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Banking, Currency, and Debt Meltdown: Ecuador Crisis in the Late 1990s

By

Augusto de la Torre, Roberto García-Saltos, and Yira Mascaró*

* Comments are welcome and the usual caveats apply. The views expressed in this paper are of the authors and do not necessarily represent the views of the institutions where they work.

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I. INTRODUCTION

This paper recounts and analyzes the deepest financial crisis in Ecuador since the 1930s and arguably one of the most destructive in Latin America in the last two decades, in terms of its financial cost and institutional breakdown (Panel II).

What is new in this paper? [To be written later]

- Illustrates the interplay of micro, macro, and political-economy factors in the gestation of a financial crisis.
- Rich case study of policy dilemmas faced in the context of twin crises.
- Illustrates complexity of banking system restructuring in the context of flight out of the system (as opposed to flight to quality).
- Illustrates major implications of *liability dollarization* (hyperinflation not a political equilibrium; devaluation-insolvency spiral).
- Illustrates the crucial importance of political economy constraints in crisis management.
- Adds significantly to the debate on preconditions for dollarization –a case of “dollarization against the ropes.”

The paper is organized broadly along chronological lines. Section II examines the gestation of the crisis from the early 1990s through 1998. Section III focuses on the eruption of the twin (currency and banking) crises and the emergency containment efforts in the latter part of 1998 and the first quarter of 1999, which culminated with a deposit freeze in March 1999. Section IV analyzes the dark aftermath to the deposit freeze, where the initial phase of banking crisis resolution was constrained by deepening financial instability, growing insolvency, and ongoing economic contraction—a dislocation that was finally arrested by the announcement of formal dollarization in January 2000. Section V briefly considers relevant post-dollarization developments.

II. ORIGINS: WHEN AND HOW WERE THE SEEDS OF THE CRISIS PLANTED?

Financial crises do not just happen; they are built overtime. Ecuador confirms this unequivocally. The gestation of the Ecuadorian (banking, currency, and debt) crises that erupted at the end of 1998 can be traced back at least a decade and can be explained along three dimensions. The first is the failure to establish an effective regulatory and supervisory environment in the face of domestic financial liberalization. The second is the boom-bust phenomenon during 1993-96. And the third relates to the exacerbation of financial vulnerability during 1997-98 due to lax fiscal policy and the failure to introduce financial sector reform, despite the clear warnings from the medium-intensity banking crisis that occurred at the end of the boom-bust phenomenon.

The first explanation highlights the microeconomic roots of the crisis, the second draws attention to its macroeconomic roots, and the third combines them both. Jointly, the three explanations clarify how seeds of crisis, planted in different and independent ways, converge and interact to create major financial vulnerabilities, drastically eroding the system's capacity to deal with the shocks that hit the country in the second half of 1998 and that caused the fragile financial situation to burst into flames. Let us now turn to the first of these three explanations.

A. Financial Liberalization with Lags in Institution Building

Financial liberalization in Ecuador intensified in the early 1990s. It mainly involved the domestic financial markets, because the cross-border movement of private (portfolio) capital had long since been allowed to take place freely. Liberalization was broad based. Administered interest rates built to underpin state-directed credit in the 1970s started to crumble in the latter part of the 1980s and by early 1993 interest rates became fully market-determined. In late 1992 the Central Bank of Ecuador (BCE) set out to eliminate the foreign exchange controls that had been in place to support a dual (official and parallel) exchange market throughout the 1970s and 1980s. Full unification of the foreign exchange market was achieved in the second half of 1993, in the context of a heavily managed float. The average level and dispersion of unremunerated legal reserve requirements was significantly reduced during 1992-94,¹ and direct credit controls (designed to benefit mainly the agriculture sector) were phased out by 1993. Finally, the modernization of bank regulation that had begun in the late 1980s registered a qualitative jump forward in May 1994, with a new banking law, the *Ley General de Instituciones del Sistema Financiero* (LGISF).

This LGISF substantially broadened the scope of operations a bank could perform directly or through its subsidiaries, thus giving a final blow to the provision of financial services through specialized intermediaries. The law also introduced the figure of a bank-holding company² that sought to facilitate the consolidated supervision of financial conglomerates. It completed the full opening of the financial sector to foreign capital. And to counterbalance the new freedoms given to banks, the LGISF established a modern framework for the development of risk-based prudential regulations, including minimum capital requirements, loan classification and provisioning rules, and limits on loans to related parties.³ Alongside banks, the law created the figure of financial societies (*sociedades*

¹ In August 1992 the (unremunerated) legal reserve requirement (LRR) stood at 34 percent for sucre demand deposits, 8 percent for sucre savings and time deposits, and 35 percent for foreign currency deposits. In the first phase of liberalization the LRR on sucre demand deposits was reduced gradually to 25 percent by July 1994. In August 1994, the LLR for sucre demand deposits *and* for foreign currency deposits was reduced to 10 percent, in one step. A process of unification followed, with the LLR on all types of deposits converging to 10 percent by October 1994. Such unified LLR remained unchanged until March 1997, when it increased to 12 percent.

² The law did not follow a pure universal banking model. For instance, it did not allow insurance and investment banking services to be generated directly by the bank or the bank's subsidiaries. Under the LGISF, these services could be provided by a financial group, through specialized entities that would hang from the holding company, alongside the group's bank.

³ To be sure, the LGISF limited the capacity of the regulator to raise capital requirements beyond percent of risk-weighted assets and established a fairly generous ceiling for loans to related parties: percent of regulatory capital, which could be increased to percent if the loans had high quality guarantees. Limits on exposure to connected loans as percentage of bank equity varies widely across Latin American countries (Brazil 10%, Costa Rica 80%, and Peru 75%, Bolivia 0%).

financieras), which were authorized to provide basically the same range of services as a bank, with the notable exception of demand deposits.

Financial liberalization in Ecuador was unavoidable—a necessary component of a needed reform and modernization process. The previously financially repressed system had become increasingly incompatible with momentous trends (e.g., capital mobility, deregulation, financial innovation, and technological change) sweeping across the world and was an obstacle to the financial deepening required for the country's economic development. Why, then, did financial liberalization create vulnerabilities in the Ecuadorian banking system that made it more prone to crisis? The answer is that, on the one hand, implementation of the LGISF through regulation, supervision, and enforcement did not (and probably could not) materialize fast enough; and on the other, the new legal framework itself had crucial deficiencies.

Three epicenters of vulnerability developed as liberalization proceeded. These were (i) the failure to implement effective consolidated supervision of financial conglomerates, with special problems related to offshore banks and investment funds; (ii) the deficiencies in the framework for troubled bank resolution and closure; and (iii) the proliferation of intermediaries with low capital. In the remainder of this section we first deal with these three issues and then, in a fourth subsection, discuss political economy factors that help explain why institution building did not adequately accompany financial liberalization.

1. Consolidated supervision failures—offshore banks and funds

The Ecuadorian financial system has been dominated by banks operating at the center of financial conglomerates with complex property structures that typically included, in addition to the onshore bank, an offshore bank, a fund management company, a securities trading/brokerage house, a credit card company, leasing and factoring businesses, and—in many cases—also an insurance company. The LGISF had intended to bring these conglomerates under consolidated supervision but its implementation was not in place by the time the crisis erupted in late-1998. Even basic preconditions for consolidated supervision took long to develop. Consolidated accounting information on financial conglomerates began trickling in (infrequently and with many deficiencies) only two years after the approval of the LGISF, severely limiting market monitoring. This was compounded by inadequate official monitoring due to skill shortages within the Superintendency of Banks (SB)⁴ and the consequent failure of the SB to move towards risk-based focus (rather than just a focus on check-list compliance) supervision.⁵ There was in addition little or no progress in strengthening the monitoring functions of internal risk management systems, as well as of external auditors and boards of directors, as had been intended in the LGISF.

Thus, the absence of consolidated supervision opened the door for unscrupulous bank managers and stockholders to utilize complex conglomerate structures to hide multiple gearing, take excessive risks, conceal losses, or loot. To be sure, the lack of consolidated

⁴ In Ecuador, the function of bank supervision and regulation does not rest with the Central Bank but with a separate institution, the Superintendency of Banks (SB), which is an autonomous entity of Constitutional rank.

⁵ The upgrading of the SB capacity for effective on-site, risk-focused supervision was not given priority in the years following the approval of the LGISF because the SB concentrated on developing new regulations.

supervision had existed long before the liberalization process. But as liberalization widened the range of risks confronting bank managers, it also broadened the scope for abuse.

Box II.1 -- Ecuadorian Offshore Banks and Funds

Offshore banks in Ecuador were of a peculiar nature. They were not established to provide financial services to non-residents, as is the case of other commonly know offshore centers. Rather, they carried a license issued by a foreign, normally Caribbean country (a license that would typically not allow them to take deposits in the issuing country) and were authorized by the SB to provide a full menu of dollar-denominated financial services to Ecuadorian residents, including deposit taking and lending. Every offshore bank was part of an onshore financial conglomerate and thus intricately interwoven with the domestic economy. For Ecuadorian residents, an offshore bank appeared as inseparable from the onshore bank—both were perceived to emanate from the same financial entity, a perception that was supported by the use of the same brand name, building, and other infrastructure to provide financial services. By the mid-1990s the offshore banking sector was about 70 percent the size of the onshore system.

This type of offshore banking blossomed in the early 1980s as tax heavens and vehicles used to circumvent capital controls, as banks licensed in Ecuador were not authorized to offer dollar-denominated deposits. In those years offshore banks played the useful function of preventing a disruption in credit flows every time Ecuadorians moved their savings into dollars for fear of devaluation—deposits that shifted from the onshore to the offshore arm of the same financial conglomerate funded continued lending (in dollars) to Ecuadorians. While the LGISF in 1994 explicitly confirmed the freedom of onshore banks to take dollar deposits and make dollar loans, a strong banking lobby squelched proposals for the LGISF to phase out the offshore system by restricting deposit taking in Ecuador to financial intermediaries licensed in Ecuador. Detractors argued that although offshore banks would no longer have exclusivity in offering protection against currency risk to depositors, their foreign licenses still enabled them to offer air-tight secrecy on depositors' identity and other protection services against country risk—which were highly valued given Ecuador's tradition of legal insecurity and political instability. Removing Ecuador's peculiar offshore system, detractors argued, would foster deposit flight out of the "expanded" financial system, with the consequent drying-up of credit.

The story with **trust, investment, and mutual funds** was similar. The legal framework for their development was established in 1993, with the new capital markets law, the *Ley del Mercado de Valores* (LMV). Fund management entities multiplied quickly under the umbrella of financial conglomerates. Funds tended to fall between the regulatory cracks, as they were the shared responsibility of the SB and the regulatory agency for securities markets, the *Intendencia de Valores* (IV) within the *Superintendencia de Compañías*, also created in 1993 by the new LMV. The IV failed to establish and enforce adequate disclosure and accounting standards. Due to branding and use of common facilities, investors clearly identified the fund with the related bank. Offshore funds were as prevalent as onshore ones, but the distinction was typically blurred to the investor. Investors in many cases did not fully understand the difference between a deposit and an investment in a fund, tending to focus only on the rates of return peddled by fund promoters.

Two vehicles of financial conglomerates proved to be particularly treacherous: offshore banking and fund management. Offshore banks were inextricably woven into the Ecuadorian economic and financial fabric, but represented a blind spot for investors and supervisors alike, as did funds (Box II.1). Autopsies of subsequent bank interventions illustrate how these vehicles were allegedly used to generate phony capital, fund loans to related parties, and strip assets behind the back of supervisors.⁶ When financial distress set in, funds and offshore banks became a source of contagion to their parent banks—who tended to come to the rescue of their related funds and off-shore branches, providing

⁶ A careful description of a highly sophisticated case can be found in BCE, *El Caso del Grupo Conticorp: Aumento de Capital Cuestionado y Presunto Beneficio a Empresas Relacionadas y a Accionistas, a Expensas de los Depositantes*, 1996.

liquidity and absorbing losses, in order not to pass on losses to investors and avoid adverse reputational consequences.

2. Deficiencies in the framework for bank failure resolution

Vulnerabilities were also brewed in the context of financial liberalization because the LGISF did not establish an efficient bank failure resolution framework. That is, a framework that would, on the one hand, ensure early closure (to stop bleeding, curb incentives to “gamble for resurrection,” and prevent looting in the troubled bank) without undue risks of causing deposit runs; and, on the other hand, avoid costly destruction of value from the assets of the closed bank.

The system of bank closure in the LGISF was basically the same that had existed before, i.e., a protracted process of liquidation applied to the entire balance sheet of the failed bank.⁷ There was no explicit insurance for small depositors, except that small onshore depositors (up to US\$2,000 per depositor) were given a priority claim on the assets of the failed bank in the case of liquidation. Payments to depositors and other creditors of the failed bank were completely tied to the availability of cash obtained from a slow and inefficient asset liquidation process. There was no legal basis, for instance, to transfer deposits (at least those of small depositors) from an insolvent bank to other banks quickly (e.g., over a weekend), which—as illustrated by, say, the experience in the United States or Argentina—is key to avoid contagious runs on other banks and, thus, to remove a crucial disincentive for supervisors to take the decision to close a nonviable bank.⁸ All of this, together with the various hoops and deadlines established in the law for identifying legitimate depositors and other claimants, implied that in practice depositors would begin getting their money back several months after a bank closure.⁹

The bank closure framework in the LGISF was usable only in case of isolated failures of small banks. But its shortcomings were evident in the case of troubled larger banks belonging to financial conglomerates. The closure of such banks, accompanied by protracted delays in paying out depositors, was feared to spark contagion to other banks, onshore and offshore. These concerns grew more acute as the macroeconomic environment deteriorated and the banking system fragility grew.

The LGISF did not provide an effective alternative to closure that could be used in extraordinary circumstances for a “too-big-to-fail” case. The SB had, for instance, no powers to intervene a troubled bank, remove its managers and directors, displace its shareholders by writing down their equity against identified losses, and then clean it up and sell it.¹⁰ There was no “intervention” figure proper in the LGISF, for it had been drafted with

⁷ The liquidation of some small banks that had started in the early-to-mid 1980s was still taking place by the mid-1990s, with lawsuits disrupting some of the processes. In more than one case (e.g., Banco Sudamericano and, most recently, Banco de los Andes) a judge ordered the SB to “give the bank back” to its owners.

⁸ A description and assessment of the experience under the Argentine bank closure and resolution system is found in De la Torre (2000). For bank failure resolution techniques in the United States, see FDIC 1997.

⁹ Reforms to the LGISF introduced in 1996, authorized the Central Bank to make a loan to a liquidator to facilitate rapid payout of small depositors. However, this was not meaningfully tested.

¹⁰ This type of legal framework is found, for instance, in the current legislations of Spain, Mexico, and Colombia. In these cases, the law also authorizes the use of deposit insurance or public sector funds to clean-up and

the naïve assumptions that (i) bank troubles would be detected by supervisors and corrected promptly, long before insolvency would set in; and (ii) the prospect of harsh liquidation of any insolvent bank (regardless of its size), by exposing bank shareholders and depositors to risk of loss, would enhance market discipline and keep moral hazard in check.

The only alternative to bank closure left in the LGISF was that of the “subordinated loan,” which was used by the BCE when it took control of failing Banco Continental in March 1996 (see below) in order to recapitalize it. This alternative, however, had flaws. The removal of Banco Continental’s administrators and the dilution of its shareholders’ equity in the bank had to be done through moral suasion—via agreements that required the signature of the bank’s owners. Partly as a result, the intervention process gave rise to such a legal quagmire, including lawsuits against the BCE and SB authorities, that subsequent authorities preferred to stay away from the subordinated loan alternative.

Legal deficiencies in bank intervention, closure, and resolution deprived Ecuador of an essential pillar to ensure the soundness of its banking system in the midst of financial liberalization.¹¹ Such deficiencies tended to shift the responsibility on bank closure away from the SB and towards the BCE. The BCE felt obligated by its law to continue to provide liquidity to a troubled bank as long as the SB did not declare that such bank was insolvent. But given perceptions of contagion and legal risks, the SB faced disincentives to take unambiguous positions on whether a bank had become insolvent, and rather tended to prefer to let it stay open with BCE liquidity support. This ambiguity of the regulator was incorporated into the risk-taking decisions by banks’ managers and shareholders. The inadequate framework for bank failure resolution planted seeds of unsoundness that made the banking system vulnerable and proved to be crippling as the crisis neared and erupted.

3. Too many intermediaries with low capital

A third less important but still relevant loci of vulnerability was the fast proliferation of banks and financial societies operating in a relatively small market. The number of financial intermediaries (banks plus financial societies) rose from 32 at end-1992 to a 89 at end-1995. This phenomenon obeyed in part to lax implementation by the SB of the already improved framework in determining fit-and-proper tests, although the LGISF itself contained generous provisions authorizing a fairly automatic transformation of existing non-bank financial intermediaries into financial societies. Once transformed, and despite lacking the minimum capital level required to operate, these could immediately engage in any of the activities (including foreign exchange and sophisticated treasury operations) permitted by the new law, safe for demand-deposit taking.¹²

recapitalize the intervened bank so that the re-privatization becomes possible. In practice, the application of such schemes has proven to be difficult to execute and excessively costly to the public purse. As the Argentine experience shows (see De la Torre, 2000), the need for this type of “open bank resolution” schemes tends to diminish where an efficient closed-bank resolution framework exists.

¹¹ Perry, Burki, et al. (1998), Chapter 3, makes the case that banking system soundness and the functionality of the safety net crucially depend on three, mutually reinforcing pillars: capital, monitoring, and exit.

