisely an understanding of the economic and institutional dynamics that led to this growing public deficit (and its relationship to the radical-monetarist economic policies devised to keep the credit in the private sector, the private sector consumption and the asset prices under control); and an understanding of how markets' automatic 'stabilisers' turned into automatic 'destabilisers' — and how, as a result, instead of a naïve market fundamentalism what was needed was effective countercyclical macro, and proper capital controls.[45]

The first point to note is that the growing public deficit was almost entirely the result of interest payments on the public debt. Other than for a small deficit in 1997, Figure 19 (panel C) shows that the 'primary' accounts of the public sector were in surplus or balance throughout the period, and that it was only the growing interest payments that brought the public sector into deficit. This seems to be the obvious 'other side' of the high interest rates coin. However, the problem is more complex than that.

First, the true 'primary balance' was not anywhere as healthy as the government statistics suggested. Not only were large privatisation receipts — about US$* 80 billion up to the January-1999 crisis — accounted as 'ordinary' public revenues,[46] but also the huge costs of the populist bailouts of banks and state finances were disguised using a long lag between the actual bailouts and the proper acknowledgement of the associated costs in the public sector accounts. Regarding the latter, although the government did register the debt issued for the bailouts of banks as new liabilities on the balance sheet of the Central Bank, it registered at the same time the non-performing debt it had absorbed as an 'increase in assets'.[47] In this way,

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[44] See, for example, World Economic Outlook (May, 1999)

[45] However, as President Cardoso remarked (see epigraphs at the beginning of this paper), capital controls were out of question: "[w]e will never use capital controls: we want to be a First-World nation." I am not sure Stiglitz had Cardoso in mind when he said that "[g]lobalization opened up opportunities to find new people to exploit their ignorance. And we found them"; however, his statement does apply to Cardoso's apparent ignorance of the financial history of First-World countries. In this respect, as Warren Buffet once said (again, probably not specifically thinking of Cardoso), "If you've been playing poker for half an hour and you still don't know who the patsy is, you're the patsy."

[46] At least this accounting method was less surreal (or 'post-modernist') than that of Mrs. Thatcher, who accounted for privatisation receipts as *reduced public expenditure* (rather than as increased public revenues). As one of her election promises had been that she would reduce the share of public expenditure in national income, this novel accounting trick was a rather useful devise in that direction. Neo-liberals have such contempt for the public sector that when in government they probably like to behave in a way that fulfils their own expectations regarding its inefficiency...

[47] As mentioned above, this also distorted the so-called 'net' debt of the public sector — as very dubious financial assets were deducted from the overall debt.

from an accounting point of view, thanks to those 'ghost assets', there was initially very little immediate 'costs' to register in the accounts of the Federal Government and Central Bank from bailouts — leading to members of the government and journalists in some of the most friendly financial press at the time even boasting that there were no significant fiscal costs associated with those bailouts! Of course, these 'assets' never performed — otherwise, why the need for a bailout in the first place; but this obvious fact was only gradually acknowledged as 'public expenditure' later on by slowly reducing their value in the Central Bank balance sheet through provisions for 'credit losses'. Perhaps García-Márquez was also an accountant in a previous incarnation.[48]

In this way, the government not only made the cost of bank bailouts less transparent, but was also able to transfer the fiscal impact of the bailouts to the future: at the time of the October 1998 elections, the Central Bank accounts showed 'assets' specifically associated to the bailing out of private banks equivalent to US* 31 billion, and 'assets' associated with both the bailout of state banks and other state debts equivalent to US$* 94 billion.[49]

Second, in the case of Brazil in the 1990s it was the service of the public *domestic* debt that accounted for most of the interest payments paid by the public sector — in the 1982 debt crisis it had been the service of the foreign debt.[50] Thus, while the external Government 'net' debt fell by more than half between 1993 and 1998 (from 14.4% of GDP to 6.3%), the internal 'net' debt more than doubled — and the *acknowledged* overall public debt almost doubled to 55% (see Figure 19, panel D).

Third, within the internal 'net' debt, it was only the Federal Government and Central Bank component of this debt that was booming (see again Figure 19, panel D). However, it is important to emphasise that the reasons for the growth of the 'net' debt of the Federal Government and Central Bank are apparently not completely straightforward. On the one hand, as they had a relatively low stock of debt to start with at the time of price stabilisation and financial liberalisation — in July 1994, the 'net' domestic debt of the Federal Government and the Central Bank (although already rising) was equivalent to just 8% of GDP — it is difficult to blame the effect of high interest rates hitting the initial stock of debt for this extraordinary growth. And on the other, throughout the period between financial liberalisation and financial crisis there were (apparently) no significant 'primary' deficits in the public accounts that needed to be financed. So, the crucial issue that needs to be clarified is what did fuel the 'Ponzi' finance? Why did the stock of debt of the Federal Government and Central Bank increase so rapidly in the first place?

For many Brazilian analysts, the usual suspect to blame is the high cost of the policy of inflow-sterilisation followed by the Central Bank in its efforts to avoid 'another Mexico'. Others blame the 'skeletons' from the past — such as the need to recognise previously unconsolidated public liabilities, and the under-capitalisation of public sector

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[48] The exception to these accounting-tricks was the re-capitalisation of Banco do Brazil, which was acknowledged as such from the beginning (i.e., there were no ghost 'assets' added to the Central bank accounts).

[49] The Central bank accounts are done in such a shadowy way that it is not possible to separate these two items.

[50] For Ffrench-Davis, the key role of the public sector deficit in Brazil's 1999-crisis makes this crisis one that still has some elements of the 'old' type of crisis; see Ffrench-Davis (2005). Although there is an element of this, especially in the way in which Cardoso paid exuberant amounts in order to get the constitutional reforms needed for his re-election, there were practically no primary-deficits in the public accounts in the years preceding the crisis; there were no 'white elephants' in the real economy adding to the stock of debt; and none of the 'old' style crisis ever had its roots in the high interest rates that the government was paying for its own domestic debt — rates that were unnecessarily high in the first place due to the government's own peculiar monetary policy.

banks (especially the Banco do Brasil).[51] However, despite extended recognition of previously unconsolidated liabilities, at the end of the second administration of Cardoso in 2002 there were still unconsolidated public liabilities equivalent to another 10% of GDP.[52] Finally, it has also been common to blame the 1988-Constitution for bringing about a delayed increase in public expenditure.[53]

However, although the cost of sterilising foreign inflows and of acknowledging 'skeletons' from the past was high, as is shown in Table 1, the bailout of banks and of State governments made a far larger contribution to the increase in the public domestic debt. These constant rescue activities may not have been properly accounted for in the 'primary' balance, but there was no way of hiding the impact of the service of that debt (mostly via additional borrowing) on the gross stock of debt of the Federal Government and the Central Bank — which is where the public sector 'Ponzi' finance took off. Table 1 (constructed with my friend Carlos Lopes) presents an attempt to breakdown the increase of this domestic debt into its main components between the beginning of the 'Real Plan' and the month before the January 1999 financial crisis.

