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**Working Paper**

## Costa Rica: The Next Stage-Reform without Volatility. A Report

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**COSTA RICA: THE NEXT STAGE -  
REFORM WITHOUT VOLATILITY.  
A REPORT**

**RODRIGO BOLAÑOS ZAMORA  
DECEMBER, 1999**

**THIS IS THE FINAL REPORT PRESENTED BY THE CONSULTANT TO THE  
INTERAMERICAN DEVELOPMENT BANK-OFFICE OF THE CHIEF ECONOMIST  
– RESEARCH DEPARTMENT**

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# **COSTA RICA: THE NEXT STAGE– REFORM WITHOUT VOLATILITY – A REPORT\***

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**RODRIGO BOLAÑOS ZAMORA**  
**DECEMBER, 1999**

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## **I. SUMMARY AND GENERAL RECOMMENDATIONS**

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During the eighties and nineties, Costa Rica has lagged behind other leading Latin American and emerging market economies in the reform and modernization of the economy. Its economic growth rate in the nineties has been moderate, 4% per year in average, stemming, mainly, from the relative good levels of human and physical capital accumulated in the country up to the end of the seventies, together with a peaceful and democratic environment and a judiciary system where contracts are so far relatively well enforced.

But, economic conditions remain volatile in Costa Rica. GDP growth volatility is high relative to develop economies and the nineties have seen a substantial increase in the volatility of private investment growth and in its correlation with GDP growth.

It is hard to escape the impression that Costa Rica is living-off of the successes of the pre-eighties period, depleting its human and physical capital, and immersed in a sort of political and economic sclerosis. Politically weak governments are unable or even unwilling to muster the political will to effect key reforms to fully modernize the economy and reduce economic volatility in ways that would allow Costa Rica to grow again at 6% or more as it did before the debt crisis-eighties, increase incomes and reduce poverty. Although foreign direct investment in leading technology sectors has been large in recent years, it is estimated that the share of benefits left in the country by those investments is small yet.

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\* The author wishes to acknowledge the useful comments of Ricardo Hausman and Luis Rivera-Batiz. Ricardo Caballero read several drafts of the report and made recommendations that substantially improved its contents. All remaining errors are the author's.

The diagnostic of macroeconomic volatility in Costa Rica in this report contains five basic elements: 1) volatility prone mixes of fiscal and monetary policies; 2) structurally weak public finances due to large domestic debts and politically motivated expenditure cycles in pre-election years; 3) underdeveloped financial markets; 4) weak financial links abroad; and 5) risky corporate financing.

Matching these elements, the general policy recommendations are centered on the following groups: A) adding flexibility to fiscal policy; B) reducing the public debt burden and improving its management; C) giving financial and policy independence and an optimal mandate to the Central Bank; D) improving the functioning and supervision of the financial system; and, E) improving financial links abroad.

Probably the key to reduce volatility in Costa Rica resides in solving the weak finances of both the Central Government and the Central Bank. These weaknesses have led to large and growing domestic public debts, high domestic interest rate premiums, persistent inflation and low cushions of international reserves. The politically motivated increases in fiscal deficits coupled with pressures to reduce inflation below a sustainable level given the Central Bank structural financial losses have combined to produce volatility prone mixes of fiscal and monetary policy instruments. Therefore, the measures to introduce healthier public sector finances may not only be the most important to reduce macroeconomic volatility by itself. If adopted, they would also help in reducing distortions in the financial sector and improve the chances of stronger financial links abroad that would also help in coping with volatility-producing shocks. A summary of the main recommendations follows, showing the interdependence between several of the proposals.

## A. ADDING FLEXIBILITY TO FISCAL POLICY

The aim here is to eliminate the average fiscal deficit and turn it into an average surplus (to reduce the domestic debt) and introduce more flexibility into public revenues and expenditures so that the fiscal accounts may be able to show a larger surplus when there are pressures that tend to reduce the supply of funds to the private sector and vice versa. To achieve this goal, consider the following measures:

- 1) *Turn the public sector deficit (including the Central Bank losses) into a surplus;*



- 2) *Increase the flexibility in budget appropriations by eliminating the constitutional and legal expenditure and revenue earmarking.*
- 3) *Continue the public sector new borrowings in the international capital markets with adequate limitations to avoid increasing the debt burden relative to GDP and exports of goods and services;*
- 4) *Require by law that a fully independent Central Bank with a mandate to stabilize non-traded goods prices and the “normal” current account presents Congress with its opinion on the fiscal budget proposal for next year, so as to reduce the likelihood of volatility prone mixes of fiscal and monetary policies.*