¹² The 1994 LGISF intended for banks and financial societies to be equally subject to prudential norms, including a minimum *ratio* of capital to risk-weighted assets. The difference in the minimum capital *level* required to operate was, however, significant: US\$ _____ million for banks versus US\$ _____ million for financial societies. A six-

One result of an overpopulated banking system operating in the small market under the mentioned conditions was an inability of most intermediaries to diversify risks adequately and reap the benefits from economies of scale and scope.¹³ In addition, the rapidly changing landscape of financial markets gave rise to a constellation of new and complex risks, a challenge for older bank managers who had grown accustomed to the previous era of banking under financial repression, as well as for the new managers, often young and inexperienced. Few far sighted financial institutions took steps to modernize and upgrade their risk management capacity but most lagged behind considerably and were not pressed to establish adequate internal risk control systems by the supervisory authority, which itself lacked the capacity and skills to conduct risk-based supervision.

4. Financial liberalization in the context of oligarchic power structures

Costly lags in implementing the LGISF and in institution building vis-à-vis domestic financial liberalization were, no doubt, a reflection of weak capacity and insufficient human capital in the public sector and regulatory entities. But this popular explanation is far from being the whole story. More fundamental were political economy constraints and, in particular, deeply rooted oligarchies—that is, power structures that use their political influence to defend or gain economic privileges.

Some of the Ecuadorian financial conglomerates were embedded into broader family-dominated groups, which had significant and often fairly diversified businesses in non-financial sectors, and possessed strong political connections. The more traditional groups saw their related bank less as a profitable business in itself and more as a source of cheap and reliable funding for the expansion of their non-financial businesses. Thus, self-lending was in some cases the *raison d'être* of banking and hence very difficult to curb through regulation. On a more benign interpretation, self-lending also may have reflected a response to the significant problems of information asymmetry and weaknesses in the enforcement of creditor rights.¹⁴ Be it as it may, the cozy relationships within economic-financial groups created resistance to reforms inconsistent with their interests, hindering progress in efforts to underpin liberalization with better market and non-market institutions.

Economic groups were often part of the web of Ecuador's traditional political machinery. Banks were sources of campaign financing. Symbiotic relationships were such that, in a few cases, banks were used as vehicles to dispense political favors. The traditional political machinery exerted influence even over the judicial system with, for instance, the selection of judges unduly intertwined with the political power play. This, together with evidence that "money can buy judges," boosted the reach of oligarchic power. The system of financial sector regulation was thus easily prone to regulatory capture. Enforcement of prudential oversight was weakened because supervisory authorities felt exposed to retaliation, including personal lawsuits, for the actions taken in the discharge of

year timetable was granted by Congress to the existing non-bank financial intermediaries to reach the minimum level once they transformed into financial societies.

¹³ Most of the weaker intermediaries were so small that individually did not pose any systemic threat. But collectively they constituted an important soft spot (■ percent of the system by end-1995).

¹⁴ The repossession of collateral in Ecuador's legal system takes unduly long time and is hampered by a bias in favor of debtors. Creditor rights are weak and unclear given major deficiencies in the framework for corporate restructuring and bankruptcy proceedings.

their official duties.¹⁵ The political economy of oligarchic power gave rise to almost insurmountable constraints in crisis management and resolution (see below).

B. Capital Inflows, Credit Boom, and Sudden Stop (1993-96)

The boom-bust phenomenon displayed by capital flows and domestic credit provides more of a macroeconomic interpretation of the roots of Ecuador's financial crisis. We argue in this section that the upswing phase of capital inflows and domestic credit (1993-94) planted seeds for the financial crisis that erupted in late-1998 and early-1999 mainly through information asymmetry problems and exposure to volatile capital flows. We also argue that the sudden stop in credit and capital flows (1995-1996), driven mainly by exogenous shocks, exposed the vulnerabilities spawned during the upswing phase and exacerbated them in a dramatic way. The aftermath of the sudden stop was a medium-intensity financial system crisis, brought under control relatively quickly.

1. The surge in capital inflows and domestic credit (1993-94)

In late 1992 Ecuador joined emerging markets as receiver of important flows of capital, which were largely intermediated through the domestic financial system.¹⁶ This led to a lending boom, which peaked in the second half of 1994, when bank credit to the private sector was expanding at annual rates of around 60 percent *in real terms*. By 1994 the stock of credit to the private sector had risen to 30 percent of GDP, compared to less than 15 percent during 1989-92. Private capital inflows (including foreign direct investment—FDI) surged from an average of US\$200 million per year during 1989-92 (about 2 percent of GDP) to US\$730 million in 1993 and US\$780 million in 1994 (about 5 percent of GDP). Private capital inflows led to an abundance of loanable funds, relaxing the credit constraints to which households and enterprises had been subject in prior years (Panel II).

The causes behind the surge in capital inflows—the main driver of the credit boom—cannot be easily and neatly separated, but they clearly included internal or *pull* factors and external or *push* factors.

The pull factor was the relatively successful macroeconomic stabilization program launched at the end of 1992 (Panel II). With the help of nominal exchange rate stability, it brought inflation down to 30 percent by end-1993 and to 25 percent by end-1994 (compared to the 50 percent to which inflation had stubbornly adhered in 1990-92). It produced a zero fiscal deficit in 1993-94, an important achievement especially considering the decline in the price of Ecuador's oil exports from a range of US\$16-17 per barrel bbl in 1991-92 to about US\$11 in late-1993 and early-1994 (oil income represented 30-35 percent of total public sector income). The resulting optimism was reinforced by debt negotiations initiated in March 1993, which led to agreement in principle by mid-1994 on a comprehensive debt reduction package under the Brady Initiative (the renegotiated debt represented some two-thirds of the public sector's total external debt and had been in

¹⁵ Ecuador was, thus, far from meeting the basic components of principle # 1 of the Basle Core Principles of Effective Banking Supervision, which concerns the autonomy, powers, and resources of the supervisory agency.

¹⁶ This trend that had started a few years earlier in other Latin American countries, as documented in Calvo, Leiderman, and Reinhart (1993, 1994).

arrears since 1987). Real GDP growth (year-on-year) picked up steadily from a low 0.9 percent in 1993Q2 to 6.3 in 1994Q4.¹⁷

Push factors included, of course, buoyant international liquidity and relatively unattractive investment opportunities in industrialized countries, including due to lower interest rates in the United States. Given the significance of these external factors, one wonders how much of a culprit for the boom in capital inflows and credit was the nominal exchange rate stability characteristic of the disinflation program. To be sure, the sucre interest rate (adjusted for subsequent currency depreciation) remained above the dollar interest rate in effect in the Ecuadorian financial market during most of 1993-94 (Panel II.10). This undoubtedly attracted short-term speculative flows and contributed to currency and maturity mismatches at home. But it is hard attribute the whole or even a significant part of the surge in capital inflows to this “pull” factor. There was such a flood of capital pouring at that time into emerging markets in general, and Latin America in particular,¹⁸ that it could thus be argued that *any* reasonable macroeconomic and reform policy in Ecuador would have enabled it to share in the general capital flow bonanza, regardless of whether disinflation was based on exchange rate stability or not.

Be it as it may, Ecuador clearly confirms the oft-found empirical regularity that a credit boom precedes a banking crisis. But why is this so? The main reason was that the euphoria of the boom intensified information asymmetry problems, resulting in a generalized underestimation of the nature and extent of risks taken by financial intermediaries. As Gavin and Hausmann (1996) remark, “good times are bad times for learning” in the sense that during a period of vigorous credit expansion “it is difficult for bankers to obtain information on the creditworthiness of borrowers” (p. 54). The increased profitability of debtor enterprises facing lower real interest rates enabled them to meet more easily the solvency and liquidity tests applied by bank credit officers, who tended interpret the situation as a permanent improvement in future cash flows of borrowers. Moreover, bankers favored bigger market shares which, in an environment of fast rising credit, increased the aggregate risk of lending in apparent contradiction with bright projections of firm-specific profitability.¹⁹ Additionally, with asset prices soaring, collateral tended to be overvalued by creditors and their clients alike. In short, the fast expansion in balance sheets during 1993-94 implied much more risk taking than was then perceived by bankers. Such latent deterioration of loan quality became actual and recognizable only after the boom came to an end.

¹⁷ The macroeconomic program featured an initial cold turkey tactic (it was inaugurated with an overshooting devaluation; major upward corrections in controlled prices of fuel, electricity, and telephone; and a drastic reduction in government spending) followed by exchange-rate based disinflation. It displayed the typical dynamics of this type of programs: an initial surge in spending and borrowing, associated with an overshooting appreciation of the real exchange rate and asset price rise. Real wages increased by a cumulative 66 percent during 1993-94, well in excess of productivity gains. Asset prices bubbled—e.g., the stock market index rose in dollar terms by nearly 600 percent during 1994 (real estate data is unavailable). Private sector investment rose faster than saving, more than offsetting the reduction in the fiscal deficit and thus leading to an increase in the external current account deficit from 1 percent of GDP in 1992 to 4 percent in 1994 (Panel II).

¹⁸ During 1990-1994 the cumulative financial and capital flows to Latin America were 1.7 times bigger than those registered during 1981-1989.

¹⁹ In a boom it is difficult to be pessimistic, even if bankers acknowledge that they have little information on new debtors.

From hindsight it can be said that, to the obvious policy failures associated with domestic financial liberalization, one could add a policy failure in the management of the domestic credit boom. The authorities should have, for instance, raised loan-loss provisions and liquidity requirements during the upswing phase of the credit cycle, to create cushions that would have enabled the banking system to deal better with the effects of the downturn phase.²⁰ The case for this is stronger given that capital inflows included a significant component of the so-called capital *golondrina*—i.e., the short-term, speculative, volatile flows. Non-FDI private inflows (which accounted for about 45 percent of total net private capital inflows in 1991) to Ecuador swelled from a cumulative US\$12 million (0.1 percent of GDP) in 1991-92 to US\$506 million (3 percent of GDP) in 1993-94. And the stock of registered private sector debt—much of which was short-term in nature—jumped from US\$258 million at end-1992 to US\$832 million at end-1994.

The volatility of non-FDI capital, which was painfully experienced after the credit boom, when a dramatic reversal took place (see below), constitutes another causal factor that explains the subsequent financial system fragility. But what could have been done about it? Aside from slowing down the associated expansion in domestic credit, not much, it seems. Firstly, it is difficult to argue that a policy of greater exchange rate flexibility would have been the right vaccine to apply. It would have been a medicine with too much collateral damage—resulting in an inordinate real appreciation of the sucre, with seriously adverse consequences for competitiveness in exporting and import-competing sectors (e.g., agriculture and manufacturing). Secondly, it could be argued that the true policy failure consisted in not introducing “sand in the wheels” of short-term inflows through, say, reserve requirements à la Chile that changed the maturity profile of the inflows. This is true in principle. In practice, however, the long tradition in Ecuador of a private capital account completely free from controls would have seriously undermined the effectiveness of Chilean-style controls, had they been imposed.

The information asymmetries germane to the lending boom and the volatile nature of short-term speculative capital were causes of banking system fragility analytically separable from the incentive distortions produced by the deficiencies in domestic financial liberalization.²¹ In particular, the lending boom would have likely led to excessive risk taking by banks even in the absence of the shortcomings in consolidated supervision, inadequacies in the framework for troubled bank resolution, proliferation of financial intermediaries with low capital, and political economy constraints. In the event, however, these independent causes interacted and reinforced each other, inflicting a much more severe damage to banking system soundness and leading to a much greater underlying vulnerability than anyone in Ecuador anticipated during the time of credit bonanza.

2. Sudden stop (1995-96)

The credit boom could not have continued for too long and a downturn phase would have had to take place eventually and endogenously. Capital inflows—the lending boom’s main driver—are subject to a “stock adjustment” dynamics; that is, inflows would have

²⁰ In this regard, the reductions of the legal reserve requirement in the second half of 1994 (see footnote 1 above) were ill timed indeed.

²¹ Empirically, however, domestic financial liberalization has been found to magnify credit fluctuations (see McKinnon and Phil, 1996).

continued strong until foreigners' exposure to Ecuadorian risk reached a steady state level compatible with their revised risk perceptions; subsequently, inflows would have tapered off. Credit demand would have subsided once domestic residents realized that their leverage was too high. Willingness to lend among bankers would have decreased once banks realized that risks taken during the years of exuberance were greater than originally thought. An eventual bursting of the asset price bubble would have reduced the value of collateral, further restricting credit demand and supply. And given the exchange-rate based disinflation program and speculative nature of much of the non-FDI private flows, the *real* exchange rate was more appreciated than its long-term equilibrium level, implying the need of an eventual real depreciation, likely to be accompanied by a contraction of domestic demand. These and other factors would have led to an endogenous downswing in credit which, with appropriate policy responses, could have been turned into a soft landing. In reality, however, Ecuador experienced a very hard landing.

The hard landing featured a nose dive in real credit expansion in 1995 and virtual credit stagnation in 1996 (Panel II). The endogenous factors mentioned above had only a small role to play in the downswing phase of the lending cycle. Dominant were major Ecuador-specific shocks whose effects were compounded by a general deterioration of the external financial environment associated with the Mexican crisis of 1994-1995. Latin America as a whole was experiencing a slump of capital inflows²² but Ecuador's fate was much worse. Although FDI continued to flow into Ecuador at about US\$470 million (about 3 percent of GDP) per year during 1995-96, there was a gigantic reversal in non-FDI capital flows. The *accumulated outflow* of non-FDI capital in 1995-96 was US\$1.5 billion (8 percent of GDP), 3 times the accumulated non-FDI inflow during 1993-94.²³

There were mainly three Ecuador-specific shocks that fed much of this reversal. First was the outburst of a military conflict with Perú in January 1995. It produced massive pressures on the sucre. The monetary authorities defended the sucre through a dramatic hike in the overnight (inter-bank) interest rate (it reached a peak of 200 percent in February 1995), believing that the conflict would last only a few days. But military confrontations lasted for 6 weeks and so did the liquidity squeeze and high interest rates. After the cease-fire a return to financial normalcy appeared promising and, in fact, credibility was temporarily rebuilt through the opportune introduction of fiscal measures and an upward adjustment to the recently inaugurated exchange rate band, both implemented in March 1995.²⁴

Unfortunately two additional shocks halted this improvement. One was a political shock—a virulent partisan confrontation between the powerful Social Christian Party and the Vice President of the Republic, Alberto Dahik, which ended in the resignation of the latter in October 1995 and marked the beginning of a long phase of political instability that has lasted to date. Mr. Dahik was considered by market participants at home and abroad as *the*

²² During 1995-96 portfolio flows to LA decreased by 60 percent with respect to the 1993-94 average.

²³ Non-FDI flows in this paper are defined to include errors and omissions—i.e., the residual item in the balance of payments statistics—and may thus be somewhat distorted by unrecorded trade flows, particularly contraband of imports. The latter is believed to have been substantial in the last quarter of 1996, at the beginning of the Bucaram administration, when corruption in customs administration is widely perceived to have surged.

²⁴ That was one of the last successful devaluations in Ecuador, for it was followed by an immediate decline in interest rates—the real lending rate decreased steadily from its peak of 40 percent in March-April 1995 to 20 percent by end-June of the same year, while the sucre stabilized at the mid-point of the new exchange rate band.

economic reform leader in the administration of President Sixto Durán-Ballén. The other shock was a prolonged drought that caused a major energy crisis, characterized by all too frequent and disruptive blackouts throughout the second half of 1995. As a consequence, real interest rates shot up again to around 30 percent by the fourth quarter of 1995 and remained high through most of the next year, supported by uncertainty about the outcome of the electoral process. (Mr. Abdala Bucaram—a populist leader known as *El Loco*—became the new President in August 1996.)

These Ecuador-specific shocks reinforced by the more general sudden stop in capital flows to Latin America during 1995-96 (in the aftermath of the Tequila) and badly shook domestic economic activity and the balance sheets of households, corporations, and banks. The high (ex-post) real interest rates implied major wealth transfers from debtors to creditors, severely weakening balance sheets where sucre liabilities were large (anecdotal evidence indicates that high leverage ratios were the norm rather than the exception among larger companies). High interest rates sharply raised the burden of debt service obligations, caused a large drop in the value of firms and their collateral (represented by *discounted* values of future income streams), and contributed to the pronounced slowdown of economic activity. Year-on-year real GDP growth fell from about 6 percent in the second half of 1994 to 0.8 percent in the July 1995-June 1996 period. Non-performing loans increased from less than 4 percent at end-1994 to 9 percent by end-1996—a *recorded* increase that was probably a significant understatement of the real increase considering the deficiencies in the supervisory framework mentioned earlier. Moreover, several financial intermediaries, including the fairly large Banco Continental (see below), were caught with substantial exposure to interest rate risk and this added considerably to their losses.²⁵

Against this background, which precipitated a medium-intensity banking crisis (see below), the BCE tried unsuccessfully to ease pressures on real interest rates by cautiously increasing the rate of currency depreciation²⁶ as from the fourth quarter of 1995 and by accepting a mild pick-up in inflation from 23 percent per year at end-1995 to 26 percent by end-1996—which kept the real exchange rate fairly constant. Despite the major reversal in portfolio capital flows mentioned earlier, the authorities were reluctant to allow a sizeable step devaluation of the sucre, not just to protect the hard won gains made in the fight against inflation but more importantly to avoid precipitating a self-fulfilling currency crisis. Such “fear of floating” (Calvo and Reinhart 2000) reflected worries about fragile expectations and a growing problem of “liability dollarization” among debtors with sucre income (see Section III below).