TABLE 1

'Deconstructing' the growth of domestic debt of the Federal Government and Central Bank, July 1994 – December 1998

All figures in US$ billion (in 2010 value)

Initial domestic debt (July 1994)		**94.2**
'Securitised' domestic debt in December 1998		**346.6**
(Increase in 'securitised' domestic debt		**252.4**)
Total increase in domestic debt		**298.1**
• increase due to bailout of banks and of State Governments		**189.9**
○ private banks	**55.6**	
○ State banks	**62.3**	
○ State Governments	**56.6**	
○ Banco do Brasil[54]	**15.3**	
• increase due to initial stock of debt		**69.2**
• increase due to sterilisation of reserves		**39.0**
Total increase in domestic debt		**298.1**

[51] See for example Goldfajn (2002), who blames almost everything on irresponsible behaviour by *previous* Federal and State governments.

[52] See JP Morgan (2002), and Favero and Giavazzi (2002).

[53] For a detailed and critical analysis of these issues, see Lopes (2009); see also Sainz and Calcagno (1999).

[54] The re-capitalisation of the Banco do Brasil is showed separately from the cost of rescuing other public sector banks because it is usually argued that this was just an acknowledgement of a 'skeleton' from the past. However, a significant part of its problems was created during the 'Real Plan'; in particular, its large exposure to the agricultural sector became rapidly non-performing due to high interest rates and the unwillingness of the government to put pressure on farmers to pay.

● *Sources and methodology*: The 'initial' domestic debt (July 1994) was first transformed into *reais* of December 1998 before being expressed in *dollars* (using the exchange rate of that month). The domestic debt of December 1998 was changed from *reais* into *dollars* also using the exchange rate of that month. All other figures were initially taken in local currency of the time of the expenditure; then, to these figures, was added the interest payments that were actually *capitalised* until December 1998 (the 'Ponzi' finance). Finally, the December 1998 totals in *reais* were changed into *dollars* in the same way as above. To calculate the increase in domestic debt due to the capitalisation of interest payment on the 'initial' stock of debt (that of July 1994), the 'primary' surplus (deficits) were first deducted (added) to the 'initial' stock of debt before adding the cost of capitalising interest rate payments; i.e., it was assumed that the 'primary' surpluses (deficit in 1997) were used to pay this part of the domestic debt (as mentioned above, these 'primary' balances included privatisation receipts). From the cost of sterilising increases in foreign exchange reserves was deducted the interest received for foreign exchange reserves (expressed in local currency and assumed equivalent to returns on US Treasury Bills; see Figure 20, right-hand panel below). For a more detailed explanation of the methodology and sources used in this exercise, see Lopes and Palma (2005), and Lopes (2009).

The key issue that those working under the Washington Consensus type of economics do not seem to understand, is that in a financially liberalised economy the government constantly has to face 'damned-if-you-do, damned-if-you-don't' types of choices in relation to interest rates. For example, as in Brazil during this period, a rapid surge in inflows tends to overvalue the currency; then, as long as this overvaluation is expected to continue (commitment to a 'peg'), this becomes an incentive to substitute borrowing in domestic currency with borrowing in foreign currency. Soon there are domestic exposures that require interest rates to come down, but there are also external exposures that require that the currency remain overvalued (i.e., interest rates need to stay up). In other words, from the point of view of the domestic financial system, interest rates are soon stuck between the needs of banks' foreign-currency liabilities, and those of the banks' domestic assets.[55] In the case of Brazil, policy-makers opted for trying to avoid bankruptcies on banks' foreign-exchange exposures, at the cost of bankruptcies on banks' domestic assets exposures — and then they opted to foot the bill for the latter. In this interest rate 'trap', it is the choice between one type of bankruptcy and the other, (and given the attitude of the government) between one type of government rescue operation and the other. Either way, the public sector debt would swell — and, given the character of the present international financial market, from then on the economy is just one-step away from speculative activity of the partly self-fulfilling, partly 'truth-telling' type that tends to end in financial crisis.[56]

In sum, in most of a LA financial liberalisation (at a time in which international

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[55] Oddly enough, at the moment the Brazilian authorities are facing a similar 'damned-if-you-do, damned-if-you-don't' type of choice regarding the exchange rate, but this time regarding the corporate sector. As is well known, the current administration is trying to foster growth mainly by devaluing the currency, lowering interest rates, and increasing public sector investment. However, as the foreign debt of the corporate sector in Brazil is getting close to US$ 200 billion, according to a senior executive of Namura, "[n]ow, with real trading above R$2.00, the government signals it is worried about a possible overshoot that would generate balance sheet stress in the private sector, further damaging already weak growth." (http://www.forbes.com/sites/kenrapoza/2012/06/14/brazil-relaxes-capital-controls-currency-to-strengthen/). The analysis of this type of 'exchange-rate-trap' (and similar 'interest-rate-trap') are often missing in mainstream textbooks, where the pain of exchange-rate or interest rate corrections are often minimised. This 19th Century-style hands-off 'policy-neutrality' regarding the exchange rate (letting it revalued to the extent of becoming at one point, according to Goldman Sachs, the most overvalued currency in the world — just to have to go through all the pain to get it back to more sensible levels) reminds me of that equally old-fashioned nursery rhyme "Oh, The grand old Duke of York; He had ten thousand men; He marched them up to the top of the hill; And he marched them down again."

[56] See Kuczynski (1999).

financial markets were becoming increasingly liquid, under-regulated, short of high-yield investment opportunities, and openly corrupt)[57], was followed by declining domestic lending rates and practically unlimited access to finance (as in Chile, Mexico and Argentina); this seems to unleash a private sector credit explosion, leading to an unsustainable consumption boom and asset bubbles. The alternative scenario, Brazil, which tries to avoid these processes via inflow-sterilisation, high interest rates, and credit-controls tends to destabilise the domestic financial system and public finances in a way that leaves the government having to choose between a rock (absorbing large amounts of bad debt created by under-performing banking assets and deficits in the State governments due to the high interest rates they have to pay on their debts) and a hard place (allowing the collapse of State's finances due to their high debt-service ratios, and of the domestic financial system because of its foreign-exchange exposures). The Brazilian government chose the route of high interest rates leading to both high State-government bad debt absorption, and high financial sector bad debt absorption.[58]