## B. REDUCING THE PUBLIC DEBT BURDEN AND IMPROVING ITS MANAGEMENT

The objective must be to reduce the premium paid on domestic interest rates through: I) sounder financial position of the public sector; II) less volatile generating mixes in fiscal and monetary policies; III) a reduction in the ratio of domestic public debt to GDP, while limiting the size and service of total foreign plus domestic public debt. To this effect, consider the following actions:

- 1) *Turning the fiscal deficit into a surplus and introducing less volatility in the mix of fiscal and monetary policies;*
- 2) *Improving access to international liquidity to absorb foreign and domestic shocks;*
- 3) *Continuing the process of issuing homogeneous domestic public debt instruments.*

## C. GIVING FINANCIAL AND POLICY INDEPENDENCE AND AN OPTIMAL MANDATE TO THE CENTRAL BANK

The objective is to have a Central Bank with financial soundness and policy independence within a clear mandate to gradually stabilize the economy both in terms of the purchasing power of money and balance of payments shocks. In this regard, consideration should be given to:

- 1) *Establish by law a clear mandate on Central Bank policy to gradually reduce non-traded goods inflation and to stabilize the “normal” current account;*
- 2) *Use the proceeds of the privatization of large public enterprises to capitalize the Central Bank;*

- 3) *Grant full independence to the Central Bank board with proper accountability and transparency about its policies;*
- 4) *Require by law that the Central Bank presents Congress with its opinion on the fiscal budget proposal for next year.*

#### D. IMPROVING THE FUNCTIONING AND SUPERVISION OF THE FINANCIAL SYSTEM

As the domestic financial system does not efficiently aggregate domestic liquidity nor provide adequate links with liquidity sources abroad, and there is a lack of diversity in instruments to allow domestic firms to have the proper mix of debt-equity, long term versus short-term liabilities, currency and interest rate risks, the domestic financial system requires reforms to:

- 1) *Improve liquidity aggregation in the financial system, by:*
- 2) *Improve the supervision of offshore banks and eliminate the distortions that provide incentives to operate through them;*
- 3) *Reduce incentives to foreign exchange risks in corporate loans,*
- 4) *Specialize one of the state commercial banks in the financing of medium and small firms (PYME's);*
- 5) *Redesign the clearing and settlements systems in the foreign exchange and security markets to adequately manage credit risks and enforce higher prudential reserves on housing loans financed with short-term liabilities.*

#### E. IMPROVING FINANCIAL LINKS ABROAD

The small size of the Costa Rican economy and its firms limit considerably the type of links with international markets. Under this constraint, the main measures to be consider are:

- 1) *Improving the contractual environment and corporate governance;*
- 2) *Lifting the self-imposed public sector borrowing constraint;*
- 3) *Authorizing the Central Bank to open liquid lines of credits abroad;*
- 4) *Promoting regional funds to attract foreign portfolio investments into the small regional corporations;*

- 5) *Promoting the creation of emergency and precautionary funds for regional small countries;*
- 6) *Establish and reinforce the direct links with international sources of liquidity.*

In summary, Costa Rica has, again, in the opening years of the next century, an opportunity not seized during the nineties, after the difficult adjustments and debt renegotiations of the eighties, to move decidedly forward in the growth and development path.

It should be mentioned at the outset of this report, that Costa Rican national accounts and balance of payments data are undergoing considerable revisions. There is widespread belief among many analysts that the present methodologies used to elaborate that information fail to capture all relevant sectors and payments, understating growth and other variables. No attempt has been made in this report to correct for any possible bias arising from those possible problems in the data. The conclusions of the report and the recommendations should be revised as new information becomes available.

The rest of the report is organized as follows. The next part discusses the measures of volatility for the main macroeconomic variables in Costa Rica, analyses the main sources of economic volatility and set forth the main hypothesis. The third part explains the sources and effects of volatility during the nineties, while the fourth part delves into additional potential sources of volatility. The policy recommendations and conclusions are presented in detail the fifth and final part.

## II. FACTS AND MECHANISMS

### A. AGGREGATE VOLATILITY

After the more volatile eighties, volatility in Costa Rican real GDP growth during the nineties still remains high relative to developed economies, as can be seen from Table II.1.