3. Banking system distress in late-1995 and early-1996

A medium-intensity banking crisis unfolded at the end of 1995, affecting mainly financial societies (*sociedades financieras*) but also a few small-size banks and Banco Continental—by then the fifth largest bank in the system. It was—as most crisis are—

²⁵ Those intermediaries speculated that interest rates would fall during 1995, in line with the macroeconomic program announced in October 1994, and imprudently took short-duration liability positions and long-duration asset positions. Prudential regulations to control for interest rate risk did not exist at that time in Ecuador.

²⁶ This was made possible by adjustments to the exchange rate band. The band was shifted upward, widened, and its slope slightly increased at end-October 1995 and, upon the change of presidential administration, in August 1996.

triggered by severe illiquidity affecting the weakest institutions. The amply publicized failure of two brokerage houses, which had been gathering funds from investors illegally, fueled runs against the financial society sector. By the fourth quarter of 1995 financial societies had been rationed out of the inter-bank market. Banco Continental became increasingly unable to manage the snowballing of losses associated with having to roll-over its huge short-term inter-bank debt—which had been build in late 1994 to fund long-term assets in the expectation that interest rates would fall. Sporadic runs also hit other large banks but did not inflict mortal wounds. By the end of 1995, the number of financial intermediaries receiving expensive liquidity from the BCE reached a peak—30 financial societies and 7 banks, including Banco Continental, jointly representing [redacted] percent of the system.

The crisis was managed in a context of “flight to quality.” That is, depositors responded to the financial system distress mainly by moving from financial intermediaries perceived as weak to banks perceived as strong; they did not massively move out of the banking system as a whole. The BCE was thus able to mop up, through open market operations, most of the liquidity injected in support of the financial system, and the exchange rate regime held with only relatively modest losses in international reserves (which fell from US\$1,712 million at end-1994 to US\$1,557 million at end-1995), given the already mentioned high interest rate policy.

The crisis, which began to subside by mid-1996, unleashed a major process of consolidation of the financial society sector—17 financial societies, representing about half of that sector, exited the system through liquidation, merger, or acquisition.²⁷ The banking sector, in contrast, remained basically intact, with the exception of Banco Continental which was taken over by the BCE in March 1996. Considering the fragile condition of the financial system at the time and Banco Continental’s large size, the authorities decided to avoid the risk of systemic contagion that could have been ignited by a traditional closure and liquidation of that bank. But given the legal framework then in effect (see section II.A.2 above), the “intervention” of Banco Continental by the BCE required considerable moral suasion. Banco Continental was re-capitalized by the BCE via a “subordinated loan,” which was granted after the BCE had appointed new administrators and after the shares of Banco Continental had been placed in a trust in favor of the BCE—the value of the shares to be legally written down upon confirmation by an independent audit of the capital losses that had been identified by the SB. The shareholders of Banco Continental lost their equity in the bank but its depositors were bailed out with the intention of avoiding the risk of a major loss of depositor confidence in the system. As a result, by June 1996, the stock of BCE financial assistance to Banco Continental stood at the equivalent of US\$ [redacted] million ([redacted] percent of GDP), including the subordinated loan for US\$160 million.

C. Post-Crisis Inaction or a Wasted Opportunity (1997-98)

Despite the deep structural problems in the banking system that became obvious during the financial crisis of late-1995 and early-1996, sustained and coherent policy action and reform did not emerge. Rather, fiscal discipline was abandoned and banking system strengthening was consistently avoided. This was a policy failure of major proportions and grave implications. To a large extent, it sealed the fate of Ecuador’s financial system. The years 1997-98 gave the country a precious opportunity to put in place a crisis prevention

²⁷ For details, see BCE, *Memoria Anual 1996*, pp. 71-74.

reform program. A medium-intensity banking crisis had occurred and, fortunately, the worse had been averted; warning signals had surfaced with great clarity; the diagnosis was not difficult—all raising awareness and creating conditions for public support for a bank restructuring program with stricter regulatory enforcement. Why was the opportunity so glaringly missed? We argue that the failure can be explained (not justified) by a complex interaction between political instability and legal risks facing supervisory and central bank authorities. The result was rising fiscal indiscipline and unchecked erosion of banking system soundness. To these issues we now turn.

The *intensification of political instability* in 1997-98 was incompatible with continuity and coherence in macroeconomic policy and eliminated the possibility of a sound plan of action to tackle deep seated financial system problems. Those two years saw 3 Presidents of the Republic, ■■■ Ministers of Finance, and ■■■ Central Bank Governors. President Bucaram announced ambitious fiscal and banking system reforms at the end of 1996, as part of his program to introduce a currency board by July 1997. But his personal style and proposals sharply antagonized Congress. And growing evidence of grotesque corruption in his administration caused him to lose support, particularly among the middle classes, the press, and the business community. He was declared “mentally unfit” and ousted from office by Congress in February 1997, six months after having been elected. Interim President Alarcón, nominated under a fragile consensus,²⁸ had a short time horizon (18 months) and too wide a range of conflicting interests to satisfy. He had no appetite to pursue economic reforms and thus chose the path of least resistance in fiscal and financial sector policy. President Mahuad assumed power in August 1998 but did not pay significant attention to fiscal and financial sector issues in the first months of his administration, when he concentrated his energies in the pursuit of a Peace Accord with Perú.

Reform inaction allowed banking system fragility to augment which, in turn, reinforced incentives for authorities not to “rock the boat” through regulatory enforcement. This effect was magnified by the regulatory *authorities’ perception of high (personal) legal risks associated with the discharge of their duties*. The judicial aftermath of the intervention of Banco Continental played an important role in this regard.²⁹ The potentially disciplining effect on bankers from the removal of, and the legal actions taken against, former Banco Continental’s administrators and shareholders (i.e., the threat that bad bankers could lose their banks) was offset by the lack of independence of judicial processes vis-à-vis political and interest group pressures. The legal process³⁰ became politicized and muddled when Ecuador’s Chief Justice issued indictments (in May 1997) to both parties: policymakers (BCE and SB authorities) and Banco Continental’s former shareholders, directors, and administrators. While the authorities were eventually cleared, the legal mess had a chilling

²⁸ Mr. Fabián Alarcón was President of Congress at the time of the ousting of Mr. Bucaram. He became Interim President after considerable political haggling between the Congress, the Supreme Court President (!), and the then Vice President of the Republic, as to who should be the rightful successor.

²⁹ The depositor bailout implicit in the BCE takeover of Banco Continental may have increased moral hazard—although the evidence on this is mixed given that runs against large banks continued to be a recurrent feature in the Ecuadorian system afterwards.

³⁰ Simultaneous lawsuits were launched in 1996 against Banco Continental’s shareholders and administrators by the BCE in the Bahamas (for transactions considered to be fraudulent and conducted through a related fund in that jurisdiction) and by the State’s General Prosecutor in Ecuador (upon receipt from the SB of the results of its detailed audit of the bank).

effect on subsequent supervisors and central bankers, and probably strengthened the belief among powerful bad bankers that they could intimidate supervisory and monetary authorities by influencing judges. Regulatory enforcement thus became a perilous affair for the authorities daring to engage in it, dimming their willingness to address boldly the structural problems in the financial system.³¹

Against the background of high political instability, economic activity slowed down sharply³² while macroeconomic imbalances worsened, adding to overall vulnerability. Surprisingly, the government was able to borrow copiously in international and national private capital markets.³³ This facilitated a passive fiscal policy, despite the adverse effects of the Asian crisis and, more importantly, the collapse in the terms of trade (oil export prices fell from a peak of nearly US\$21/bbl at end-1996 to US\$7/bbl by end-1998). The private sector was also able to finance a widening gap between its expenditure and income. Thus, the fiscal and external current account deficits widened dramatically, to about 6 and 11 percent of GDP respectively by 1998, while the real exchange rate continued to appreciate gradually (a cumulative appreciation of 10 percent took place during 1997-98) (Panel II). The delay in adopting a sound macroeconomic program increased the magnitude the adjustment that eventually would be required.

In short, reform inaction in 1997-98 gave way to growing banking system unsoundness and widening macroeconomic disequilibria. The result was a dangerous mix that turned Ecuador's currency and banking system increasingly fragile. To use Gavin and Hausmann's (1996), the links in the financial system chain became increasingly weaker. Any shock that would put significant tension on the chain could easily break it. Tragically, the shocks came.

[Insert Panel II -- Graphs on the Origins of the Crisis]

III. CRISIS ERUPTION AND CONTAINMENT EFFORTS

After several years of Caprio's (1997) trilogy of "bad policy, bad banking, and bad luck," the Ecuadorian financial system found itself by the second half of 1998 highly exposed to a crisis of confidence that could precipitate a self-fulfilling deposit run and speculative attack against the sucre. Multiple equilibria lurked in the background, in the sense that it was fairly easy to conceive a constellation of a much higher interest rate and a much more depreciated exchange rate with the same "fundamentals"—e.g., the same fiscal stance, external current account, and degree of financial fragility—as existed then. Alas, several

³¹ For a detailed description of the circumstances that led to the intervention of Banco Continental, the results of the special audits applied to the bank after its intervention, and the legal quagmire that ensued, see BCE, *El Caso del Grupo Conticorp: Aumento de Capital Cuestionado y Presunto Beneficio a Empresas Relacionadas y a Accionistas, a Expensas de los Depositantes*, n/d; and Samaniego, J. and Villafuerte, M., "Los bancos centrales y la administración de crisis financieras: teoría, experiencia internacional y el caso ecuatoriano," in *Cuestiones Económicas*, No. 32, September 1997, BCE.

³² There was a sharp slowdown in economic activity—zero GDP growth (year-on-year) in the last three quarters of 1998.

³³ For instance, Ecuador placed US\$500 million of 3-year [check] Eurobonds in 1997 at a cost that, given the circumstances, appears low (an initial yield of [] basis points over U.S. Treasuries).

shocks visited upon Ecuador virulently, confidence collapsed, and twin (banking and exchange rate) crises erupted. This section examines the shocks that triggered such eruption as well as the efforts to contain it, efforts that climaxed in March 1999, with a one-week bank holiday followed by a one-year freeze of bank deposits.

A. Triggers — Depositor Anxiety, Shocks and Liquidity Squeeze

The twin crises unfolded under the pressure of growing depositor anxiety, devastating external shocks, and a major systemic liquidity squeeze.

Depositor anxiety rose steeply during 1998. Two events were particularly important. First, the cycle of closure and re-opening of a mid-size bank (Solbanco)—the SB closed it in April 1998 and, following the commitment by depositors (mainly public sector pension funds) to capitalize part of their claims, allowed it to reopen in October 1998. This episode had an adverse psychological effect and, in particular, triggered a major deposit run on Banco del Progreso during May 1998. And given the absence of a limited deposit insurance, creditors of the reopened Solbanco remained skittish, wondering about the value and ultimate recoverability of their deposits. The second event was the closure of Banco de Préstamos, another mid-size bank, in August 1998, at the beginning of President Mahuad's administration.³⁴ Such closure inflicted immediate losses on its depositors and led to a default on the bank's international inter-bank and trade lines, thereby exacerbating the sharp withdrawal of international lines from the Ecuadorian banking system (see below) and leading to virulent deposit runs against other banks during the fourth quarter of 1998, including two of the largest banks in the system, Banco del Pacífico and Filanbanco.

Against this backdrop, and as if the gods had decided to unleash their rage on Ecuador at once, three major *external shocks* hit in 1998, deeply accentuating negative expectations. First was el Niño phenomenon which disrupted (mainly through flooding), since the first quarter of 1998, Ecuador's coastal agricultural production and commercialization processes and physical infrastructure.³⁵ It exacerbated the decay in the quality of banks' loan portfolio (*reported* non-performing loans rose from 7.3 percent of total loans at end-1997 to 13 percent at end-October 1998), particularly for the large banks headquartered in coastal city of Guayaquil, which had high exposures to the affected sectors. The second shock was, as already noted, the pronounced decline in the price of Ecuador's oil exports which by December 1998 reached US\$7/bbl, its lowest level since the mid-1970s (Panel III). It caused havoc in public finances and external current account (see above), accentuating doubts about balance of payments and public sector debt sustainability. A fiscal crisis accompanied the financial crisis. And the third shock was the contagion from the Russian debt default in the Fall of 1998. It resulted in a sudden drying-up/reversal of external finance, sharp rises in interest rates, and currency devaluations throughout Latin America, exacerbating problems in Ecuador.

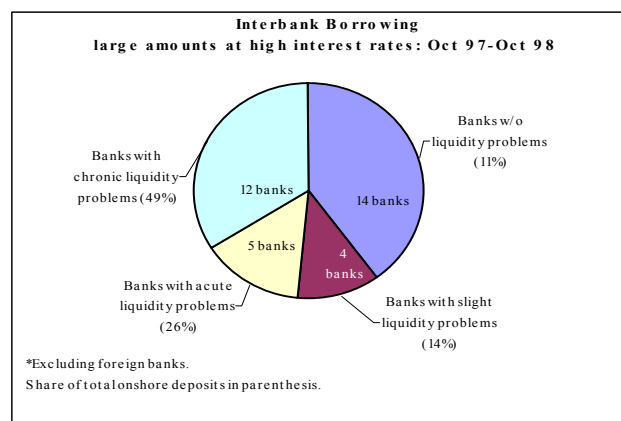
The combined effect of these shocks created a major *liquidity squeeze*, which was devastating for an already unsound and vulnerable financial system. The stock of

³⁴ At the time of this writing, the owner of Banco de Préstamos was in jail, under so-called "preventive imprisonment order," awaiting trial in respect of a lawsuit initiated against him in September 1998 for bank fraud.

³⁵ The direct and indirect economic damage caused by the El Niño weather phenomenon was estimated in US\$2.6 billion (13 percent of 1998 GDP).

international credit to the Ecuadorian banking system fell by US\$ 500 million (2.6 percent of 1998 GDP) between July 1998 and March 1999 (Panel III) and the accumulated outflow of non-FDI private capital during the last quarter of 1998 and first quarter of 1999 is estimated at US\$854 million (4.3 percent of 1998 GDP). The consequent liquidity squeeze prompted the weakest banks to intensify their distressed borrowing (i.e., gathering deposits at very high interest rates), led to mounting pressures on the exchange and interest rates (see below), and pushed the BCE to fully open its lender of last resort (LOLR) facilities.

Figure III.1. Ecuador: Systemic Liquidity Squeeze
(As of October 1998)



About 17 banks (out of 35), representing some 60 percent of the system, were chronically or acutely illiquid by October 1998 (Graph III.1).³⁶ Around the same time, 11 banks, representing about 25 percent of the system and including Filanbanco, the largest bank in terms of assets, were receiving emergency liquidity from the BCE—the stock of such last-resort liquidity reached the equivalent of times the money base as of end-October 1998 and times the money base (or percent of GDP) by the end of 1998. Moreover, off-site estimates performed during October 1998, including by a World Bank technical assistance mission, suggested that the deficit in provisions was possibly as large as the system's book value of capital, and that it was mainly concentrated in the two largest banks in the country—Filanbanco (then percent of the system's assets and already receiving the lion's share of BCE emergency liquidity) and Banco del Progreso (percent of the system, not yet under intensive BCE liquidity care but clearly heading for it).

B. Policy Makers Against the Ropes

The room for policy maneuver shrunk dramatically during the second half of 1998. It may be even argued that the cards had been played by the Fall of 1998, leaving no scope for a successful policy response, particularly considering the political economy constraints. We think, however, that at the beginning of the Mahuad administration—when hope was

³⁶ These estimates are derived from the behavior of individual banks in the inter-bank during the 12 months ending October 1998. Banks were ranked as more illiquid to the extent that they borrowed continuously in the such market, in large amounts relative to the size of their deposits, and at a cost significantly higher than the system's median.

high—there was still a chance to avoid the worse. But a decisive and comprehensive policy package would have been required to arrest capital flight and reverse the erosion of confidence. In particular, substantial financial support from multilateral agencies, particularly the IMF, would have had to be mobilized on the strength of bold, coherent, and well-executed policies to, on the one hand, address the fiscal chaos and, on the other, resolve in an orderly fashion the large troubled banks in the system. Efforts in that direction, however, were delayed³⁷ and when finally taken, were insufficient to assemble a comprehensive policy response (see below). The elimination of the income tax in December 1998—which was part of a political compromise to pass a 1 percent tax on financial transactions—was the last straw that caused the prospects for IMF support to slip away. Ecuador was thus left to fend for itself in the midst of a most virulent version of the twin crises.

Meantime, the BCE was forced to confront a most complex set of policy trade-offs and sequencing alternatives, which could not be solved satisfactorily through high interest rates and eventually resulted in the free float of the sucre (see below). At the heart was the dilemma between protecting the banking system through liquidity provision versus defending the currency through liquidity tightening. Three factors added tension to this dilemma, complicated its nature, and undermined the feasibility of effective responses to it.

First was the phenomenon of *liability dollarization*, which led to “fear of floating” (Calvo and Reinhart 2000)—i.e., fear that letting the exchange rate go would not help prevent a banking system collapse but rather contribute to its demise. Liability dollarization had been on the rise since 1994 and accelerated during 1996-98.³⁸ Regulators required banks to broadly match dollar assets and liabilities, but banks were not required to constitute provisions for dollar lending to domestic residents with no dollar earnings. Thus, unhedged exposure to exchange rate risk among household and corporate debtors implied a significant unhedged exposure to credit risk for banks.³⁹ Liability dollarization became a significant structural feature of the Ecuadorian financial landscape in the second half of the 1990s, and it seriously constrained the room for exchange rate policy maneuver.

Second was the *uncertainty regarding the course of other policies*. In particular, the BCE felt compelled to wait for a fiscal adjustment package (including tax reform) and for legal amendments to the bank failure resolution framework before taking any mayor

³⁷ In the first months of his administration, President Mahuad devoted virtually all of his energies to pursuing a peace accord with Peru that would put an end to a 50-year history of border disputes. Only after the signing of the Peace Treaty in October 26, 1998 did he shift his attention significantly to economic policy.