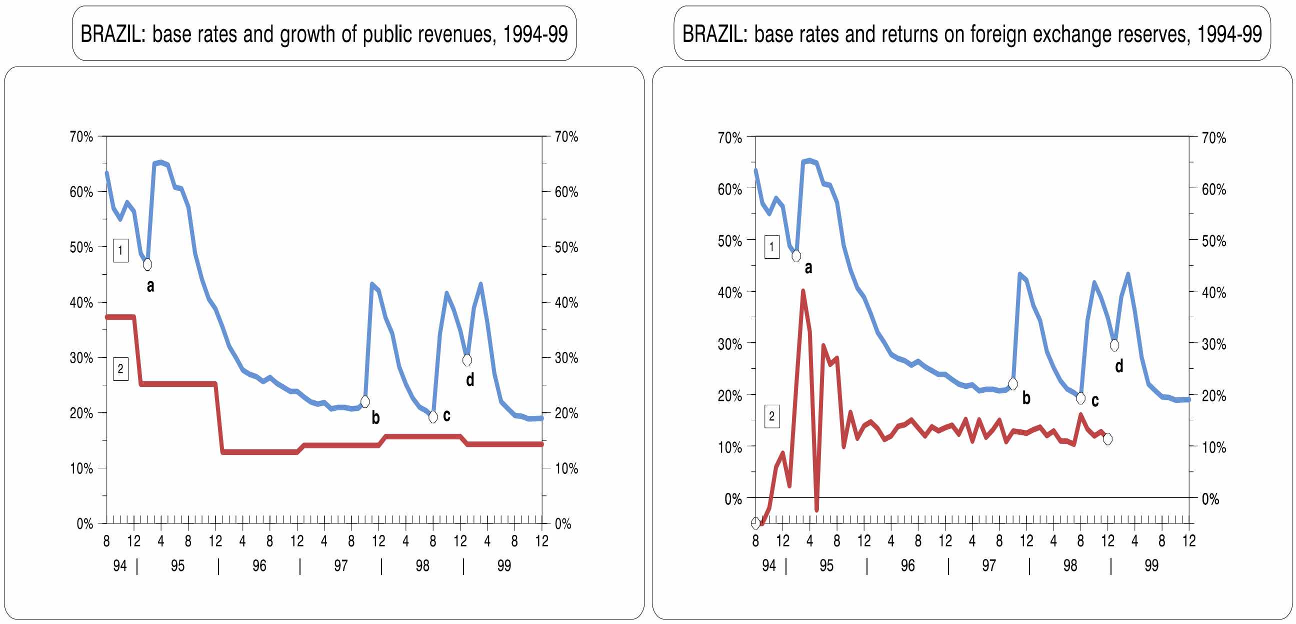
Related to this, of course, were two crucial factors fuelling financial fragility: first, in Brazil financial liberalisation was implemented with a particularly inadequate system of regulation and supervision of the domestic financial sector. Furthermore, the Federal Government exacerbated this problem by overlooking and covering up cases of wrongdoing and corruption in financial institutions. Second, a weak government is a recipe for problems of the 'Federal government versus State governments' type; it is also bound to lead to political stalemates such as that between the government and parliament over much needed public finance reforms.

And once the stock of debt of the Federal Government and Central Bank began to swell, the high interest rate-related 'Ponzi' finance took over. See Figure 20.

[57] According to a former British fraud squad detective, Rowan Bosworth-Davies, the City of London could best be described today as 'organised crime and racketeering' — he also explains how when he was in active service, he was not allowed to investigate financial fraud without explicit approval from politicians (see http://maxkeiser.com/2012/10/16/kr354-keiser-report-enema-state/; see also, Rowans-blog.blogspot.co.uk).

[58] The main banks that had to be rescued were (in chronological order) Econômico (1995), Nacional (1995), Banco do Brazil (1996), Mercantil, Banorte (1996), Bamerindus (1997), State Bank of São Paulo (Banespa, 1997), State Bank of Minas Gerais (1998), and State Bank of Rio Grande do Sul (1998). Other state banks whose rescue initially cost the Federal Government and Central Bank less than those above but still more than US$ 1 billion (this figure only in terms of what was 'officially' recognised as bail-out cost) were those of Bahia, Pernambuco and Paraná. Besides these, other fifteen state banks needed bailing out.

FIGURE 20

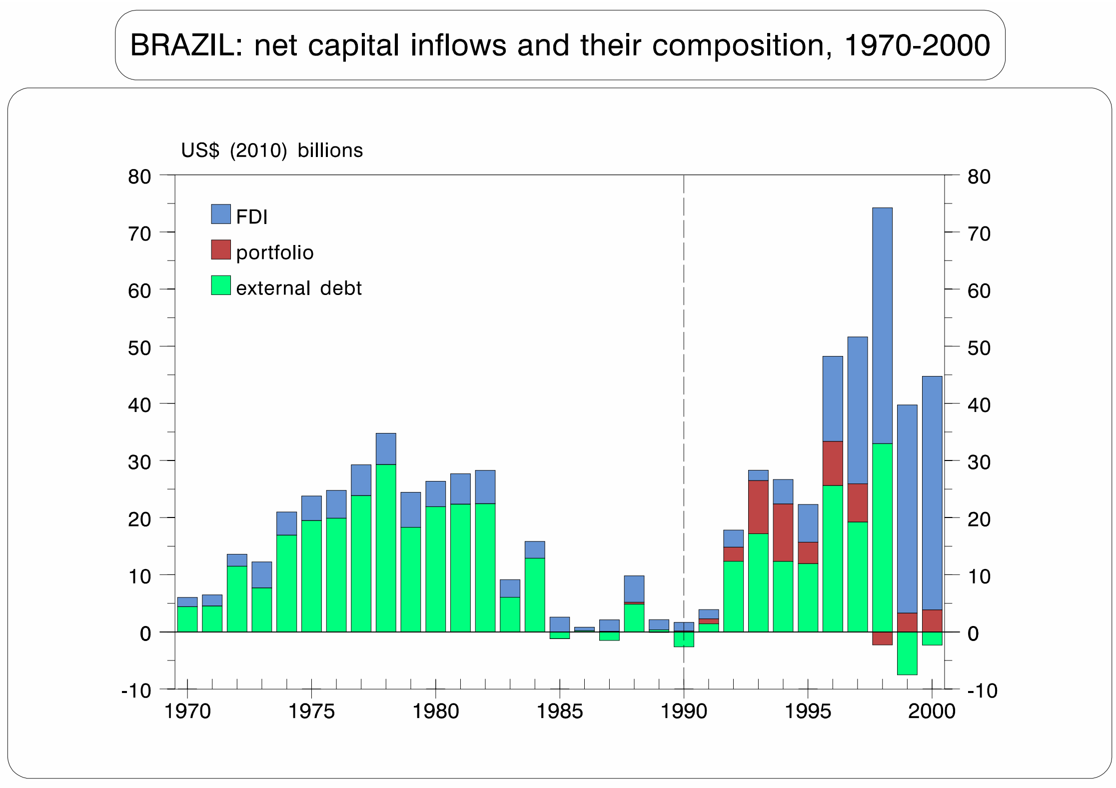


- [**1**] = base rates (annualised monthly rates); [**2**], left-hand panel = growth of public revenues (annual rates); and [**2**], right-hand panel = interest rate received for foreign exchange reserves (assumed equivalent to returns on US Treasury Bills; 1999 is not included in this panel due to large monthly variations caused by sharp exchange rate changes that followed the January crisis). Domestic currency.
- [**a**] = Interest rate increase following the Mexican 1994-financial crisis; [**b**] = following the East Asian 1997-crisis; [**c**] = following the Russian 1998-default; and [**d**] = following the State of Minas Gerais' moratorium on its debts to the Federal Government.
- *Source*: BCDB (2012).