Table II.1. Selected Countries: Standard Deviation of Annual Rates of Change in Real GDP and Gross Fixed Capital Formation

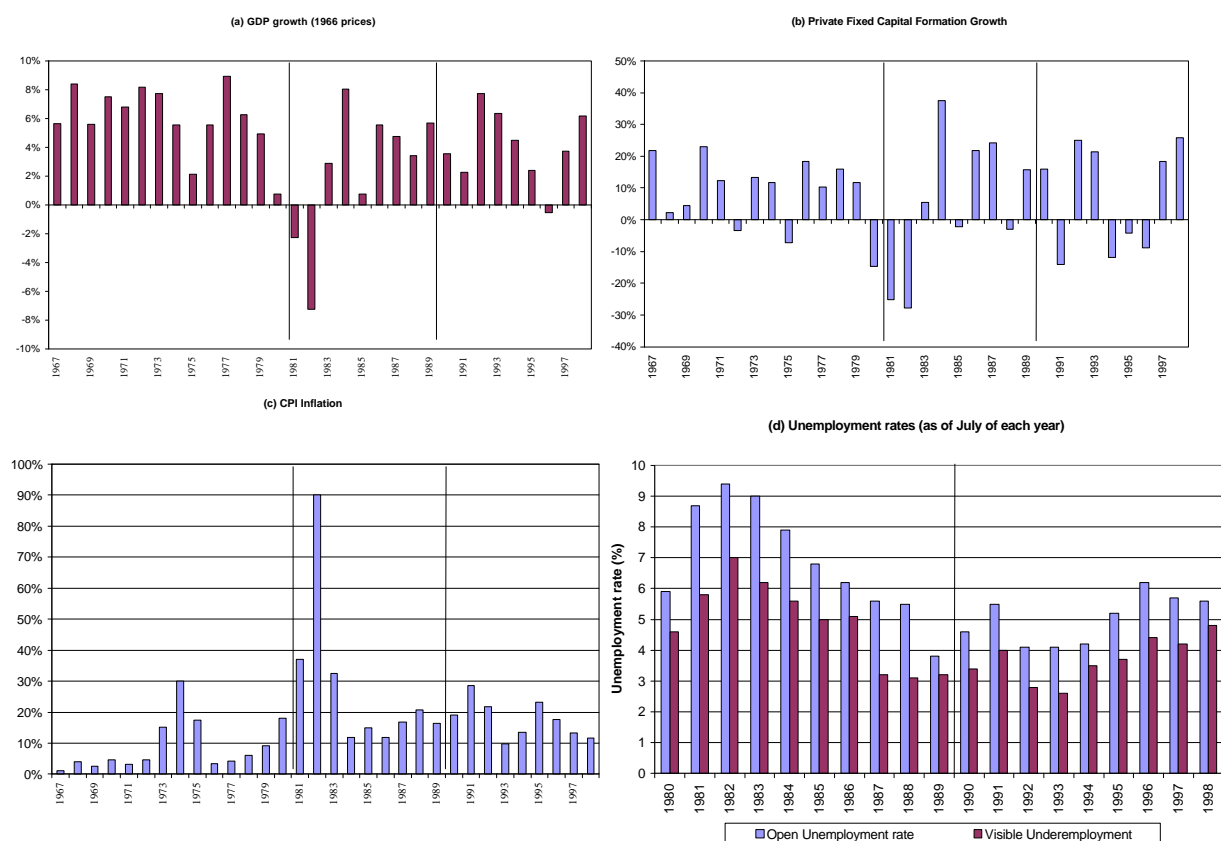
Region or country	Statistics of Annual Rates of Change of Real GDP						Statistics of Annual Rates of Change of Gross Fixed Investment					
	Standard Deviation			Minimum Value		Series	Standard Deviation			Minimum Value		Series
	1967-80	1981-89	1990-96	1967-80	1990-96		1967-80	1981-89	1990-96	1967-80	1990-96	
Argentina	0.038	0.050	0.050	-0.045	-0.046	1967-96	n/a	n/a	n/a	n/a	n/a	none
Brazil	0.033	0.046	0.036	0.032	-0.046	1967-96	0.067	0.116	0.070	-0.012	-0.081	1971-96
Chile	0.058	0.066	0.026	-0.116	0.032	1967-96	0.148	0.199	0.114	-0.228	-0.022	1967-96
Colombia	0.017	0.017	0.015	0.021	0.020	1967-96	0.060	0.054	0.160	-0.039	-0.066	1967-96
Costa Rica	0.023	0.046	0.028	0.007	-0.005	1967-96	0.086	0.181	0.152	-0.094	-0.128	1967-96
Dominican Republic	0.048	0.026	0.046	0.002	-0.057	1967-96	0.104	0.183	0.151	-0.079	-0.209	1967-96
El Salvador	0.045	0.045	0.019	-0.104	0.025	1967-96	0.191	0.088	0.116	-0.305	-0.124	1967-96
Guatemala	0.018	0.027	0.008	0.019	0.030	1967-96	0.113	0.140	0.128	-0.097	-0.103	1967-96
Honduras	0.037	0.026	0.029	-0.008	-0.014	1967-96	0.120	0.162	0.172	-0.082	-0.098	1967-96
Mexico	0.019	0.042	0.041	0.033	-0.062	1967-96	0.076	0.143	0.159	-0.067	-0.290	1967-96
Panama	0.032	0.067	0.032	0.011	0.017	1967-96	n/a	0.276	0.321	n/a	-0.036	1981-96