³⁸ The share of dollar debt in total public sector debt rose from [redacted] in 1993 to [redacted] percent by mid-1998. The share of dollar loans in the *onshore* banking system grew from 10 percent in 1992-93 to 20 percent by end-1994 and to over 50 percent by mid-1998. Making the reasonable assumption that the loan portfolio of *offshore* banks was equivalent to 70 percent of that in onshore banks, *dollar loans are estimated to have represented over 70 percent of the loan portfolio of the expanded (onshore plus offshore) banking system by mid-1998.*

³⁹ Domestic residents had incentives to borrow in dollars because of the combination of a relative stable exchange rate and a high real interest rate for sucre lending. But this is only a part of the explanation, given that liability dollarization intensified in 1997, at the same time as real lending interest rates displayed a declining trend (Panel II). Incentives appeared to have been strong also on the investor/creditor side. Dollar deposits in offshore banks not only reflected fear of currency devaluation but also desire for protection of privacy and against country risk (offshore banks are legally subject to foreign jurisdictions). In addition, bank creditors appear to have perceived that, in the event of debtor default, the value of their claims would be better protected throughout the process of debt workout or collateral repossession if denominated in dollars.

decisions on the course of its own monetary and exchange rate policy. As will be seen later, however, communication breakdowns and conflicting views and incentives between key policy makers dismantled hopes for success in this type of policy coordination.

And third was the *paralysis of the SB* in the face of growing concerns on the true financial condition of some of the banks already accessing BCE's LOLR facilities. Analysts and depositors were increasingly worried that the two largest banks—Filanbanco and Progreso—were headed for failure. Paradoxically, published financial statements did not show insolvency in any of the banks in the system. The SB was reluctant to uncover solvency problems partly due to sheer incompetence, but mainly because of unwillingness to confront powerful bankers as well as valid concerns that disclosing insolvency through rigorous regulatory enforcement would unleash depositor runs with unpredictable consequences. The SB defaulted to an attitude of passive, implicit, and unrestrained regulatory forbearance. Without an official pronouncement from the SB as to the insolvency of banks accessing the LOLR window, it was highly risky, legally and politically, for the BCE to unilaterally exclude them from emergency liquidity assistance (the BCE could have been accused of running a solvent bank into the ground and/or of touching off social unrest among small depositors). The BCE, furthermore, was also haunted by its own concerns about the likely destabilizing effects of the liquidation of such large banks (the denial of further access to the LOLR window would have, by law, automatically precipitated liquidation). These concerns were intensified by the inadequacies of the bank failure resolution framework explained in Section II.A.2 above.⁴⁰

C. Containment Attempts through Emergency Legislation

In November 1998, facing an imminent currency and banking system breakdown, the Government submitted to Congress emergency legislation to deal with both the fiscal and financial sector problems. This led to the approval in December of that year of the *Ley de Reordenamiento en Materia Económica*.

The fiscal package in the Law was a bad one—the elimination of the income tax and introduction of a 1 percent tax to all financial transactions. It was the result of a political compromise, given fierce opposition by the dominant Social Christian Party to the Government's preferred option of increasing the VAT rate. The 1 percent tax on financial transactions could not have come at a worst time for the ailing banking system. To avoid the tax, agents sharply increased their holding of cash so as to minimize the frequency of debits and credits to their bank accounts, as evidenced by the steep rise in the currency to sight deposits ratio beginning in January 1999, when the tax went into effect (Panel III). In addition, businesses shifted to offshore accounts to manage their finances. The associated disintermediation squeezed an already illiquid banking system. And, as mentioned earlier, the elimination of the income tax led to a breakdown in the negotiation of an IMF program, depriving Ecuador of international support when it most needed.

The financial sector emergency legislation centered on the creation of a Deposit Guarantee Agency (AGD), as a public entity endowed deposit insurance and bank failure

⁴⁰ Constitutional reforms of May 1998 authorized the BCE to provide "solvency" loans to banks, but only temporarily, for a maximum period of two years, or until "the State has suitable legal instruments to confront financial crises."

resolution functions (Box III.1). The AGD law—approved jointly with the 1 percent financial transactions tax—sought to, on the one hand, minimize money creation by the BCE and, on the other, tackle the problem of insolvency. To keep investors from fleeing while the banking system underwent a sort of “open heart surgery” through bank interventions and closures, the Law featured an explicit guarantee for the international trade-related liabilities and the deposits of banks taken over by the ADG for resolution.⁴¹ Non-depositor claims were not guaranteed. The Law authorized the use of public sector bonds to finance AGD-executed troubled bank resolutions, but conditional on the prior removal of the administrators of, and elimination of shareholders’ rights in, the insolvent bank. The typical bank resolution technique (*técnica de saneamiento*) envisaged in the Law was a purchase and assumption operation (P&A). By directing the support to the healthier banks in the system (the so-called acquirer banks) that would assume the deposits of the failed banks, P&As hoped to minimize money printing and fiscal costs, as well as limit the contagion risk of the closure of a bank, even if large.

The AGD Law had significant risks that needed to be addressed, including the moral hazard implications of the deposit guarantee and the risk that it would lack credibility (i.e., that it would not stem the flight of depositors and foreign creditors out of the banking system), particularly considering that the public sector debt burden (at 80 percent of GDP by end-1998) was high. These risks had to be weighted against what appeared to be riskier or unsustainable alternatives—e.g., the continuation of the status quo (unlimited money printing to prop up nonviable banks) or such drastic actions as an outright nationalization of the banking system. To minimize the risks it was necessary to act promptly and surgically to remove insolvency while endeavoring quickly to move assets and deposits to the healthy part of the private banking system. This implied a number of pre-requisites, including an accompanying, credible macroeconomic program, high degree of professionalism and administrative capacity in the execution of systemic bank restructuring, independence from vested political and economic interests, and flawless coordination at the highest policy level.

Although Congress introduced important changes that debilitated the AGD Law (see below), its approval was initially favorably perceived—as a long overdue step towards cleaning up the banking system that appeared confirmed by the immediate intervention of Filanbanco.⁴² However, soon it became clear that the pre-requisites mentioned above were not being met, with the application of the law unable to stabilize financial markets, as discussed in the next section.

⁴¹ Governments often have protected the liabilities of the banks they had to intervene or close to reduce the risk of contagious runs on the banking system, particularly in times of generalized financial distress. Some times this protection has been through the unfolding an implicit guarantee, other times by resorting to an explicit blanket guarantee. Recent examples in Latin America are numerous. Mexico explicitly guaranteed all banking system liabilities throughout the management and resolution of the banking crisis triggered by the Tequila. All the liabilities of the nonviable financial intermediaries that had to be intervened (“officialized”) by the Colombian Deposit Insurance and Resolution Agency (Fogafin) were protected—i.e., no losses were allocated to the depositor and non-depositor creditors of such banks. The same can be said of most recent bank interventions and closures in Guatemala, Bolivia, and Honduras. No bank creditor lost in the resolution of the Chilean crisis of the early 1980s—all the losses were absorbed by the Central Bank. A blanket guarantee on bank liabilities was also introduced during the management of the banking crises that erupted in South East Asian countries in 1997.

⁴² [Cite Wall Street analyses of the time].

Box III.1. Other Salient Features of the AGD Law

AGD decisions were taken by a Board composed by the Superintendent of Banks (who had veto power), the Minister of Finance, one member of the Board of Directors of the BCE, and a representative elected by the President of the Republic. The Board named the AGD General Manager. The AGD had a minimal bureaucratic structure—existing institutions (particularly the SB and BCE) provided office space and seconded needed staff.

The Law provided a degree of legal protection to all members of the boards of the AGD, SB, and BCE. To avoid lawsuits aimed purely at intimidation—which had been common in Ecuador—the Law required that any criminal action against the authorities in such boards could only proceed after a favorable opinion from a committee of three experts in banking matters nominated by the AGD, SB, and the Bankers Association.

The AGD was to be funded through a relatively high premium (65 basis points of total deposits per year) paid by the banking industry as from the effectiveness of the Law. While the guarantee fund accumulated, however, the Government was authorized to issue bonds to finance AGD-executed bank resolutions, with the AGD obligated to repay them over 50 years out of its future premium-based revenue.

The AGD featured a guarantee on all the international trade-related liabilities and virtually all the deposits of banks taken over by the AGD for resolution—i.e., of banks placed under so-called *saneamiento*. The guarantee applied to offshore and onshore deposits, given that these were practically indistinguishable (see Box II.1), but had important limitations. It did not cover non-deposit liabilities, including inter-bank liabilities (other than trade-related bank obligations to foreign banks), subordinated debt, and other accounts payable. Also explicitly excluded from the guarantee were the deposits related to the shareholders or administrators of the bank under *saneamiento*, as well as deposits that paid an interest rate 3 percentage points or higher than the average deposit rate paid in the system. The draft law sent to Congress explicitly pre-announced the expiration of the blanket deposit guarantee after three years and its replacement by a limited one of up to about US\$8,000 per depositor. But Congressmen made the blanket guarantee permanent.

The Law established a number of resolution techniques (*tecnicas de saneamiento*), at the core of which was a purchase and assumption operation (P&A). It consisted in the *closure* of the insolvent bank immediately followed by the transfer of its deposits and international trade-related liabilities to healthy private banks in the system (the so-called “acquirer banks”). To pay for such transfer, the AGD would first use the good assets of the insolvent/failed bank but could also issue bonds if needed to cover any shortage. The residual balance sheet of the failed bank would be sent on to liquidation. The law also contemplated the possibility of open-bank resolution (*saneamiento abierto*)—i.e., the takeover of the administration and property of a bank by the AGD in order to recapitalize it with public sector bonds, rehabilitate it, and re-privatize it eventually, while keeping it open to the public all along. But this alternative was intended to be used only in exceptional cases, and preferably just to buy time until a P&A could be arranged.

D. The Unraveling of Market-Based Containment Efforts

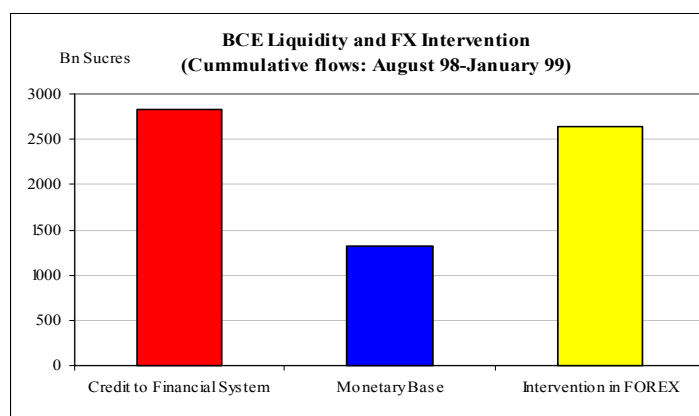
The twin crises could not be avoided. The drain of liquidity from the banking system could not be staunched and, partly as a result, the bank resolution process became chaotic. Fueled by BCE liquidity expansion, the speculative attack on the sucre intensified, forcing the abandonment of the exchange rate band by February 1999. In what follows we first describe the highlights of this unraveling process and then we discuss some underlying reasons for the failure of market-based containment efforts.

1. Exchange rate crisis and banking system disarray

As liquidity assistance to banks skyrocketed and exchange rate pressures mounted, the BCE strategy of avoiding large movements in the exchange rate and limiting losses in

international reserves became unglued (Panels II and III). It could not longer be held together through high interest rates and controlled adjustments to the exchange rate band.⁴³ Rather, the attack on the sucre intensified *after* the sharp increase in the overnight interest rate that started in the fourth quarter of 1998—the overnight interest rate peaked at 170 percent by mid-January 1999 and remained in the 100-130 percent rage through early February. The BCE thus had to intervene heavily (by selling dollars) in the foreign exchange market to keep the sucre within the exchange rate band. Over the August 1998-January 1999 period, cumulative sales of foreign exchange by the BCE were similar in magnitude to the cumulative injection of liquidity in support of the troubled banking system. By the end of 1998 and early 1999, the loss of confidence was such that high interest rates were rendered ineffective to curb capital flight and monetary policy became endogenous to the banking system liquidity needs. In these circumstances, having lost all hope of gaining support from the IMF, and with the view of protecting international reserves, the BCE let the exchange rate go. On 12 February 1999 the BCE abandoned the system of exchange rate bands and allowed the sucre to float freely. Soon thereafter the sucre went into a free fall—from 7,000 to 18,000 sucres per dollar in the two weeks ending March 5, 1999.

Figure III.2. Ecuador: BCE Liquidity Injection and FX Intervention



The same money creation that fed the attack on the sucre was also keeping artificially alive large banks believed by many (except the SB!) to be insolvent. The authorities could no longer postpone intervening or closing them. They eventually did so, using the new bank resolution powers introduced with the creation of the AGD. Filanbanco was placed under a special administrator appointed by the AGD in early December 1998, and was kept open with a view towards its recapitalization and eventual reprivatization. A string of disorderly closures of mid- and small-size financial intermediaries followed immediately thereafter—5 banks, 2 financial companies, and 1 credit union were closed by

⁴³ Two adjustments to the exchange rate band were implemented in 1998. In March, the mid-point of the band was shifted upwards by 31.6 percent but its width was maintained at ± 5 percent around the mid-point. In September, the mid-point of the band was shifted upwards by 25.4 percent and its width increased to ± 7.5 percent around the mid-point. In both occasions, the slope of the band was kept constant, at 20 percent per annum (consistent with the BCE inflation objective), but the September adjustment also included the abandonment of the policy of intra-band intervention.

the AGD between December 1998 and early March 1999. These actions, however, were so clumsily implemented that they did not help stem the erosion of confidence (see below).

To be sure, the evidence suggests that the virulent dismantling of financial stability in late-1998 and early-1999 was first driven by flight out of the currency and not by a depositor flight out of the *onshore* banking system. Once allowed to freely float, the sucre became extremely sensitive to speculation—it would depreciate suddenly just due to bidding and even in the absence of significant transactions in the exchange market. This exacerbated fears of further depreciation and fostered flight out of the currency. But depositors in onshore banks displayed a remarkable loyalty, at least through March 1999 (Panel III). There is no indication depositor flight from the onshore system as a whole during the 7 months ending February 1999.⁴⁴ There is, however, plenty of evidence of flight to quality within the system—from banks perceived as weak to banks perceived as strong. The growth of onshore deposits from foreign banks, perceived as safe, was 40 percentage points higher than for the system as a whole, while deposits from banks under AGD control almost stagnated in nominal terms.⁴⁵ Thus, the system's demand for BCE liquidity and the associated pressures on the sucre appear to have reflected mainly the withdrawal of external credit lines (Panel III) and runs by *offshore* depositors, as well as off-balance sheet turmoil associated with withdrawals from mutual or investment funds. Data on offshore banks and funds are, however, unavailable to corroborate adequately this hypothesis.

The quagmire unleashed by the exchange rate crisis and banking system instability, and the associated political pressure and social unrest, provides the context in which the authorities took the decision to freeze deposits in March 1999. Before turning to this event, however, we examine some of the underlying reasons for the failure of the market-based containment efforts.

2. Behind the Failure of Market-Based Containment

The containment measures undertaken towards the end of 1998 and beginning of 1999 had, from the outset, a low probability of success. They lacked an accompanying credible fiscal program and thus did not have financial support from the IMF and other multilateral agencies. Moreover, containment faced a type of challenge that was, itself, most difficult to overcome, particularly considering the constraints and potential instability posed by the phenomenon of liability dollarization (see Section IV.C below for a full discussion of this subject). The challenge was to reverse the *flight out* of the Ecuadorian financial system and turn it into a *flight to quality within* the system. As this was not achieved, the possibility of an orderly bank restructuring and resolution process—to root out insolvency—disappeared. Ecuador is, in fact, a salient case in the Latin American region where the continued bleeding of liquidity out of the banking system rendered virtually impracticable the execution of orderly bank interventions and closures.

⁴⁴ Onshore sucre deposits rose 24 percent in *nominal* terms in that period. Of course, in terms of dollars they fell on account of the depreciation of the sucre. Dollar deposits in the onshores rose mildly from August 1998 to end-January 1999, and stabilized during February-March 1999 (Panel III).

⁴⁵ A greater presence of prestigious foreign banks would have fostered greater flight to quality and, possibly, reduced the incentives for flight out of the system, thereby facilitating crisis management.

The guarantee on deposits lacked the credibility to stem the flight out of the system. This was probably not only because of doubts on the solvency of the guarantor (the State), but also because of underlying dysfunctions in overall governance which undermined the effectiveness of crisis containment efforts. These dysfunctions included: (i) major coordination failures; (ii) serious deficiencies in administrative capacity; and (iii) political interference and capture by powerful interest groups. They have accompanied the process of crisis management to date.

Coordination failures created a vacuum of leadership and prevented concerted action when it was most needed. They arose in part due to institutional weaknesses but mainly because of conflicts between policy makers at the highest levels. For one thing, incentives pulled the authorities in inconsistent directions. For instance, the Ministry of Finance was reluctant to issue bonds at market-related conditions to finance AGD-executed bank resolutions. And the AGD Board felt most uncomfortable with the responsibility of sending the large unviable banks to *saneamiento*—such “pulling of the plug” appeared too risky, legally and politically.