Three crucial phenomena of the public sector 'Ponzi' finance are evident in Figure 20. First (left-hand panel), the violation of one of the most important financial 'golden rules': interest rates paid on public debt were systematically higher than the growth of public revenues (and, even worse, much higher than that of the practically stagnant income per capita). Second, each external and internal shock led to a sudden rise in this interest rate, provoking a similar (but increasingly augmented) phenomenon in lending rates. Third (right-hand panel), Figure 20 shows yet another side of the public sector 'Ponzi' finance — the well-known high cost of sterilisation as interest payments on public liabilities due to sterilisation of foreign inflows were systematically higher than revenues from related assets (foreign exchange reserves).

Finally, not every aspect of Brazil's 1999-crisis was of course unique. Although an internal public sector 'Ponzi' was unique to Brazil among the 1990s-crisis-economies discussed in this paper, Brazil also had to face four problems common to all other crisis-countries: (i) a constantly changing composition of the ever increasing private inflows (see Figure 21); (ii) a progressive shortening of the term structure of their debt (see Figure 22, panels A and D); (iii) a progressive deterioration of the ratio of foreign exchange reserves to short-term debt (figure 22, panel B); and (iv) the constant danger that in a financially liberalised economy the attack could also come from 'within' (Figure 22, panel C). See first Figure 21.

FIGURE 21



● In March 1990 the incoming President, Collor de Mello, began the process of reforms with his 'New Brazil' Programme; also around that time, the crucial 'Brady initiative' was taking shape in many Latin American countries.[59]

● *Source*: World Bank (2012b). See this source for the definition of the three components of capital inflows (in the case of the external debt, it includes private debt, private with government guarantee, and public foreign debt).

Regarding the first problem, Figure 21 shows that in Brazil there was an erratic changing composition of inflows after 1990; this is also found in the other crisis-countries in LA, but in East Asia this took a less extreme form. This changing composition made the already difficult matter of effectively absorbing massive inflows even more complicated. In fact, regulations that were introduced to help deal with surges of inflows — as in the post-1982-debt-crisis scenario — often were backward looking; in terms of the latter, for example, new regulations were aimed at bank lending when the most destabilising type of inflows that was going to hit LA during the 1990s was portfolio (see especially Figure 6 above). Regarding the second problem, the changing term-structure of inflows, see Figure 22, panel A.

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59 On the 'Brady Plan', see Ffrench-Davis (2005); Frenkel (1998); and Palma (2000a).

FIGURE 22

- [**Cl**] = Chile; [**Mx**] Mexico; [**Ar**] = Argentina; [**Br**] = Brazil; [**Ko**] = Korea; and [**M&T**] = average of Malaysia and Thailand.
- *Sources*: IMF (2012a and b).

In Brazil the term-structure of inflows shortened significantly over the period between financial liberalisation and financial crisis — the ratio of short-term debt to total debt jumped from less than 20% in 1994 to nearly 60% in 1998 (see Figure 22, panel D). As a result, and despite the rapidly growing levels of reserve, a new problem was created as the ratio of foreign exchange reserves to short-term debt collapsed from about 135% in 1994 to 33% in 1998 (panel C). Obviously, this added further fragility and heightened uncertainty in an already difficult situation by making the economy extremely vulnerable to a sudden collapse of confidence and withdrawal of finance by often jittery (and under-informed) foreign speculators.

Finally, of course, in a financially liberalised economy, there is the danger that the 'attack' could also just as easily come from 'within'. Brazil (as Mexico and Korea before it) did not have significant defences against internal attacks on their exchange rates, as their 'reserves-M2' ratios were also particularly low (panel B — in the extreme case of Mexico, this ratio fell to just 5% just before the 1994 crisis, and only a few' insiders' knew about this as the Central Bank would only release information on foreign reserves every four months, giving 'insiders' a huge advantage — in particular during the four-month period before the November release, when reserves were running out).[60]

In sum, the path to financial crisis in Brazil started with a massive surge in inflows — in part created by an artificially created demand for foreign capital[61] —, but the scene was soon dominated by the high domestic interest rates initially necessary for price-stabilisation but later becoming permanent to avoid 'another Mexico', and to respond to continuous external shocks. These high interest rates were successful in avoiding a repeat of 'Mexico's booms and bubbles', in consolidating price-stabilisation and in partially insulating Brazil from external shocks in 1995 and 1997, but soon created massive domestic financial fragility in the banking sector (both private and public) and in state-government finances, leading to an increase in public debt through continuous private banking and State-government rescue activities. And this public debt exploded due to high interest rates, which became systematically higher than both the growth in public revenues and the returns on reserves. In the meantime, the real economy imploded because of these rates, affecting the growth of public revenues even further; but high interest rates became even more necessary as a (poor) substitute for missing public-sector reforms and as a price for political stalemate, and to defend the 'peg', so as to avoid both further domestic banking crises due to high foreign-exchange liabilities, and a stampede by restless international fund managers. And the 'Ponzi' finance in the public sector ballooned out of control as a result of this high interest rate 'trap'. Again, it did not take much (the Russian default in August 1998 and a relatively minor internal political crisis at the beginning of January 1999) for Brazil to end up in a major financial crisis. The 'moral' of the story is that although excessively low interest may well have contributed to other contemporary financial crises, a policy of high interest rates (following the 'moral hazards' and 'second-generation' models' discourse) is by no means an insurance against them. So, if you open the capital accounts indiscriminately to over-liquid and under-regulated financial markets, don't complain if you are soon faced with 'damned-if-you-do, damned-if-you-don't' types of choices in relation to interest rates, the exchange rate, and banks' balance sheets and public finances in general.

Conclusions

The legacy left by the military regimes to their civilian successors was (at best) a complex one. The Brazil of 1985 was very different from that of 1964. Brazil's economy had improved significantly, but the lot of the majority of its people had not followed suit.[62] The Sarney Government proved unable to deal with the pressing problems of hyperinflation and foreign debt. President Collor de Mello's attempt to bring about a significant shift in the character of the economy and its integration into the world economy, and to put a gradual end to over 50 years of state-led development failed. Short-term economic problems and the emergence of massive corruption and bizarre private scandals as major issues in 1992 revealed the fragility of his political base. This threatened not only his liberalisation programme, but also the survival of the administration itself. After Collor's forced resignation, his successor Itamar Franco also proved unable to deal with Brazil's major political and economic

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[60] One thing well-informed Mexican 'insiders' did with this information was to sell their dollar-indexed 'Tesobonos' to 'gringos' — the share of 'Tesobonos' in total domestic public debt held by foreigners increased from 6% in February 1994 to 60% in August that year (and even further later in the year; see Armendáriz, 2003). As Taylor (1998) emphasised, the speed of Clinton's reaction to the Mexican crisis was about saving his friends in the US financial community, who had guessed badly wrong when they increased their Mexican exposure.

[61] See statement by Pedro Malan above (Introduction).