Peru	0.025	0.086	0.062	0.002	-0.054	1967-96	0.173	0.205	0.141	-0.149	-0.028	1967-96
Uruguay	0.033	0.065	0.035	-0.043	-0.022	1967-96	0.121	0.209	0.136	0.077	-0.124	1974-96
Venezuela	0.035	0.048	0.047	-0.045	-0.029	1967-96	0.147	0.135	0.211	-0.200	-0.238	1967-96
France	0.018	0.013	0.014	-0.003	-0.012	1967-96	0.041	0.048	0.034	-0.064	-0.067	1967-96
Italy	0.025	0.012	0.014	-0.021	-0.012	1967-96	0.053	0.039	0.063	-0.071	-0.128	1967-96
Japan	0.042	0.012	0.019	-0.013	0.003	1967-96	0.086	0.042	0.041	-0.085	-0.020	1967-96
Korea	0.050	0.026	0.018	-0.027	0.050	1967-96	0.140	0.069	0.083	-0.105	-0.008	1967-96
Spain	0.029	0.019	0.016	0.000	-0.012	1967-96	0.065	0.081	0.064	-0.045	-0.106	1967-96
Switzerland	0.034	0.015	0.011	-0.073	-0.008	1967-96	0.072	0.032	0.045	-0.136	-0.066	1967-96
United Kingdom	0.022	0.020	0.020	-0.016	-0.020	1967-96	0.039	0.065	0.039	-0.054	-0.095	1967-96
United States	0.022	0.023	0.015	-0.011	-0.010	1967-96	0.070	0.062	0.057	-0.100	-0.070	1967-96
Hong Kong, China	0.066	0.044	0.010	-0.082	0.034	1967-96	0.123	0.063	0.037	-0.168	0.037	1967-96
Indonesia	0.024	0.028	0.007	0.007	0.072	1967-96	n/a	0.062	0.045	0.264	0.036	1980-96
Malaysia	0.030	0.035	0.008	0.008	0.078	1967-96	0.104	0.153	0.054	-0.074	0.081	1967-96
Philippines	0.015	0.053	0.022	0.034	-0.002	1967-96	0.095	0.178	0.105	-0.082	-0.168	1967-96
Singapore	0.030	0.043	0.017	0.040	0.062	1967-96	0.112	0.119	0.027	-0.038	0.083	1967-96
Thailand	0.026	0.033	0.016	0.044	0.064	1967-96	0.083	0.102	0.076	-0.007	0.068	1967-96