For another, conflicts in the views of key policy makers led to severe disruptions in policy coordination. For instance, a growing divergence in the views on the nature of the needed fiscal reform within the Executive Branch led to the resignation in February 1999 of the first Minister of Finance of the Mahuad administration. More important, a widening and highly publicized rift between the BCE Board and the President of the Republic emerged from the outset of the Mahuad administration.⁴⁶ The breakdown finally came during the week of the bank holiday (March 8-12, 1999), when a major impasse among the various authorities took place. The BCE Board argued that the only way to come out of the bank holiday while avoiding a massive run would be to close the deeply insolvent banks first, and then defend the healthy part of the system. The Superintendent of Banks was completely unresponsive of this strategy, arguing that he lacked information to single out the insolvent banks (!). Most members of the Board of Directors of the BCE, including its Governor, resigned immediately after the deposit freeze was decreed.

Deficiencies in administrative capacity became increasingly glaring as the crisis deepened. The SB capacity to undertake an objective assessment of a banks true financial condition on a consolidated basis was precarious. This rendered unfeasible the originally intended strategy of distinguishing between unviable and healthy banks, with the latter envisioned to become “acquirer banks” in the process of systemic consolidation and restructuring. The implementation of P&As required sophistication and expertise that could not be mobilized in short notice within the public sector. The flexibility granted to the AGD in the law—necessary to ensure effective bank failure resolutions—was killed by rigidities introduced in the *reglamento* and other regulations to the law. These included cumbersome hurdles to the execution of P&As, the key resolution technique envisaged in the law. The closures decreed after the approval of the AGD Law were, as a result, not immediately

⁴⁶ BCE authorities sought to adhere against all adversities to the principle of central bank autonomy and the objective of price stability, which had been cemented through the Constitutional reforms of May 1998. The President of the Republic, by contrast, grew increasingly frustrated with his lack of control over the BCE at a time when, in his mind, the critical financial conditions warranted a major easing of monetary policy, including central bank financing for the budget. Monetary authorities publicly and successfully opposed lending to the Government and this left deep scars, with the President of the Republic publicly (and rashly) breaking communications with the BCE Board and pushing for its resignation.

followed by the transfer of deposits to the healthy banks in the system.⁴⁷ The depositors of the closed institutions were instead left in the dark waiting for a solution, and this led to the belief that the guarantee would not be honored, fueling further runs.⁴⁸ Thus, the string of clumsy bank closures implemented at the end of 1998 exacerbated significantly the problem of depositor anxiety, threatening to bring other large banks to their knees, including the gigantic and politically well entrenched Banco del Progreso.

Political interference and capture were factors that most seriously corroded crisis containment efforts. Capture was already evident during the approval of the AGD Law, as modifications introduced by Congress reflected the lobbying power of interest groups. In particular, Congress converted the “restructuring” corrective regime (which in the original draft had been intended for viable banks with problems that could be addressed through a regularization plan and without injection of public funds) into a necessary stage before bank resolution (*saneamiento*), and authorized the AGD to inject public funds into banks under “restructuring.” This weakened AGD powers and led to delays in the resolution of nonviable banks. Since its inception, furthermore, the AGD succumbed to the pressures of interest groups, with doubtful and presumably fraudulent transactions taking place in the case of some banks under the aegis of the AGD—including the failure to collect on large debts (involving in some cases the disappearance of loan documentation) and various forms of asset stripping. Additionally, major conflicts of interest are believed to have encumbered the actions of the Superintendency of Banks in the crucial days leading to the deposit freeze.⁴⁹

Moreover, regional politics blended with powerful banking groups to create huge constraints to the implementation of timely and sound bank resolutions. For instance, P&As could not easily be applied to large nonviable banks—they faced the resistance from regional politics because they implied the closure of a bank prominent in one region and the simultaneous increase in the market share of a bank of a possibly different region. But perhaps the most flagrant episode of interference was the effort to avert the intervention of Banco del Progreso, despite strong presumptions of fraudulent management and deep insolvency. In effect, soon after the decree of the deposit freeze, the influential and powerful owner of that bank unilaterally decided to close it—an utterly illegal act—and then led a street demonstration, supported by prominent political and business leaders, asking depositors to capitalize their claims as a way to resist “the attacks by the central government on the banks of Guayaquil.” The Mahuad administration felt compelled to negotiate a surprising solution: on March 22, 1999 it granted the owner of Banco del Progreso 45 days (which in the event turned into 4 months) to remain in full control of his closed bank (without

⁴⁷ P&As were to some extent hampered because the best assets of the failed banks were not always available to finance the deposit transfer, as they had often been given in guarantee to the BCE in connection with previous liquidity loans. However, P&As could have been supported by issuance of AGD bonds.

⁴⁸ Throughout the resolution of the crisis (starting in late 1998 and until the time of this writing), instead of using P&As the authorities preferred open-bank interventions, which proved ineffective at stopping runs against the intervened banks and ultimately more costly to the government.

⁴⁹ For instance, the chief bank regulator of that time had been the lawyer of Banco del Progreso few months before and had a well-known, strong personal relation with that bank’s owner.

significant monitoring by the SB) in order to seek the capitalization of deposits and thus restore his bank to solvency.⁵⁰

Finally, the perception of capture became rooted in the popular mind when information transpired (later in 1999) that the ex-owner of Banco del Progreso had been a major contributor to the campaign of President Mahuad. This led to the unfortunate perception that the deposit freeze implemented in March 1999 was mainly motivated by political debts and not by the pursuit of the common good. This perception inflicted a major blow to the credibility of the government's crisis management actions, further weakening overall governance in the country throughout the dark months of 1999 and beyond.

In short, the already difficult task of containment was further complicated, and indeed rendered ineffective, by underlying governance problems—coordination failures, deficiencies in administrative capacity and, most importantly, capture and political interference. Whether containment efforts themselves exacerbated the already acute financial distress is difficult to ascertain, because the counterfactual (i.e., what would have happened in their absence or under an alternative containment approach) is unknown and probably unknowable with reasonable precision.

E. Forcible Containment: The deposit freeze

The unraveling of containment efforts that preserved investor freedom led to forcible and intrusive containment, materialized first in a one-week bank holiday (March 8-12, 1999) followed by a freeze on deposits (starting on March 15th). Important triggers for such extreme measures included: (i) the seemingly uncontrollable depreciation of the currency (see Section III.D.1 above); (ii) the apparently insatiable demand for BCE liquidity by ailing banks (Sections III.A and III.D.1); (iii) the risk of financial contagion due to the imminent failure of Banco del Progreso; and, (iv) the perception of adverse political repercussions of the closure of that bank in the midst of rampant regionalist tensions.⁵¹ The convergence of these events overwhelmed the authorities, who considered it impossible to handle the situation without extreme action.

The deposit freeze could have perhaps been averted if—as noted earlier—the supervisory authorities would have managed to isolate and close the clearly insolvent banks, including Banco del Progreso, during the bank holiday. This separation of the “wheat from the chaff” would have perhaps allowed the re-opening of the system without a massive run—and the freeze would have still remained as an option to be used in case such strategy failed. But the inability of the government—particularly of the Superintendent of Banks—to raise to this challenge forced the deposit freeze which, by treating all banks equally, fostered the wrong perception among the public that the entire banking system was terminally ill.

⁵⁰ At the time of this writing the ex-owner of Banco del Progreso was in jail as a result of a lawsuit initiated by the tax authorities. Paradoxically, the lawsuits concerning his participation in presumed banking fraud (such as alleged asset stripping and incorporation of US\$400 million in liabilities to the balance sheet that had previously not been recorded) had been effectively stalled in Ecuadorian courts.

⁵¹ Some policy makers of the time add another trigger to this list, namely the rapid decline in the stock coins and bills in the BCE, fostered by the 1 percent tax (Section III.C above). In addition, social unrest was high—in the days where the bank holiday decision was taken, the capital city was virtually paralyzed by a taxi-driver strike.

The freeze applied only to deposit liabilities, onshore and offshore.⁵² Non-deposit bank liabilities—including to foreign banks—were not frozen. The freeze was partial for sight deposits and passbook savings, and total for time deposits and CDs. It was set to last one year, although subsequent decrees introduced some exemptions and advanced the timetable for unfreezing sight and passbook savings deposits. The deposit freeze was accompanied by an automatic reprogramming of bank loans, so that loan payments would not fall for a year, until deposits were fully defrosted. By end-July 1999, the equivalent of US\$3.7 billion were frozen, that is, 58 percent of a total of US\$6.4 billion of deposits in the extended (onshore and offshore) Ecuadorian banking system. The frozen deposits were about equally distributed between the offshore and the onshore segments of the system. And they were predominantly dollar-denominated (Table III.1).

Table III.1. Ecuador: The Magnitude of the Deposit Freeze
(US\$ billion, end of July 1999)

Deposits	Frozen	Unfrozen	Totals
Onshore	1.8	1.7	3.5
Offshore	1.9	1.0	2.9
Totals	3.7	2.7	6.4
(Of which: US\$ denominated)	2.9	1.7	4.6

For about 4 months, the freeze contained the speculative attack on the currency—without any BCE intervention. The drastic once and for all reduction in the money supply (M1)⁵³ caused the sucre to appreciate in nominal terms and then stabilized at around 10,000-12,000 sucres per dollar through July 1999. But this came at a huge cost. The freeze blurred the distinction between good banks and bad banks, inflicted a permanent damage to depositor confidence, and was severely disruptive of economic activity. It impoverished savers and caused the flow of payments to virtually grind to a halt. As a result, it played a major causal role in the subsequent compression of consumption and investment, the failure of many non-financial corporations,⁵⁴ the associated destruction of otherwise usable capital stock, and the sharp contraction in economic activity. As will be argued in the next section, however, the freeze was not the sole responsible for the 1999 debacle. It was joined by another powerful determinant—the renewed free fall of the sucre precipitated after July 1999 by persistent runs engineered by holders of unfrozen assets.

⁵² Despite their foreign license, the freeze was applied to offshore banks that *only* took deposits in Ecuador and, hence, that did not have a geographical presence (e.g., a branch) in the licensing jurisdiction. It was not applied to the deposits of Ecuadorians in those offshore banks that had a functioning branch in the jurisdiction where they were licensed. The vast majority of Ecuadorian offshore banks was of the first type.

⁵³ The BCE had to redefine the monetary aggregates because part of the demand deposits were de facto transformed (frozen) into one-year time deposit.

⁵⁴ According to the Superintendency of Companies, between January and June of 1999, around 250 enterprises went off their registry in Quito and more than 2000 enterprises in Guayaquil (see BCE, *Apuntes de Economía* No. 7, November 1999, p. 17).

[Insert Panel III – Graphs on Crisis Eruption]

IV. THE DEPTHS OF THE CRISIS — IMPLOSION OF SOLVENCY

The year 1999 marked the depths of the crisis. Despite the deposit freeze, the major rebound in oil export prices,⁵⁵ and the announcement of a systemic bank restructuring program (which hinged on a comprehensive diagnostic by international auditing firms of Ecuadorian banks), financial turbulence resumed with a vengeance after August 1999 (Panel IV). The nominal exchange went again into a tail spin—depreciating from about 10,000 sucres per dollar in August-September 1999 to a peak of 26,000 in early-January 2000. The currency fall appears to have been exacerbated, rather than mitigated, by a major tightening of monetary policy engineered by the BCE in late-1999, which led to a skyrocketing of the inter-bank interest rate from the 50-60 percent level registered during May-November 1999 to 150 percent by the end of the year. Most troublesome was the free fall in the *real* exchange rate. It depreciated by 63 percent from August 1999 to January 2000 (and by 108 percent during the 15 months ending January 2000). The combined effect of the freeze and the runaway depreciation of the real exchange rate led to a massive turnaround in the external current account, from a deficit of 11 percent of GDP in 1998 to a surplus of 7 percent of GDP in 1999—a swing of 18 percentage points of GDP (!), 66 percent of which is attributable to a collapse in investment and the remainder to a compression of consumption. And real GDP shank by over 8 percent in the second half of 1999 (compared to the same period the year earlier).⁵⁶

In the process, insolvency spread rapidly within the banking system and to the corporate and fiscal sectors. Ecuador's GDP measured in dollars became highly unstable, tumbling from nearly US\$20 billion per year in the fourth quarter of 1998 to about US\$8 billion per year by January 2000, in tandem with the collapse of the real exchange rate. The public sector debt-to-GDP ratio rose from 81 percent at end-1998 to 156 percent by 2000, but 76 percent of such increase was due to the shrinkage of dollar GDP (Graph IV.1). Banking system solvency eroded equally fast and, by January 2000, 16 financial institutions accounting for 65 percent of assets had either been closed (12) or taken over (4) by the government. And insolvency problems among corporate and household debtors pushed the government eventually to establish in June 2000 a framework for debt restructuring.⁵⁷

This section aims at explaining the seemingly uncontrollable financial instability during the five months ending January 2000, which halted only with the decision to adopt formal dollarization. We submit that, in addition to the damaging effects of the deposit freeze itself (see above), three factors played a key role in this process: (i) the announcement of the results of the international audits of the banks, which confirmed depositors' worse fears; (ii) the default on Ecuador's internationally traded bonds, which

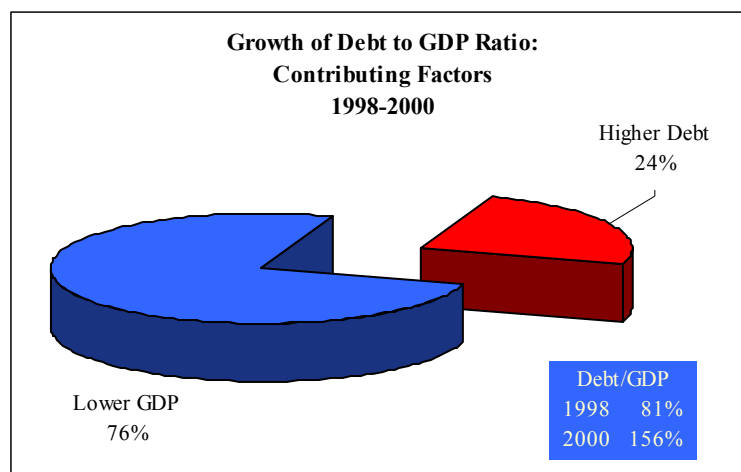
⁵⁵ Oil prices shot up from the low point of US\$7/bbl at end-1998 to over US\$17/bbl by July 1999.

⁵⁶ The deterioration of economic conditions generated a massive out-migration of skilled and unskilled workers, most of which entered industrial countries (mainly Spain and the United States) illegally. The net out-migration of Ecuadorians during 1999-2000 is estimated at over 650,000 (about 5 percent of the entire population).

⁵⁷ Such framework included two components: (i) the compulsory rescheduling of about 800,000 small debts (up to US\$50,000), accounting for 92 percent of the total number of loans in the system; and (ii) a set of guidelines and procedures to promote voluntary workouts of large debts (see IMF, 2000).

evidenced that insolvency had infected the public sector, including the banks it controlled; and, most importantly, (iii) a perverse dynamics whereby devaluation and insolvency reinforced each within a downward spiral. To the analysis of these factors we now turn.

Figure IV.1. Ecuador: Change in Debt to GDP Ratio



B. Belated Diagnosis: International Audits

A program of audits for the universe of Ecuadorian banks was carried out during May-July 1999. It was part of a comprehensive bank restructuring strategy designed and implemented with technical assistance from multilateral agencies.⁵⁸ The execution of the audits was contracted out to international firms (Price Waterhouse, KPMG, and Arthur Andersen), whose responsibility was to determine the solvency level of each bank using uniform and fairly rigorous criteria to value assets (only credit risks was evaluated). A team of foreign advisors conformed an Evaluation Unit that monitored the process, assessed the results of individual bank audits, made suitable accounting adjustments, and classified the banks into three categories: capital compliant banks (category A) that would remain under the control of their private shareholders and administrators; capital deficient banks (category B) that would be placed under a tightly monitored recapitalization, which favored capitalization from private sources; and insolvent (negative net worth) banks (category C) that would be placed immediately under the control of the AGD for their resolution.

The audit process was professionally conducted. It appeared at that time as a reasonable approach considering, in particular, the shameful unwillingness of the SB to identify the insolvent banks. Also, the freeze had brutally forced a more stable financial environment, such that a highly publicized and fairly long diagnostic process could be undertaken without sparking depositor runs. In addition, the presence of the multilateral

⁵⁸ See IMF (2000), pp. 23-34 for a description and assessment of the Restructuring Strategy. The strategy envisaged actions in three main fronts: (i) the control and management of systemic liquidity in the short-term (including a chronogram for a gradual unfreeze of deposits, a tightening monetary policy, and efforts to make the deposit guarantee credible); (ii) banking crisis management (including, prominently, the international audits); and (iii) the strengthening of the regulatory and incentive framework in the medium term (which included, later on, in 2000, a strategy for corporate and household debt restructuring).

agencies, international auditing firms, and foreign advisors was instrumental in protecting the auditing process from political interference, and this was noteworthy given the problems of capture that had distorted crisis management (Section III.D.2 above). Moreover, the audits led to a qualitative jump in the transparency and truthfulness of financial statements.⁵⁹ However, the audits did not help restore confidence, or arrest its slide, and thus could not contribute to avert the new round of deadly attacks on the currency and the banking system that took place in the fourth quarter of 1999. From hindsight, it can be argued that part of the explanation lies with certain features and implications of the audit process itself.

Firstly, the audit program confirmed the institutional failure of the SB. It was an open recognition that the SB was either unqualified or unwilling to do its job. The discredit of the SB had adverse externalities—it accentuated the public’s fear that the state apparatus itself was unable to provide credible leadership and protect citizens from unnecessary pain, and to dig the country out of the financial crisis. To the extent that the regulatory agency and other public institutions could not be trusted, the public felt a greater incentive to use any (unfrozen) asset available to run against the banks and the sucre.