[62] For Brazil's remarkable degree of inequality, see Palma (2011). See also ECLAC (2010).

problems, but did manage to achieve some recognition in the last year of his government with the appointment of Fernando Henrique Cardoso as his finance minister. President Franco allowed Cardoso and his team freely to devise and implement a highly ambitious (and desperately necessary) stabilisation programme. The 'Real Plan' succeeded in dramatically reducing inflation and resulted in the election of Cardoso to the presidency.

Although the *real* stabilisation plan succeeded in its inflation objective, this success came at a huge cost. In fact, the crucial issue about Cardoso's stabilisation programme was that it followed the oldest ('two-stage') macroeconomic law: one can only solve a macroeconomic imbalance by creating another one, hoping that this new one would be somehow easier to solve. The problem is that although the first 'stage' of this macro-law sometimes can be achieved (particularly when international financial markets are happy to provide the necessary finance), seldom is there such luck regarding the new one. In Brazil's case, although there was ample success with the *real* stabilisation plan, what was needed regarding the second 'stage' was firm government action to deal with the newly created imbalances in the current and fiscal accounts, and with the newly created financial fragilities in the banking sector. Instead, the government opted for the naïve belief that time was on their side, and all that was need in the 'second stage' (i.e., after price stabilisation) was continuous access to international finance, and the magic of the 'invisible hand'. Instead, as soon as inflation was tackled in the second half of 1994, what was urgently required was an effective regulation and supervision of the private and public banking system and of state finances. It was also necessary to start relaxing the 'quasi-peg' to reverse the rapid revaluation of the *real*; a return of interest rates to more sustainable levels; an effective mechanism of capital controls on short-term flows; and the long-delayed public sector reforms. These measures were necessary for dealing with the fast growing deficit in the current account, with a public-sector domestic debt that was increasing at an unsustainable pace, and with the growing fragility of the domestic financial system and State finance.

However, as so often happens in mainstream economic, wishful thinking regarding the capacity of 'markets' (if allowed to operate freely) to solve private imbalances by themselves took over. And as so often happens in politics, it was the turn of risk-averse inertia — particularly at a time when the government's main political preoccupation was how to achieve a Constitutional reform that would allow the President to run for a second term in office. As a result, a successful set of economic policies that brought inflation down from four figures to single digits in a few months (the 'Real Plan') was then kept in place after it had accomplished its objectives, run its full course and long passed its 'sell-by' date. As a result, the same policies that had been the solution to the previous problem (hyperinflation) began to be the very problem of the new cycle; and the longer the policies were maintained, the more difficult it became to change them. In the meantime, it seems that the only active weapon that the government felt it had in its armoury was interest rates, and the only passive one was to keep cutting the already low levels of public investment to absurd new lows.

Today the term 'Custo Brasil' (the extra cost of doing business in Brazil) have become fashionable. However, little connection is usually made with its root causes during the two-terms Presidency of Cardoso. For example, much is made today that the cost of electricity for industrial users in Brazil is the third highest in the world — about twice those of China and Korea, and two and a half times that of the US (*The Economist*, 15/9/2012); but seldom the connection is made with the shady way in which the electricity sector was privatised, and the naïve way in which it was regulated at that time.[63] Again, much is made of the fact that Brazil has had one of the largest financial intermediation spreads in the world — if not the largest (see OECD, 2011); Figure 19 above already indicated how and when did it all begin. And most observers do not seem to have noticed until recently the huge costs associated to crumbling infrastructure and shortages of 'complementary capital' — for example, in Brazil to get a ton of soy to a port costs twice as much as in Argentina (not the country with the most efficient and modern infrastructure in the world; http://www.allaboutfeed.net/Page Files/10338/001_boerderij-download-AAF10251D01.pdf); again, it was not always like this.[64] Hopefully one day policy makers in Brazil — and in the rest of LA — will realise that issues such as 'Custo Brasil' are just the other side of the neo-liberal reform package-coin; i.e., a 'Waiting for Godot'-type story: after having implemented all possible liberalisations, de-regulations, privatisations, and so on, they are still waiting for the magic of unfettered markets forces to solve all the above problems. Instead, if anything has become obvious in post-reform LA is that it pays far more to the private sector to rent-seek on them than to try to solve them.

In this sense, the January-1999 financial crisis in Brazil was more about 'weak governance' than in other crisis-countries of the 1980s and 1990s. In fact, the financial problems of the public sector demanded so much attention that some important new policy initiatives (in health and education, for example), some industrial restructuring, some major productivity growth in unprocessed commodities, and some modernisations in the public sector (e.g., PETROBRAS) went almost unnoticed.

One of the strengths of the Brazilian economy in the past had been that its economic authorities (of different political persuasions) had tried not to allow its domestic inflation, interest rates, exchange rate and external balance to become a constraint on economic growth. As this policy, after long periods of sustained growth, ended in the 1980s in 'hyper-stagflation', the Cardoso government reversed it into a new policy in which economic growth, interest rates, and the need for external balances were not allowed to become a constraint in the fight for price stability. Although inflation was successfully controlled (even after the huge devaluation in January 1999, the consumer price index for that year increased by just 8.6%), this created major economic problems, not least the 'Ponzi' finance of the public sector.

A domestic deregulated but badly supervised financial market, closely linked to a highly liquid, under-regulated and unstable international financial market (mostly made up of jittery and sometimes under-informed fund managers prone to oscillating between mania and panic), coupled with a domestic economy characterised by large imbalances, a weak state, and an even weaker government coalition, made a sudden collapse of confidence and withdrawal of funds a real possibility. When in 1998 the Brazilian policy-makers finally realised that they had sleepwalked into a public sector

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[63] In 1996, the Cardoso government created the ANEEL (the Brazil's National Electricity Regulatory Agency), a quasi-independent regulatory body in charge of overseeing the electricity sector. By the end of the decade, electricity supply was already growing at just about half the rate of growth of demand — between 1994 and 2000 the rate of growth of electric-power capacity was 3.6% p.a., while that before 1994 had reached 10% p.a. (see Pinheiro, Gill, Severn and Thomas, 2001); this plus a few years of draught, led to a major energy crisis in 2001/02. As in so many other energy privatisations in LA, deregulation and higher tariffs were expected to be the sufficient conditions that would do the trick. Despite so much evidence against that since then, most Latin American governments (including the post-Cardoso governments in Brazil) are still stuck on their unshakable belief that *laissez-faire* is the best mechanism to solve these types of problems.

[64] Between 1994 and 2000, the length of Brazilian railways actually declined; the rate of growth of roads only reached 0.7% p.a. (the respective rate between 1964 and 1980 was 5.6% p.a.), and that of paved road was just 1.7% p.a. (previous rate was 16% p.a.). See also Pinheiro, Gill, Severn and Thomas (2001).

'Ponzi' finance and some drastic policy changes were necessary, it was unfortunately an election year — again not the most propitious time to take major risks.

Initially, the Cardoso Government had greatly benefited from the Brazilian people's disillusionment with previous development and economic policies — in fact, this had been the ultimate condition required for the success of the 'Real Plan' in its initial stages.[65] However, by the end of 1998 the government found out that this was 'political capital' from which they could not continue to depreciate endlessly.