Secondly, the audits by international firms of all Ecuadorian banks required time. This was inevitable but had significant drawbacks. For one thing, the process was psychologically draining for depositors forced to wait anxiously and impotently. During four months the public was kept in the air, unable to move their (frozen) deposits and in tense expectation of the outcome of the audits that would determine the fate of their bank. Such a wait was all the more unsettling given that the clumsy management of the banking and currency crisis (Section II.B) had obliterated the belief that deposits were truly protected by the deposit guarantee. For another thing, during the time required to complete the audits the quality of the bank loan portfolio was rapidly decaying, in tandem with the ongoing economic contraction. Thus, the “true” capital position of the banks—which the audits were supposed to determine—became a moving target. The longer the time allotted to complete the audits, the greater the number of banks that would be found undercapitalized or insolvent, and this the public understood.

Finally, the announcement of the audit results, made in late-July by a new Superintendent of Banks,⁶⁰ was chilling. It confirmed depositors’ worse fears. The verdict was that, of the five large banks still in private hands, one (Banco del Progreso, second largest in the system in terms of assets) was deeply insolvent that and had to be closed immediately, and three (Pacífico, Popular, and Previsora) were capital deficient. The announcement also identified one medium-size bank (Cofiec) as capital deficient and two other relatively small banks as insolvent and subject to immediate closure. Capital deficient banks were given a year to secure private capital injections to replace the capital that was injected immediately after the announcement with public resources, through a subordinated loan granted by Filanbanco, to enable them to meet the minimum ratio of regulatory capital to risk-weighted assets. But two of the large capital deficient banks, Popular and Previsora, embattled by the effects of adverse rumors and associated runs, could not overcome their

⁵⁹ For instance, reported non-performing loans rose from about 10 percent of total loans in April 1999, at the outset of the audit process, to 40 percent in September 1999, after the results were announced (Panel IV). This jump can only in part be attributed to the intervening deterioration of loan quality.

⁶⁰ In [redacted] 1999, Mr. Jorge Guzman replaced Mr. Jorge Egas Peña in the post of Superintendent of Banks. It was Mr. Guzmán who announced the results of the audits.

problems and were moved under AGD control in September 1999, scarcely six weeks after the announcement of the audit results.⁶¹ Filanbanco absorbed Previsora (creating a troubled mega-bank) and Popular's problems were resolved through a purchase and assumption operation. These latter events further depressed depositor confidence—depositors felt that not even international auditing firms could be trusted.

To be sure, the attacks and eventual failure of several of the banks deemed as capital deficient was not independent of Ecuador's sovereign debt default and the workings of the devaluation-insolvency spiral, as explained in the next sections.

C. Sovereign Debt Default

Ecuador defaulted on its internationally-traded Brady bonds in August 1999.⁶² The default seemed inevitable and most investors saw it coming. Public sector indebtedness was rising rapidly with the issuance of AGD bonds to deal with the banking crisis, GDP was falling, and cash constraints had forced the government to fall increasingly behind in its non-debt obligations, including wage payments to civil servants. Continued full servicing of debt against this background was not socially or politically sustainable. Inevitable though it seemed, the actual default produced greater damage to Ecuador's image than was strictly necessary, thus unduly complicating the management of the banking crisis. This was for three main reasons: (i) the severe irritation caused by non-uniform treatment of bondholders at the outset of the default; (ii) the confusing signals from the international community regarding the "bailing in;" and (iii) the effects of the default on the perceived value of the bonds issued to recapitalize ailing banks and to pay out the depositors of closed banks. To these issues we now turn.

First, the default inflicted differential treatment to different classes of private creditors, creating greater disorder than necessary. Holders of discount bonds were asked to avail themselves of the attached rolling interest guarantee, but interest payments on the so-called past-due-interest (PDI) bonds (which did not have such guarantee), due also in August 1999, were paid. Creditors had considered the rolling interest guarantee of the discount bonds as a protection in case Ecuador would not pay *any* bondholder. In the event, this guarantee served to identify creditors that would be the first in line not to receive payments. This encouraged angered bondholders' quickly to assemble the needed votes to trigger the so-called "acceleration clause" in discount bonds, whereby the entire stock of such bonds became due immediately. As a result, cross-default provisions were automatically activated and the entire US\$6 billion of Brady bonds (discount, par, and PDI) became due. Ecuador thus found itself at a maximum risk of being subject to lawsuits in the jurisdictions governing the Brady bond contracts.

⁶¹ The IMF (2000, p. 28) notes that Pacifico and Previsora would have been classified as insolvent, had the audits used standards closed to international practices (in terms of accounting, provisioning, and capital risk weights) in valuing assets.

⁶² As of August 1999, Ecuador Brady bonds amounted to about US\$6 billion (face value), about 46 percent of total external debt. There were three classes of Brady bonds: discount bonds (US\$1.4 billion at face value), par bonds (US\$1.7 billion) and past-due-interest (PDI) bonds (US\$3 billion). The default initially affected the discount bonds (about one-third of total Brady bonds). Interest payments on par bonds were not due yet in August.

A less disorderly default process could and should have been pursued, but flawed coordination and tactical mistakes on the Ecuadorian side prevented it.⁶³ Mixed signals by the international community regarding “bailing in” contributed to market uncertainty (see below). Eventually the default extended to other creditors—including Eurobond holders, and even domestic bond holders (the claims of the latter were unilaterally rescheduled by the government). But this was not in the context of a comprehensive approach, which should have been followed from the outset. The damage of the initial differential treatment of creditor classes had already occurred and proved incendiary. The environment of debtor-creditor relations was unduly poisoned, precisely at a time where Ecuador could least afford unnecessary turbulence.

Second, debt default created market confusion regarding the implications of the “bailing in” doctrine—i.e., a doctrine that called for keeping portfolio investors from fleeing a country in distress with liquid funds provided by the official sector (mainly through the IMF). “Bailing in” was then emerging as a center piece of the (lack of) international financial architecture.⁶⁴ The problem for Ecuador was that, regardless of the merits or flaws of “bailing in” in principle, its application in practice was extremely problematic. Bailing in lacked then a clear framework and did not provide any guidance to troubled sovereign debtors and private creditors. It was an idea in gestation whose operational implications had not yet been developed.

Ecuador became a test case for the new doctrine. A small country, without systemic implications for the international financial system and thus clearly not too-big-to-fail, Ecuador was a low-risk testing ground for “bailing in” from the point of view of international capital markets. Ecuador-specific interests became secondary and the country became, in a real sense, a conduit for the transmission of messages between the official sector and the private holders of emerging market debt. The former was intent of proving that rescue packages (organized through the IMF) would not just go to “bail out” (i.e., help finance the exit of) private creditors. The latter was intent in demonstrating that countries that defaulted on their obligations would be severely punished. Both, *de facto* used Ecuador to create a precedent for the future.

The operational fuzziness of “baling in” led to mixed signals, communication failures, and confusion in markets. Ecuadorian authorities understood that no IMF program or disbursement would take place if it continued to make full payments to the holders of its internationally traded bonds. As they embarked on the road to default, the authorities expected public support from the IMF. IMF support did not come and the IMF publicly explained that it had not pressed Ecuador to default but rather encouraged it to enter into a

⁶³ For a discussion of the motivations, tactical mistakes, and implications of the Ecuadorian bond default see De la Torre (1999b). See also Deepak Gopinath (1999) for a discussion of issues raised by the Ecuadorian default, as well as of the activist role played by a hedge fund vulture investor in triggering the acceleration clause.

⁶⁴ The “bailing in” doctrine was derived from a broadly shared diagnosis within G-7 policy makers and the official Washington community that the main culprit for the Asian and Russian crises of 1997-98 was international moral hazard. That is, that there was “too much” speculative capital flowing to emerging market countries because of the expectation that the IMF would “bail out” such countries (particularly in they were large) in times of financial distress. However, the evidence in favor of the moral hazard view of international crises appears weak (see, for instance, Hausmann [])

comprehensive debt restructuring agreement with its private creditors.⁶⁵ Market participants were confused, although most surmised that some (undefined) form of “bailing in” was a necessary, but not sufficient, condition for Ecuador to secure an IMF agreement.

And third, the debt default dealt a direct and unavoidable hit to the domestic banking system restructuring program. It undermined the feasibility of this program because it confirmed that the bonds issued to recapitalize intervened banks and pay out the depositors of closed banks were value-impaired. The large banks that had moved under the control of the public sector for rehabilitation were, by definition, relatively large holders of public sector bonds, which were recorded in their balance sheets at face value. The default led agents to believe that these bonds too could be defaulted on, and thus to conclude that the true capital of intervened banks was much lower than reported.⁶⁶ As a result, and contrary to what is needed for an orderly bank restructuring process, intervened banks became more vulnerable to runs than the banks still owned and controlled by the private sector. Since then, this bifurcation of depositor behavior (a sort of anti-public bank bias) has remained as a visible feature of the Ecuadorian financial system.

In short, Ecuador’s default on its internationally-traded bonds was an important contributing factor to the post-August 1999 speculative attacks on the sucre and the banks controlled by the public sector. In particular, it helps explain the runs on the two large (“capital deficient”) banks—Previsora and Popular—that prompted their takeover by the AGD scarcely a month after the announcement of the international audits.

D. The Devaluation-Insolvency Spiral

The fall into the depths of financial disarray during 1999 featured a seemingly unstoppable depreciation of the *real* exchange rate, a consequent dilution of dollar GDP, and rising insolvency for the banking system, households, corporations, and the government (see Panel IV). This phenomenon questions the conventional wisdom on the effects from devaluation. Economists tend to expect expansionary effects, particularly if a real devaluation happens in the context of unemployment.⁶⁷ But if this view were generally true, Ecuador—whose currency depreciated massively in real terms—should have been experiencing fast growth in 1999. To be sure, it is recognized that, for instance, where domestic production is highly dependent on imported inputs, a real devaluation could lead to a contraction in economic activity in the short-run. But this caveat is insufficient in the case of Ecuador, which was not simply the case of a recession after a step devaluation; but rather the case of a free falling real exchange rate, associated with the dilution of GDP and widespread erosion of solvency. The prolonged period of this phenomenon suggests that the problem went beyond the tendency for inflation to lag behind nominal devaluation. It

⁶⁵ For additional details see the remarks by Stanley Fischer (1999 and 2000), then the IMF’s First Deputy Managing Director, regarding the Ecuadorian debt default.

⁶⁶ The methodology followed by international audits also contributed to this perception—it required a provision of 15 percent for Government bonds.

⁶⁷ A real devaluation raises the price of tradable (i.e., exports and imports) goods and services, relative to nontradable ones. As a result, demand “switches” towards locally produced nontradable *and* import-competing goods and services. This leads to an expansion in GDP, which could be achieved without much friction and with little price pressures if there is underutilized productive capacity.

points to some form of self-reinforcing mechanism through which the real exchange rate, GDP, and solvency reinforce each other, possibly along a divergent path.

The failure of the real exchange rate to stabilize quickly at a new equilibrium, consistent with a given deterioration in fundamental factors (e.g., the inter-temporal saving-investment balance as manifested in the actual and expected current account and fiscal deficits), was perplexing to Ecuadorians. In past decades they had frequently witnessed a tendency for the real exchange rate to converge to a new level after an adjustment. In effect, in the Ecuador of the 1980s there were two structural features that would naturally put the brakes on a process of *real* exchange rate depreciation. First was the condition of the State as a net exporter, which meant that a devaluation would reduce the fiscal deficit (or increase the surplus). Second was the fact that the debts of households and corporations were denominated in sucres, which implied that a devaluation reduced the real value of debts, transferring wealth from depositors to debtors (most debts were owed to banks). Thus, in the Ecuador of the 1980s a devaluation would give rise to process of convergence—it would enhance the solvency of the government as well as of household and corporate debtors, which would in turn help re-float the banking system. Such improvement in fundamental solvency would put a break on the depreciation of the real exchange rate, which would stabilize it at a new equilibrium.

In the 1990s these structural features disappeared. Burdened by rising dollar-denominated debt service obligations, a devaluation would no longer have a positive effect on the government's budget (the effect became broadly neutral in cash flow terms). And, as explained in Section II.C.2, corporations and households sharply raised the share of dollar debt in total indebtedness, even where their income was predominantly in sucres. A high degree of liability dollarization emerged as a salient structural feature in the Ecuador of the 1990s. This reversed the balance sheet effects of a devaluation, which would now erode (rather than restore) the solvency of debtors. A floating exchange rate regime in the midst of weakening confidence thus became a high risk adventure. Given that a reduction in solvency (or an increase in insolvency) is a fundamental factor that calls for a more depreciated real exchange rate, the presence of liability dollarization created conditions for a devaluation-insolvency spiral whereby the depreciation of the real exchange rate and the deterioration of fundamentals factors reinforced each other.

However, a structural feature such as liability dollarization could not itself set this type of process into motion. Indeed, a high degree of liability dollarization coexisted with relatively solvent debtors years before the exchange rate went into a tail spin. A fuel was needed to unleash the process, and this was the expansion of BCE liquidity to support the ailing banking system. To be sure, money printing fed the fire of the devaluation-insolvency spiral but it was not itself at the origin of the problem. It was a response to, more than a cause of, the implosion of confidence. The BCE—as most central bankers in the world—provided emergency liquidity assistance to the banking system reluctantly. The crumbling of confidence—triggered by the accumulation and combination of “bad luck, bad banking, and bad policies” (as explained through this and the previous sections of this paper)—led to runs on the currency and the banks. And it was these runs which induced the BCE to pump liquidity, which it felt compelled to do given the legal, institutional, and political economy restrictions and risks it faced (as explained particularly in Sections III.A.2 and III.B.2 above).

A key question arises at this stage: Why did BCE continue to expand liquidity after March 1999, if deposits were frozen and could thus not be withdrawn and used to engineer

a run on the currency? Much of the answer can be found in the following three considerations. First, frozen deposits did not exhaust the assets that could be dumped and thus used to attack the currency. Unfrozen ammunition included importantly the external credit lines to banks. These continued to be withdrawn at a rapid rate throughout 1999, falling by nearly US\$500 million during the 10 months immediately following the deposit freeze, and this raised bank demand for BCE liquidity.

Second, the failure to apply the purchase and assumption technique to closed banks (see Section III.B above) meant that the associated deposit payouts had to be made mostly in sucres (cash). The equivalent of about US\$ [redacted] million in such payments are estimated to have been made between April and December 1999 and, given the crisis of confidence, it is reasonable to assume that a significant portion of it was for used to attack the currency. Third, and perhaps most important, the government gradually freed frozen deposits through a series of decrees, in response to understandable political and social pressures. Deposits defrosted during April-December 1999 amounted to the equivalent of US\$ [redacted] million, a nontrivial part of which can be assumed to have been withdrawn from the system. A strong correlation is indeed found between the gradual unfreezing of deposits and the evolution of the exchange rate (Panel IV).

In all, despite the March 1999 deposit freeze, plenty of ammunition (unfrozen assets) was or became available afterwards to engineer a run against the system. All the ingredients for a devaluation-insolvency spiral were there. The shocks to confidence described throughout this paper induced initial runs against the banking system, prompting the BCE to provide liquidity. Liquidity then fueled the attack against the currency, which depreciated in the context of the free float introduced early in 1999. The nominal devaluation would adversely affect balance sheets, eroding the solvency of debtors and the banking system. This constituted a deterioration in a fundamental factor which would, on the one hand, require a more depreciated *real* exchange rate and, on the other, foster renewed runs against the banks. Runs would, in turn, initiate a new round of liquidity injection and nominal devaluation, and the whole process would spiral again. Whether the spiral would increasingly widen or eventually narrow cannot be ascertained in the absence of a formal model. However, the potential for an unstable trajectory, at least for a time period, seems analytically clear. And we argue that the Ecuadorian experience during 1999 is a case in point that illustrates this type of perverse dynamics.

The Ecuadorian experience also illustrates that, under conditions of liability dollarization, hyperinflation is not a political equilibrium and may not even be among the feasible dynamic trajectories. In effect, no politician could become interested in a process that erodes debtor and banking system solvency (large corporate debtors and bankers normally constitute well-organized and powerful interest groups). Moreover, the feedback loop whereby greater insolvency requires a more depreciated *real* exchange rate implies that the rate of inflation would tend to lag behind, and not necessarily converge to, the rate of nominal devaluation. This in turn entails that, under conditions of liability dollarization, hyperinflation would not be a likely trajectory and may not be a feasible one. As Ecuador's case illustrates, a more likely process would be that of a continuous real exchange rate depreciation. That process did not stop endogenously in Ecuador. Rather, it was halted by an exogenous (administrative) decision announced in January 2000—i.e., the abandonment of the national currency and the formal adoption of the dollar.

[Insert Panel IV --Graphs on the Depths of the Crisis]

V. POST-DOLLARIZATION DEVELOPMENTS

The adoption of formal dollarization—i.e., the complete abandonment of monetary sovereignty—marked an inflexion point in the history of Ecuador, with profound repercussion that go well beyond the economic and financial sector spheres.⁶⁸ In these sections, however, we focus only on dimensions of dollarization that are relevant to the management and resolution of Ecuador's financial crisis. These are discussed below.

A. Stabilizing Power of Dollarization – Whither the Preconditions?

For all the potential medium-term costs of dollarization (including the risk of falling into a high-cost low-competitiveness trap without resort to exchange rate policy), the Ecuadorian experience is a testimony to its remarkable stabilizing power. Dollarization arrested instantaneously the vicious spiral of devaluation and insolvency, in a way that, it seems, no other combination of macroeconomic policies and structural reforms could have done. The mere announcement of formal dollarization resisted a coup d'état and the restoration of democracy with Interim President Gustavo Noboa, who confirmed the decision to dollarize and obtained Congressional approval of the respective law in March 2000, ten weeks after dollarization had been announced. Dollarization also reversed depositor behavior vis-à-vis the banking system in a much stronger way than expected. The full unfreezing of deposits in March 2000 did not give rise to the feared flight out of the system, even though the process of troubled bank resolution was far from complete (see below). In effect, total bank deposits have steadily risen from US\$2.7 billion in January 2000 to US\$4.4 billion by mid-2001 (Panel V).