The moral of the story of the 1999 Brazilian crisis, and of other financial crises in middle-income countries during the 1990s (those that fully opened their capital account during the second cycle of inflows, from 'Brady bonds' to the Argentinian 2001-2002 crisis), is that no matter what they did within the range of options allowed by their mainstream thinking in order to handle the absorption of the sudden surges of inflows, they ended up in a major financial crisis (see Palma, 2012a). Of course, with hindsight, one can always think of hypothetical ways in which the worst excesses in each route could have been avoided, but the fact is that surges in inflows into economies with newly open capital accounts have created such pro-cyclical dynamics and risk accumulation that they have proved extraordinarily difficult to absorb. And as Brazil has shown, desperate attempts to deal with the open-capital account/inflow problem via sterilisation and 'tough' monetary policies, instead of helping to avoid a financial crisis, just change the nature of the crisis. As the title of the paper emphasises, the paradox of Brazil's 1999 collapse is that it created a financial crisis by trying to avoid one. In all probability, 'first-best' capital controls (i.e., an attempt to deal with the problem at source — inward-controls up to the Russian default, and probably outward-controls after that) could have been a much more effective way forward.[66]

Perhaps the main lesson of the 1999-Brazilian financial crisis — and other crisis since the end of the Bretton-Woods agreement — is that it is about time to think again (as some are trying) about all the complex theoretical issues that led Minsky to conclude that finance could so easily become fragile (as financial stability breeds 'financial instability'); that led Kindleberger to warn us about how excess liquidity inevitably leads us to oscillate between manias and panics; and, especially, that led Keynes to conclude that "above all, let finance be primarily national" (1933, 759).[67]

Needless to say, a fundamental part of this task is to turn Lucas's famous "residue of things" upside-down (see epigraph at the beginning of the paper):

> "The problem that the new theories, the theories embedded in general equilibrium dynamics of the sort that we know how to use pretty well now — there's a residue of things they don't let us think about. They don't let us think about the U.S. experience in the 1930s, or about financial crises and their real consequences in Asian and Latin America, they don't let us think very well about Japan in the 1990s." (Lucas, 2004; 23)

Part of the task ahead is about transforming these "odd events" that Lucas sees as

[65] As mentioned above, Díaz-Alejandro insisted that popular support was the most important component of a stabilisation package; see (1983).

[66] Despite its 1998/99 financial crisis, Brazil has continued with many of its 'Real Plan' policies (what in another paper I call its 'route 2' policies), leading to a situation in which the current cost of sterilisation has reached a level well above US$50 billion a year — not least because its recent taxes on inflows (only applied in the heat of a presidential campaign in which the official candidate was not doing very well) are so porous that speculators only have to pay them if they have a bad accountant. This is perhaps not surprising, because for the Brazilian government to have forced its Central Bank to implement capital controls is equivalent to having forced a vegetarian to manage a butcher-shop. In fact, the current mild controls have been already significantly relaxed (http://www.forbes.com/sites/kenrapoza/2012/06/14/brazil-relaxes-capital-controls-currency-to-strengthen/).

[67] See, for example, Taylor (2010).

"residue" — including, of course, the current global financial crisis — into the events that form part of the cornerstone of our analytical thinking on how financial markets actually work in the real world. And how middle-income developing countries should deal with their capital accounts.

However, given the current political and economic environment, to be able to think again about these theoretically complex "odd events" one has to deal with at least two main risks. One is that unless the above 'rethinking' is done with a purpose, heterodox economics runs the risk that its discourse could be overcome by "the narcissism of lost causes." Sometimes it's just too easy to admire the sublime beauty of critical reason doomed to be marginalised... The other risk, of course, is (in a sense) the opposite: it is also too easy to avoid marginalisation by quitting *critical* thinking, and absorbing the fundamentals of the alternative hegemonic (mainstream) paradigm — ending up with a 'prudent' discourse made of *scepticism cum social conscience* (although with the latter usually in the area of 'diminishing returns').

The problem with critical thinking, of course, is that it is a distancing, even debilitating, activity. It distances us from conventions, from established assumptions, and from settled beliefs. It takes what we know from familiar, unquestioned settings and makes it strange. And it does so not necessarily by supplying new information, but by inviting and provoking a new way of seeing. Therefore, a key challenge ahead for heterodox economists is how to steer a course that avoids both types of evasion: that of the false beauty of the 'lost cause', and that of prudent 'uncritical' thinking — not least because when reality is evaded, it is also bound to be distorted.

And a key challenge ahead for mainstream economists (of all political persuasions, including of course those of the 'new left') is how to recover their lost capacity for critical thinking. In fact, I sometimes wonder whether mainstream economics today is just shorthand for 'nothing left to decide' — and, of course, 'nothing left to think about *critically'*. Indeed, the attitude of many mainstream economists towards policy-making resembles Lord Kelvin's attitude towards physics at the end of the 19th century, when he famously declared that in physics "there is nothing new to be discovered now. All that remains is more and more precise measurement." (Kelvin, 1900) From this perspective, the incapacity of mainstream economists to consider alternative points of view is such that even the so-called 'New Keynesians' still work within a 'complete markets' paradigm, and with the strongest version of the efficient-markets hypothesis (Buiter, 2009).

However, in all probability, as mainstream economists have invested so much emotional energy in the idea that neo-liberalism is the final stage of human progress, and have attached so much symbolic meaning to their 'end-of-history' supremacy, a financial crisis or two (no matter how damaging they are); a long TFP stagnation (or decline); a 30-year stagnation of investment per worker; a premature de-industrialisation or a 'Dutch Disease'; an Asian continent that growth so fast despite getting all its prices, institutions and policies 'wrong', and so on, seem unable even to dent their beliefs.

Sigmund Freud (1915) did warn us about the inevitability of illusions clashing with reality:

> "We welcome illusions because they spare us emotional distress, and enable us instead to indulge in gratification. We must not complain, then, if now and again they come into collision with some portion of reality and are shattered against it.

However, mainstream economists seem to have perfected the usual defence against this clash: when their illusions come into collision with some portion of reality, they cover up quickly their unbearable 'shocked disbelief' (using Greenspan famous expression) by blaming China (no matter what problem is, how could it not be China's fault), labour rigidities, uncontrolled immigration, excessive regulation, big governments, Greenspan, the delay of a major fiscal reform in the case of Brazil, and so on. And if none fits, 'chance' is often a (convenient) validation of the new' turning of a blind eye.'[68] For example, although many things have already been said regarding the speed, the size, and the nature of the rescue operations after each financial crisis (including the urgent need to stop the rot, as well as old boys' networks at work, corruption, and so on), perhaps an *additional* component of these rescue operations (particularly their urgency) is that they are a fundamental component of the 'cover-up'. When Clinton quickly intervened after the Mexican crisis with his more than US$* 70 billion rescue package, he was not just saving his Wall Street mates (who had been caught badly exposed in Mexico); most probably, he was *also* trying to turn the page of that crisis as quickly as possible — so that one could turn a blind eye to the evidence emerging from that crisis regarding the risks associated with full opening of the capital account in middle-income countries. The same probably happened with the massive IMF intervention in Brazil and East Asia. And in the case of Chile, when the government was happy to spend more than 50% of GDP rescuing the banking system after the 1982 crisis, and when most governments in rich countries were all too happy to shower financial markets with trillions of dollars following Lehman's downfall — bringing the concept of a 'soft budget constraint' to a totally new dimension — perhaps they were *also* trying to cover up quickly their unbearable 'shocked disbelief'.

Moreover, in the case of the 1999-Brazilian financial crisis, and of the other six financial crises in middle-income DCs discussed above, and as opposed to the current global financial crisis, the relatively rapid recovery of the economies involved greatly helped the cover-up.

This type of cover-up seems to make it possible to continue the 'worship' of free markets — and the 'purity of belief' does not have to come into conflict with the intricacies of the real world. But, inevitably, this ideological status quo *ex-post* crash is ever more in need of further cover-ups — i.e., further evasions and distortions.

All in all, the 1994 price-stabilisation was a success, but events between then and the Brazilian 1999-financial crisis belong to a very different story, as policy makers in the first Cardoso administration were unable to deal with the internal and external imbalances created in order to get price stability. Their approach regarding those new imbalances — deregulate, liberalise and privatise everything but the kitchen sink, and then hope that market forces would solve all those imbalances — expose their policy-rigidity. Luck was also not on their side (in the form of external shocks); nor was the insatiable ambitions of a politician that couldn't bear the idea that he could be just a one-term President (why can't people understand that they are unique — just like everyone else). Gustavo Franco told us at the beginning of the Real Plan that (from the point of view of his narcissistic ideology) the alternative for Brazilians at the time was simple; to be neo-liberal, or to be neo-idiotic (neo-burro). Well, history taught us that there was at least one more alternative — one in which the naïve fundamentalism of the 'new-convert' could transform the main actors in that government into 'neo-burro-type neo-liberals.' As such, the Brazilian 1999-financial crisis surely belongs to what Oscar Wilde (1890) called 'the real tragedies of life': those that "occur in such an inartistic manner that they hurt us by their crude violence, their absolute incoherence, their absurd want of meaning, their entire lack of style. They affect us just as vulgarity affects us. They give us an impression of sheer brute force, and we revolt against that."

[68] See especially Steiner (1993) for a psychoanalytical understanding of the difficulty the human mind has in recognising reality when faced with complex and emotionally charged problems — and of its usual failure to live with them and adjust accordingly. See also Palma (2012a).

BIBLIOGRAPHY

Acharya, A (2009), 'The Impact of Globalisation on International Convergence and Growth', Cambridge, mimeo.

BCDB (2012), Banco Central do Brasil, available at http://www.bcb.gov.br/?ENGLISH.

BID (2001), 'The structure of the public sector debt in Brazil', available at http://www.bid.org.uy/res/laresnetwork/files/pr122finaldraft.pdf.

Blankenburg, S and MH Khan, (2009), 'The Political Economy of Industrial Policy in Asia and Latin America.' In: M Cimoli, et al. (2009).

Boix, C (2003), *Democracy and Redistribution*, Cambridge University Press.

Bresser Pereira, LC (2002), 'Latin America quasi stagnation', in P Davidson (2002).

Britton, R, and J Steiner, (2004), 'Interpretation: selected fact, or overvalued idea?', *International Journal of Psychoanalysis*, 75.

Bruno, M (2010), 'Growth Regimes in Brazil: periodization and macroeconomic implications', IPEA.

Buiter, W (2009), 'The unfortunate uselessness of most state of the art academic monetary economics', *Financial Times*, 3 March.

Chang, H-J (ed.) (2003), *Rethinking Development Economics* , Anthem Press.

Chile (1988), *Indicadores Económicos, 1968-86*, Banco Central.

Cimoli, M, G Dosi and JE Stiglitz (eds.), (2009), *The Political Economy of Capabilities Accumulation*, Oxford University Press.

Damill, M., R. Frenkel and L. Juvenal (2003), 'Las cuentas públicas y la crisis de la convertibilidad en Argentina', *Documento de Trabajo* N. 4, CESPA, UBA.

DataStream (2012), available at: http://extranet.datastream.com/.

Davidson, P. (ed.) (2002), *A Post Keynesian Perspective on Twenty-fist Century Economic Problems*, Elgar.

Díaz-Alejandro, CF (1983), 'Some aspects of the 1982-83 Brazilian payments crisis', *Brookings Paper on Economic Activity*, No. 2.

Díaz-Alejandro, CF (1985), 'Good-bye Financial Repression, Hello Financial Crash, *Journal of Development Economics*, vol. 19, N.4.; also in *Collected Essays*, (edited by A Velasco), Oxford University Press, 1989.

ECLAC (2010), *La Hora de la Igualdad. Brechas por Cerrar, Caminos por Abrir*, available at http://www.eclac.org/publicaciones.

ECLAC, (2012), *Database*, at http://www.cepal.org/estadisticas/.

Fama, E (1976), *Foundation of Finance*. Basic Book.

Favero, CA and F Giavazzi (2002), 'Why are Brazil's Interest Rates so High?, IGIER – Università Bocconi*, Working Paper* N. 224, July.

Ffrench-Davis, R (2005), 'The conflict between purely-financial and real-economy macrobalances: the case of emerging economies since the 1990s', ECLAC.

Ffrench-Davis, R (2010), *Economic Reforms in Chile: From Dictatorship to Democracy*, Palgrave Macmillan.

Forbes, K, M Fratzscher, T Kostka, and R Straub (2011), 'Bubble Thy Neighbor: Direct and Spillover Effects of Capital Controls', Paper presented at the 12th Jacques Polak Annual Research Conference, Washington.

Frenkel, R (1998), 'Capital Market Liberalization and Economic Performance in Latin America', New School, *CEPA Working Paper Series III*, 6.

Freud, S (1915), 'Thoughts for the Times on War and Death', available at http://www.panarchy.org/freud/war.1915.html.

GGDC (2009), 'Groningen Growth and Development Centre, 10-sector database', in http://www.ggdc.net/.

GGDC (2012), 'Total Economy Database', available at http://www.conference-board.org/economics/.

Goldfajn, I (2002), 'Há Razões para Duvidar de Que a Dívida Pública no Brasil é

Sustentável?, *Notas Técnicas do Banco Central do Brasil*, N. 25, July.

Hinshelwood, RD, (2009), 'Ideology and Identity: a psychoanalytical investigation of a social phenomena', in *Psychoanalysis, Culture and Society*, 14.

IMF (1999), *World Economic Outlook*, May.

IMF (2012a), *WEO database*, available at www.imf.org.

IMF (2012b), *IFS database*, available at www.imf.org.

IFC (2006), *Emerging stock markets Factbook*, available at http://www.ifc.org/.

Jansen, K (2001), 'Thailand, financial crisis and monetary policy', *Journal of the Asia Pacific Economy*, 6(1).

JP Morgan (2002), 'Emerging Market Research', March 7.