Ecuador's experience invites a revisiting of the debate on "pre-conditions" to dollarization. More than a well thought out decision taken after the road for it had been prepared, dollarization in Ecuador was improvised and adopted "against the ropes," without having met any of the preconditions that are often considered as necessary. The lender of last resort function (i.e., the money-printing version of it) was abandoned in the midst of a major banking crisis and the dollar was adopted with no clear prospects for the restoration of fiscal discipline. To be sure, the law that enacted dollarization did introduce some important reforms in the fiscal and labor market areas. Precisely because preparatory reforms were not pursued ahead of the decision, and in line with Calvo's (2000⁶⁹) more general reasoning, Ecuador evidences that dollarization itself can arrest the deterioration in fundamentals.⁶⁹

The stabilizing power of dollarization was reinforced by good luck and good news. The price of oil, Ecuador's main export commodity, increased dramatically (good luck). The good news were that Ecuador finally arrived at separate agreements with the IMF (April 2000) and its private creditors (announced in April 2000 and implemented in July 2000).⁷⁰

⁶⁸ Dollarization was announced by President Mahuad in January 2000. From that point forward, the BCE ceased to print sucres; it only sold (in exchange for money base) as much dollars as demanded at the conversion rate of 25,000 sucres per dollar. Dollarization legally entered into effect only in March 2000, with the approval of the respective law, and after President Mahuad was replaced by President Gustavo Noboa.

⁶⁹ At the same time, Ecuador's experience does not support the conclusion that dollarization would, of itself, necessarily foster fiscal discipline or promote structural reform.

⁷⁰ Ecuador's agreement with international bondholders was achieved in an unexpectedly smooth fashion. The feared proliferation of lawsuits did not materialize. And the problem of "holdouts"—i.e., creditors that refuse to join an agreement and keep the old claims to press (through international courts) for better payment conditions—

Together, these developments contributed to the sharp reduction in the spreads of Ecuador internationally-traded bonds after July 2000 (Panel V). They played a complementary (not substituting) role to the stabilizing power of dollarization, a view that is supported by the fact that oil prices had been surging much before dollarization and that the IMF and debt agreements came after dollarization halted the devaluation-insolvency spiral.

Moreover, by putting a floor to the fall of the real exchange rate depreciation that had occurred throughout 1999, dollarization fostered a rebound in key economic variables that had overshot to unsustainable levels. Dollarization thus set into motion, at least for the short-run, a virtuous circle. In particular, as the real exchange rate appreciated, the large surplus in the external current account began decreasing and approached equilibrium in the first quarter of 2001. This reflected a gradual unleashing of aggregate spending (which had been dramatically compressed in 1999) and the consequent reduction in capital outflows. Partly as a result, real GDP stopped falling and was rebounding at an annual rate of about 8 percent during the first quarter of 2001.

B. Inflation Hump and Dilution of Debts

Key to the dollarization-induced rebound in domestic spending and economic activity was the dilution of debts (restoration of debtor solvency) that resulted from a highly negative real interest rate. The ex-post real interest rate reached a *negative* level of around 80 percent per year during the second and third quarters of 2000, before rising to a negative 25 percent by the first quarter of 2001 (Panel V). This phenomenon was the counterpart of a very pronounced “inflation hump” caused by the unduly depreciated conversion rate (25,000 sucres per dollar) at which dollarization took place. In effect, it is estimated that domestic prices in January 2000 reflected an exchange rate of about 16,000 sucres per dollar, and this necessarily implied that consumer prices would have to rise substantially in dollar terms, to a *level* compatible with the conversion rate of 25,000 and before Ecuador’s inflation *rate* would converge to that in the United States.

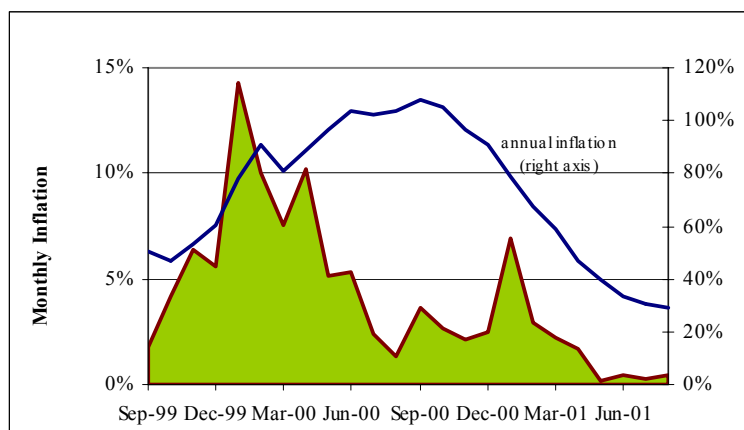
The “inflation hump,” which appears to be finally subsiding at the time of this writing, caused high irritation among Ecuadorians, who were expecting a faster stabilization of prices. Yet it was incorporated *by design* in the decision to dollarize at a conversion rate of 25,000 sucres per dollar. Why? Partly because the authorities thought that credibility could be weakened if they chose an exchange rate more appreciated than the one in effect at the time of the dollarization decision. More importantly, however, the authorities wanted to ensure that international reserves would not be exhausted in retiring the monetary base and BCE short-term debt securities—i.e., that some “excess reserves” will be available to support liquidity lending by the BCE in case the unfreezing of deposits would lead to a run. As discussed earlier, in the event, such fear fortunately proved to be unwarranted.

The “inflation hump” had, however, a silver lining from the point of view of financial system stabilization. With post-dollarization lending interest rates hovering around 20

was successfully eliminated through the use of “exit consents” for the first time in the history of sovereign debt workouts. “Exit consents” refer the amendment of clauses in old bond contracts by the joint decision of investors that agree to accept the new bonds. “Exist consents” were used to increase the costs of keeping the old bonds by amending selected non-payment clauses that require the acquiescence of creditors holding one-half or two-thirds of the exposure (the amendment of clauses related to payment conditions typically require supermajorities of over 80 percent). For a detailed and lucid discussion of “exit consents” see Buchheit (2000).

percent and inflation peaking at 100 percent, debtors greatly benefited from a major wealth transfer, at the expense of depositors. In particular, debtor enterprises experienced a major improvement in profitability over the long transition period in which the rate of increase in the price of the goods they sold was well in excess of the rate of interest they paid on their debts. Negative real interest rates, furthermore, encouraged people to finance the purchase of assets whose prices were expected to appreciate. This boosted a rebound in asset prices (notably real estate), enhancing the value of collateral and, hence, the quality of the banks' loan portfolio. In short, a generalized restoration of debtor solvency took place in the aftermath of dollarization.

Figure V.1. Ecuador: Inflation Hump



C. Post-Stabilization Allocation of Insolvency

A special feature of the Ecuadorian case is that the allocation of insolvency had to be done via administrative decision and negotiation, and much of it had to be allocated *after* the stabilization brought about by dollarization. This is in contrast with the more common case in Latin America where insolvency losses had been allocated to depositors and creditors via hyperinflation, before stabilization. For Ecuador, the implication was that the allocation of insolvency had to face acute political-economy related complications. Partly as a result, the process of loss allocation was not a reflection of a well thought out, ex-ante strategy. It was improvised along the way and has taken long time to materialize.

In the end, almost every stakeholder ended up taking a hit, but not simultaneously nor equitably. Holders of internationally-traded sovereign bonds accepted a haircut (40 percent relative to the nominal value of their claims) in the context of the July 2000 debt agreement. Holders of domestic Government bonds were forced to accept the unilateral rescheduling of their claims in mid-1999. Presumably, the shareholders of failed banks lost their equity when such banks moved under the control of the AGD. In practice, however, some of those shareholders may have come out even or ahead if they managed to strip assets prior to the failure of their banks. A big share of the total insolvency losses from the banking crisis was, of course, allocated to the Government—this portion is estimated at 20 percent of GDP (Table V.1). Additionally, a significant share of insolvency losses was allocated to bank depositors, as a result of the failure of the guarantee to fully materialize in the case of closed banks, the erosion of deposits' value caused by the freeze, and, in the case of sucre deposits, of the devaluation. Insolvency losses allocated to depositors is

estimated in the range of to percent of GDP. Finally, bank debtors, particularly the large and powerful ones, that did not pay their debts, particularly debts to banks under the control of the AGD, appear to have been net gainers of the process. However, more recently, public opinion has turned against big debtors—their names have been published in the newspapers—and pressures for them to honor their debts appear to be rising.

IV. PENDING BANK RESOLUTIONS AND BANKING SYSTEM SEGMENTATION

Dollarization also came into effect before the completion of banking crisis resolution. In particular, two mega-banks, Filanbanco and Pacífico, remained open and under public sector control after dollarization.⁷¹ The liquidity and solvency positions of these banks eroded continuously, largely due to a very deficient administration but also because of segmentation of the banking system that had started in the second half of 1999. Depositors have continuously shifted towards the few banks that remain under private sector control, which display clearly stronger indicators than the publicly controlled open banks (Table V.2). The divergence in the financial strength of private versus public banks has become a salient feature of Ecuador's financial landscape. This has had a positive side, namely, it has enabled the authorities to manage the troubled of the mega-banks in the context of flight to quality. Contagion appears to have been restricted to the publicly controlled banks.

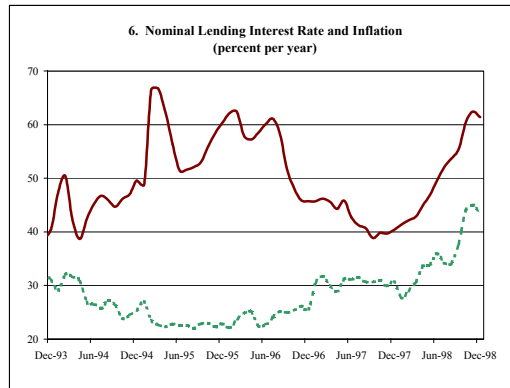
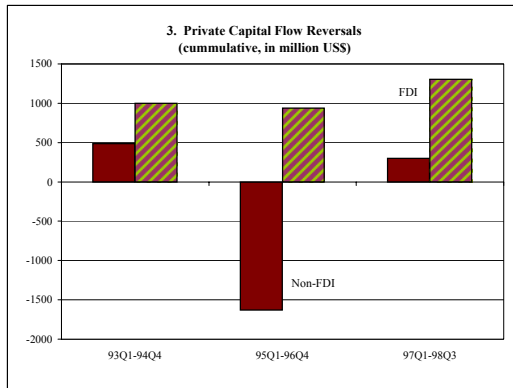
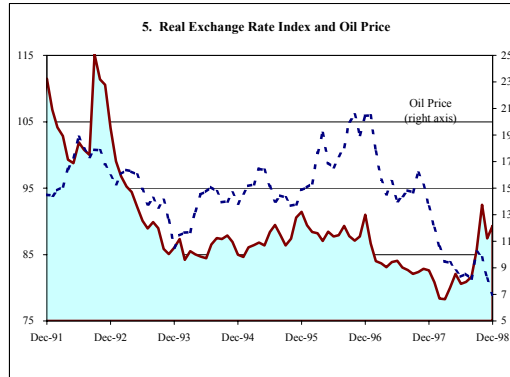
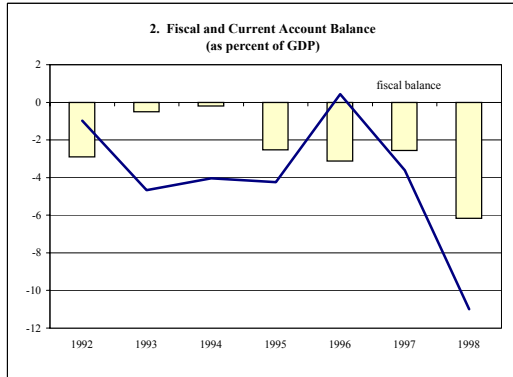
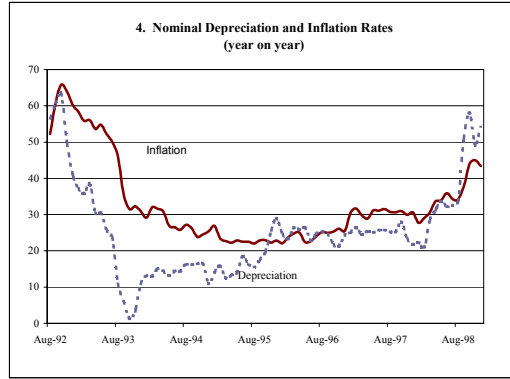
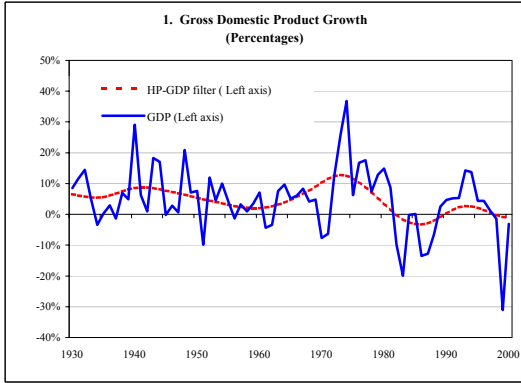
At the time of this writing, things seemed headed towards a final resolution of the pending cases. In effect, Filanbanco failed in August under the weight of illiquidity, mounting losses, and poor administration, despite a second round of recapitalization by the fiscal authorities. Regulators decided to close it. Deposits up to US\$10,000 per depositor have been paid or transferred to private banks, and there is considerable expectation that large depositors will have to take substantial losses. Fortunately, contagion did not spread to private banks, who were rather the recipients of flight to quality. However, runs on Pacífico, the other mega-bank in public hands intensified, raising the sense of urgency among the authorities who were trying to advance the timetable to transfer Pacífico (at least the “good bank” part of it) to private hands.

With the resolution of the two mega-banks within sight, the closing of the terrible financial crisis chapter of Ecuadorian history is also within sight. This is welcome news indeed. Closing that chapter is a necessary, but far from sufficient, step towards the recreation of a healthy financial system, with the depth, resiliency, and efficiency that is needed to support growth and poverty reduction in Ecuador's dollarized economy.

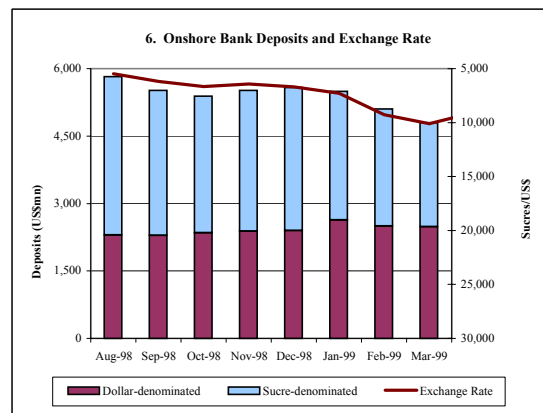
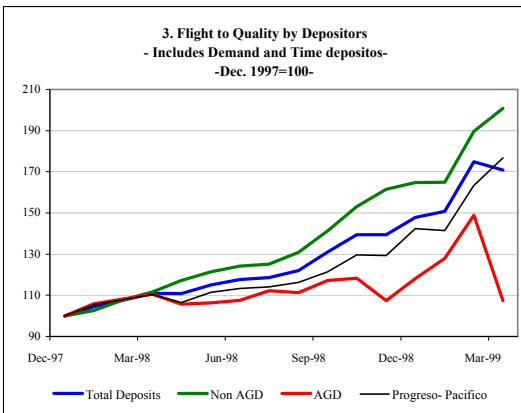
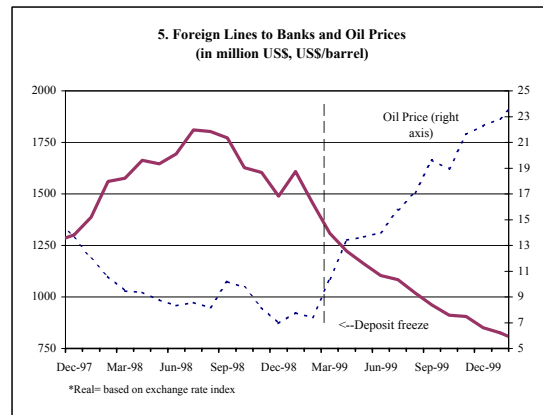
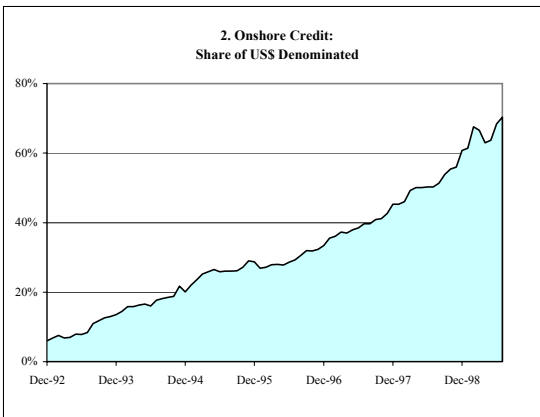
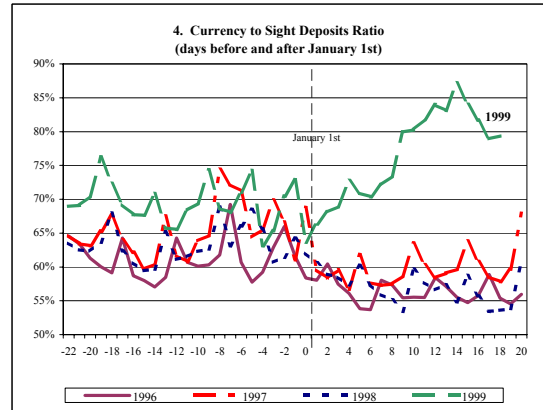
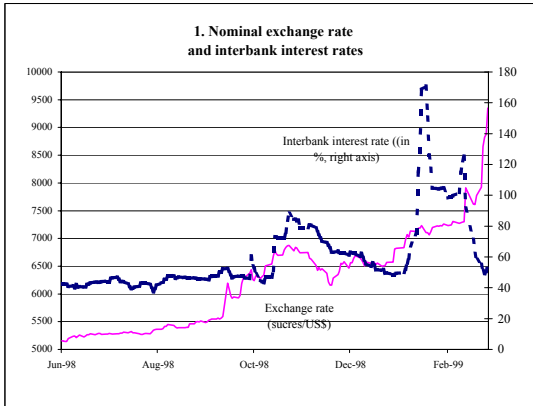
[Insert Panel V. Graphs on Post-Dollarization Developments]

⁷¹ These banks became mega-banks as they absorbed other intervened banks. Filanbanco absorbed La Previsora at the end of 1999. And Pacífico absorbed Continental in 2000.