Kelvin, Lord (W Thomson) (1900), 'Address to the British Association for the Advancement of Science', available at http://www.physics.gla.ac.uk/ Physics3/Kelvin_online.

Keynes, JM (1933), 'National Self-sufficiency.' *The Yale Review*, 22(4).

Kindleberger, C (1996), *Manias, Panics, and Crashes: a history of financial crises*, John Wiley & Sons.

Kuczynski, M (1998), 'How Asian has the Asian crisis been?', mimeo, Adenauer Stiftung, December.

Lopes, CL and JG Palma (2005), 'The economic consequences of Mr. Franco', mimeo, Cambridge.

Lopes, CL (2009), *A High Interest Trap: the making of the Brazilian crisis*, BNDS.

Lucas, RE (2004), Keynote Address to the 2003 Hope Conference: My Keynesian Education. *History of Political Economy* 36(4).

Macrométrica (2012), available at: http://www.macrometrica.com.br/.

McKinnon, R, and H Pill (1997), 'Credible economic liberalizations and overborrowing', *American Economic Review*, 87 (2).

Minsky, H (1982), 'The financial instability hypothesis: capitalist processes and the behaviour of the economy', in C Kindleberger and JP Laffargue (eds.), *Financial Crises: theory, history and policy*, Cambridge University Press.

Mönckeberg, MO (2001), *El Saqueo de los grupos económicos al Estado de Chile*. Ediciones B.

Ocampo, JA, (ed.) (2005), *Beyond Reforms, Structural Dynamics and Macroeconomic Vulnerability*, Stanford University Press and the World Bank.

Ocampo, JA and JG Palma (2005), 'Dealing with volatile external finances at source: the rôle of preventive capital account regulations, in JA Ocampo and J Stiglitz (eds.), 2005.

Ocampo, JA and JE Stiglitz (eds.) (2005), *Capital markets Liberalization in Developing Countries*, Oxford University Press.

OECD (2011), *OECD Economic Surveys: Brazil*, available at http://www.oecd.org/brazil/ economicsurveyofbrazil.htm.

Ostry, J, A Ghosh, K Habermeier, M Chamon, M Qureshi, and D Reinhardt (2010), 'Capital Inflows: The Role of Controls.', IMF *Staff Position Note* 10/04.

Palma, JG (2000a), 'The magical realism of Brazilian economics', New School, *CEPA Working Paper Series III*, No.18.

Palma, JG (2000b), 'The three routes to financial crisis: the need for capital controls', *New School, CEPA Working Paper Series III*, No.19.

Palma, JG (2005a), 'Four sources of de-industrialisation and a new concept of the *Dutch Disease*', in JA Ocampo (2005).

Palma, JG (2005b), 'The six main stylised facts of the Mexican economy since trade liberalisation and NAFTA', *Journal of Industrial and Corporate Change*, December.

Palma, JG (2006), 'The 1999 financial crisis in Brazil: "macho-monetarism" in action.' *Economic and Political Weekly*, 41(9).

Palma, JG (2008), 'De-industrialisation, premature de-industrialisation and the Dutch disease', in *The New Palgrave Dictionary of Economics*, 2nd edn., Palgrave.

Palma, JG (2009a), 'Why did the Latin American critical tradition in the social sciences become practically extinct?', in Blyth, M. (ed.) *The Handbook of International Political Economy*, Routledge.

Palma, JG (2009b), 'The Revenge of the market on the rentiers: why neo-liberal reports of the end of history turned out to be premature', *Cambridge Journal of Economics* 33(4). An extended version can be found at http://www.econ.cam.ac.uk/dae/epec/cam/pdf/cwpe0927.pdf.

Palma, JG (2010), 'Why has productivity growth stagnated in most Latin American countries since the neo-liberal reforms?' in JA Ocampo and J Ros (eds.), *The Handbook of Latin American Economics*, Oxford University Press. An extended version can be found at http://www.econ.cam.ac.uk/dae/repec/cam/pdf/cwpe1030.pdf.

Palma, JG (2011), 'Homogeneous middles vs. heterogeneous tails, and the end of the 'Inverted-U': the share of the rich is what it's all about', Development and Change 42(1). An extended version can be found at http://www.econ.cam.ac.uk/dae/repec/cam/pdf/cwpe1111.pdf.

Palma, JG (2012a), 'How the full opening of the capital account to highly liquid financial markets led Latin America to two and a half cycles of 'mania, panic and crash', in G Epstein and M H Wolfson, *The Handbook of the Political Economy of Financial Crises*, forthcoming, Oxford University Press. An extended version can be found at http:// www.econ.cam.ac.uk/dae/repec/cam/pdf/cwpe1201.pdf.

Palma, JG (2012b), 'Was Brazil's recent growth acceleration the world's most overrated boom?', in C. Pitelis (ed.), *The BRICs and Beyond*, Routledge. An extended version can be found at http://www.econ.cam.ac.uk/dae/repec/cam/pdf/cwpe 1248.pdf.

Pérez, C (2002), *Technological Revolutions and Financial Capital*, Elgar.

Pinheiro, AC, I Gill, L Severn and M Thomas (2001), 'Brazilian economic growth in 1900-2000: lessons and policy implications', *Third Annual Conference on Global Development Network*, Rio de Janeiro.

Saad-Filho, A, and L Morais (2002), 'Neomonetarism dreams and realities: a review of the Brazilian experience', in P Davidson (2002).

Sainz, P and A Calcagno (1999), 'La Economía Brasilera ante el Plan Real y su Crisis', ECLAC, *Serie Temas de Coyuntura* No. 4.

Steiner, J (1993), *Psychic Retreats: Pathological Organizations in Psychotic, Neurotic and Borderline Patients*, Routledge.

Stiglitz, JE and A Weiss (1981), 'Credit rationing in markets wit imperfect information, *American Economic Review,* June.

Taylor, L (1988), 'Lax Public Sector, Destabilizing Private Sector: Origins of Capital Market Crises.' New School, *CEPA Working Paper Series III*, No 6.

Taylor, L (2010), *Maynard's Revenge: The Collapse of Free Market Macroeconomics*, Harvard University Press.

UN-Comtrade (2012), *Database*, available at http://comtrade.un.org/.

Wilde, O (1890), *The Picture of Dorian Gray*, James Sullivan Publisher.

Winter, B (2007), 'How Slim Got Huge', available at http://www.foreignpolicy.com/articles/2007/10/11/how_slim_got_huge.

Wolf, M (2007), 'Why plutocracy endangers emerging market economies.' *Financial Times*, 6 November (http://www.ft.com/cms/s/0/9d372b7e-8c9e-11dc-b887-0000779fd2ac. Html#axzz1bhb Cl4Jg).

World Bank (2012a), World Development Indicators, available at http://esds80.mcc.ac.uk/wds_ wb/TableViewer/dimView.aspx?ReportId=24.

World Bank (2010b), Global Development Finance available at http://esds80.mcc.ac.uk/wds_ wb/TableViewer/dimView.aspx?ReportId=23.

World Economic Outlook, (1999), available at http://www.imf.org/external/pubs/ft/weo/1999/02/:.