Panel II. Ecuador: Origins of the Crisis

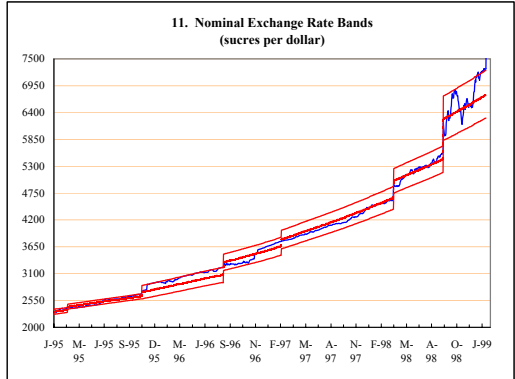
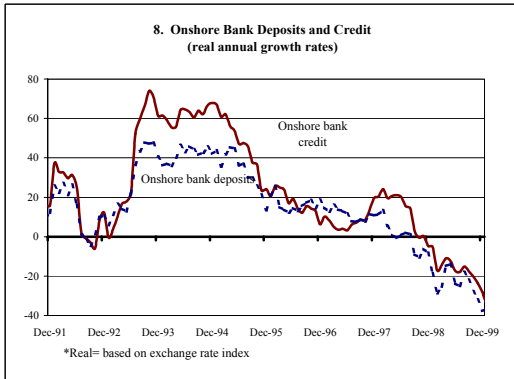
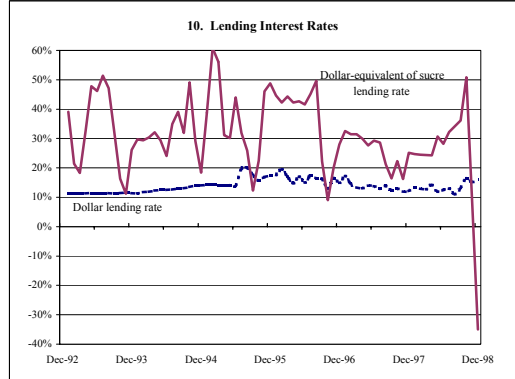
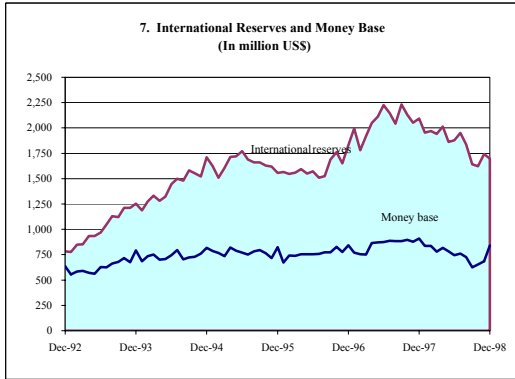


Panel III. Ecuador: Crisis Eruption



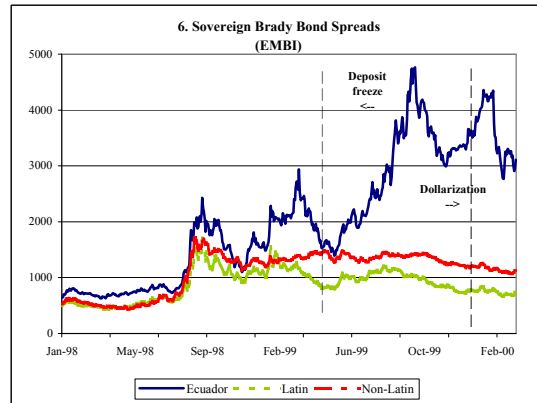
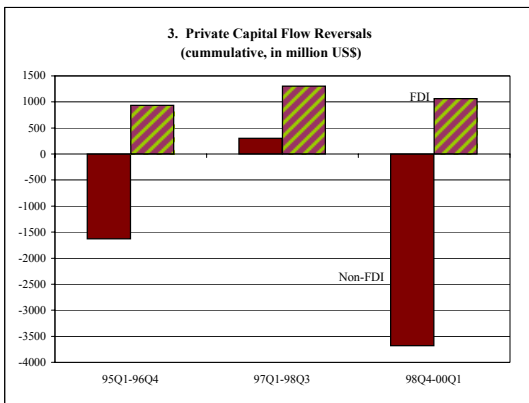
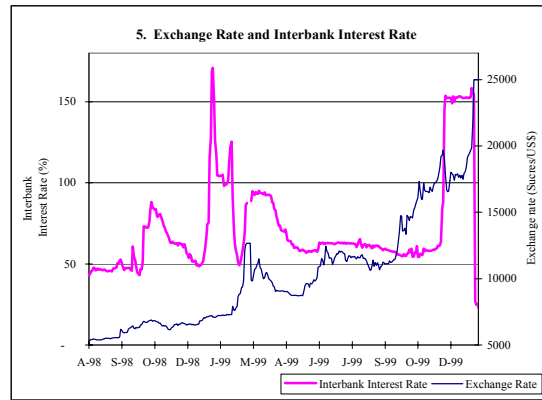
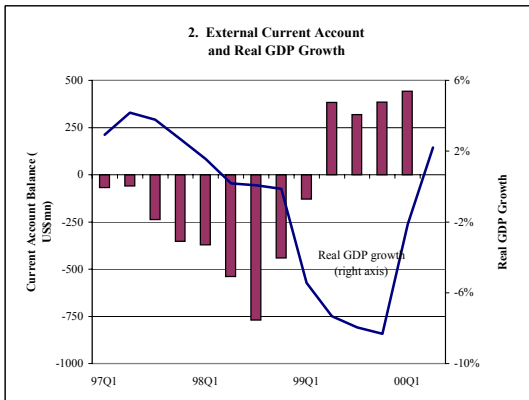
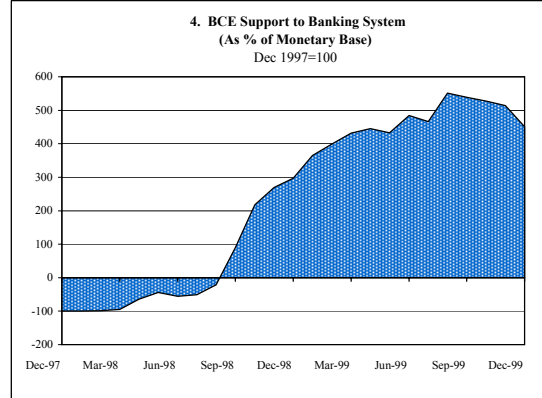
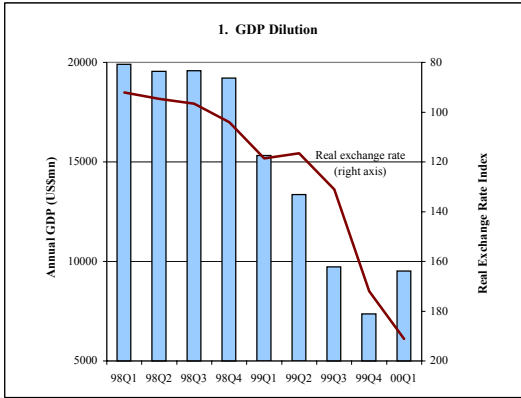
Source: BCE and SB data.

Panel II (cont.). Ecuador: Origins of the Crisis

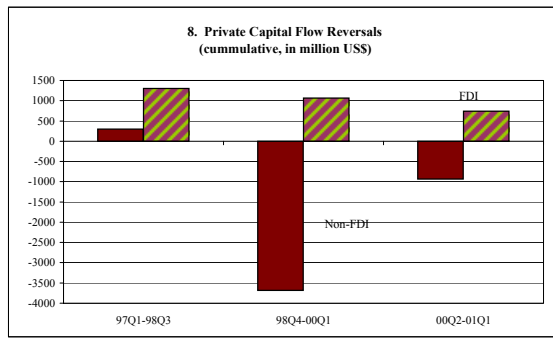
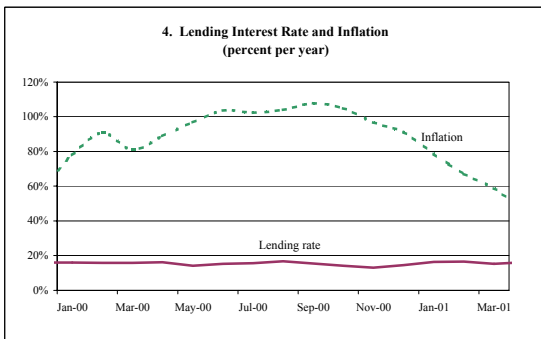
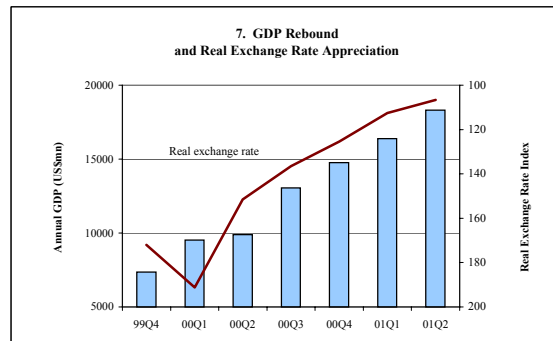
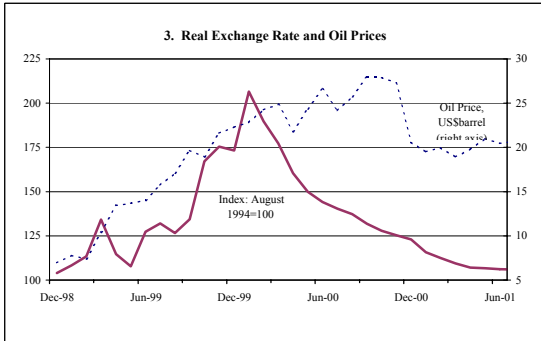
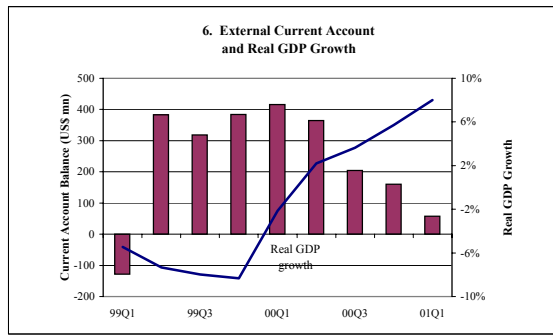
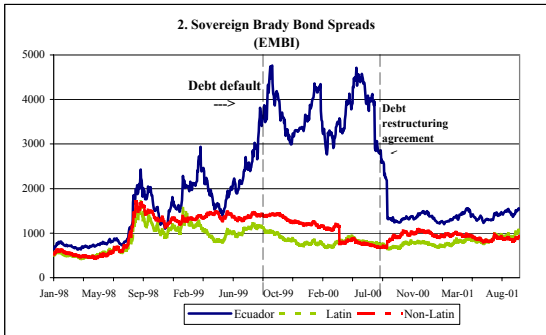
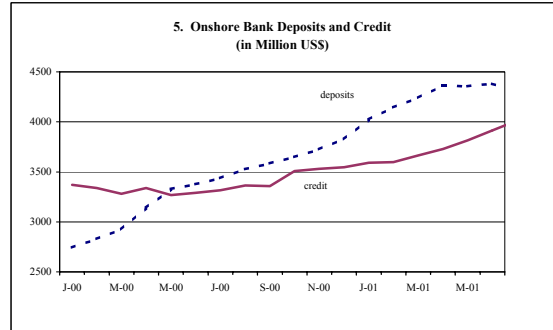
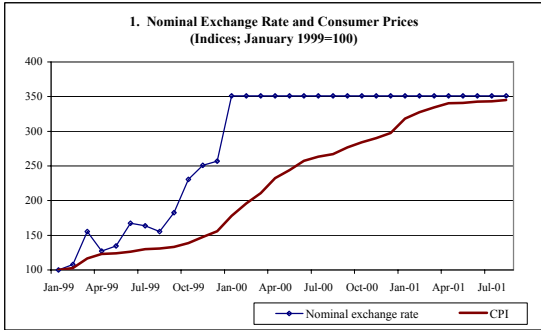


Source: BCE data.

Panel IV. Ecuador: The Depths of the Crisis

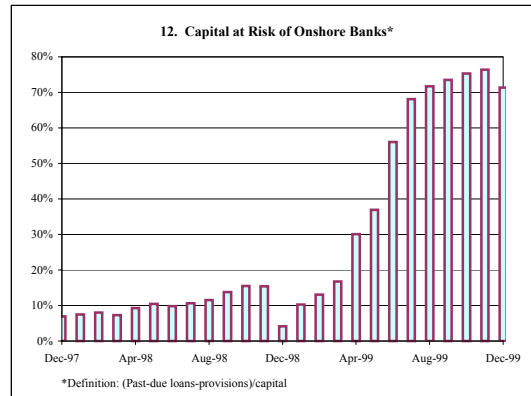
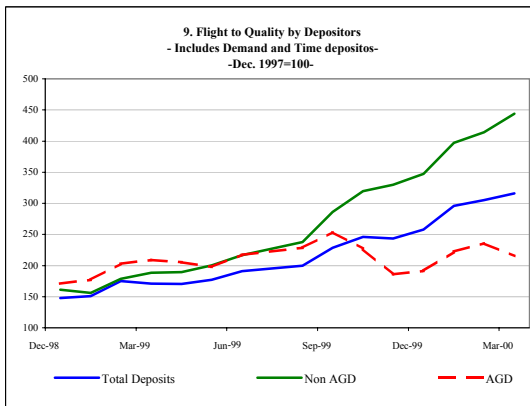
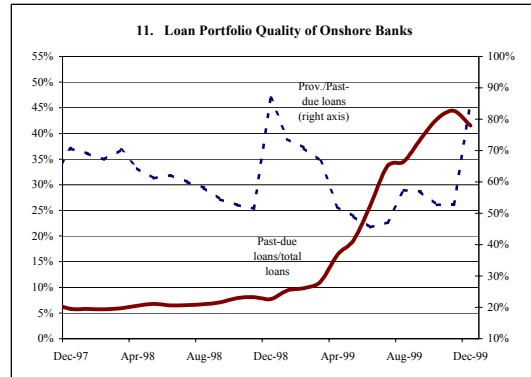
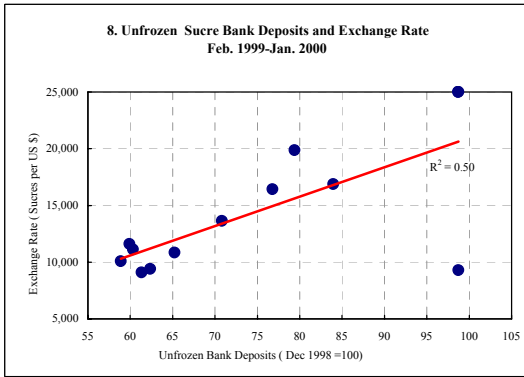
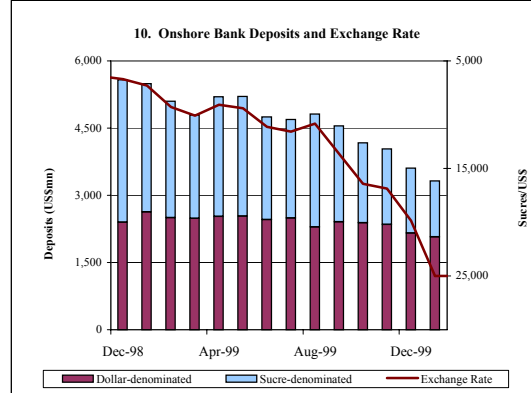
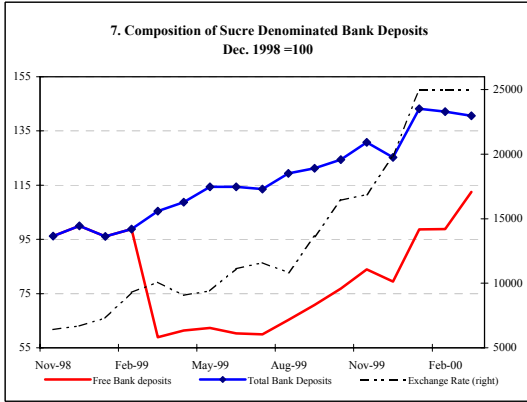


Panel V. Ecuador: Post-dollarization Developments



Source: BCE and SB data.

Panel IV. (cont.) Ecuador: The Depths of the Crisis



Source: BCE and SB data.