Source: World Bank. World Development Indicators. 1998. n.a.: not available. Based in 1987 constant dollars data.

Also presented in the Table is the volatility in the rate of change of Gross Fixed Capital Formation (GFK). It is important to note the volatility of the latter variable has increased in Costa Rica in the nineties relative to the pre-eighties. Also, from that same table, the standard deviation of annual real GDP growth rates in Costa

Rica has been similar to the average of other Latin American economies. But, on the other hand, Costa Rica has not had the deep output and, specially, employment, declines that have characterized the economies of the large countries (Argentina, Brazil, and Mexico) in the region in the second part of the present decade, measured here by the lowest value observed for output growth. It is important to note also that the result of high but stable GDP growth volatility and increased volatility in investment growth is particular only to a small group of countries in Latin America or outside the region. Besides Costa Rica, only Colombia and Dominican Republic show such a result.

Figure II.1: Costa Rica: GDP and Private Investment Growth and Inflation



Source: Mideplan. Costa Rica en Cifras. 1998, Banco Central. Estadísticas de Cuentas Nacionales. Various issues.

Across time, the following are the additional main patterns in macroeconomic volatility in Costa Rica. Domestic demand has increased its instability in the recent period because growth in real private investment has markedly increased its already high volatility (panel b), a point developed further below. Also, although successful stabilization policies brought inflation rapidly down from the 90% peak reached in the foreign debt

crisis, the legacy has been higher average rates in the nineties relative to the pre-eighties – panel (c)- although they have been less volatile. Average annual CPI inflation in 1951-66 was 1.8% and 8.8% in 1967-80. That is, Costa Rica had, during those periods, almost US inflation levels. However, after the 1982 peak, average inflation has been near 17% per year, well above US inflation. The standard deviation of annual inflation rates fell from 0.083 in the pre-eighties to 0.062 in the nineties. Unemployment rates have fluctuated with GDP growth, but have been relatively moderate, probably reflecting a flexible labor market.

Looking in more detail to the components of aggregate demand, as Table II.2 shows, the standard deviation of growth in real fixed capital investment by the private sector rose by more than 50% in the nineties relative to the period before the eighties. Volatility of private investment growth is almost 7 times that of GDP growth.

Table II.2. Costa Rica: Volatility in Aggregate Supply & Demand and their Shares to GDP

Variable	Standard Deviation of Annual Rates of Change			Average Share in Aggregate Demand			Correlation Coefficient of Share Weighted Growth in Variable with Real GDP Growth		
	1967-80	1981-89	1990-98	1966-80	1981-89	1990-98	1967-80	1981-89	1990-98
Gross Domestic Product	0.023	0.047	0.025	1.000	1.000	1.000	1.000	1.000	1.000
Domestic Demand	0.039	0.093	0.066	1.034	0.940	0.925	0.638	0.857	0.936
Private Consumption	0.038	0.063	0.033	0.685	0.608	0.584	0.719	0.927	0.944
Government Consumption	0.034	0.034	0.019	0.124	0.122	0.103	0.361	0.739	0.335
Total Gross Investment	0.113	0.234	0.188	0.225	0.210	0.238	0.231	0.667	0.997
Total Gross Fixed Investment	0.086	0.181	0.148	0.213	0.191	0.239	0.515	0.945	0.727
Public Gross Fixed Investment	0.165	0.182	0.102	0.061	0.058	0.056	0.040	0.492	0.649
Private Gross Fixed Investment	0.110	0.221	0.169	0.153	0.134	0.183	0.553	0.924	0.719
Export of Goods & Services	0.084	0.091	0.029	0.340	0.413	0.631	0.851	0.687	0.395
Import of Goods & Services	0.092	0.164	0.100	0.374	0.353	0.556	0.677	0.833	0.796

Source: Banco Central de Costa Rica and Mideplan. Costa Rica en Cifras.

Therefore, recent macroeconomic volatility in Costa Rica channels mainly through the rate of change of private investment, since total consumption and public investment growth rates are less volatile.<sup>1</sup> It is also important to realize from the last columns in that Table that, in the nineties, there has not only been a higher volatility in private investment growth but there has been as well a higher correlation between GDP growth and growth in private investments.<sup>2</sup>

<sup>1</sup> In the pre-eighties growth in public sector investment played the principal destabilizing role.

<sup>2</sup> In fact, total domestic demand growth has increased its correlation with GDP growth, since growth in private consumption has shown an even larger increase in its correlation with GDP growth.

On the other hand, exports of goods and services, despite almost doubling their share in real GDP in the nineties from the pre-eighties levels, have reduced their volatility and have become a stabilizing factor in GDP growth. Growth in imports of goods and services increased its volatility, serving as the counterpart to that of private investment growth, probably reflecting the high imported component of capital goods.

## **B. SOURCES OF SHOCKS**

We now proceed to look for the sources of shocks to GDP and private investment growth starting with trade and economic activity in main trade partners and then move to analyze financial flows.

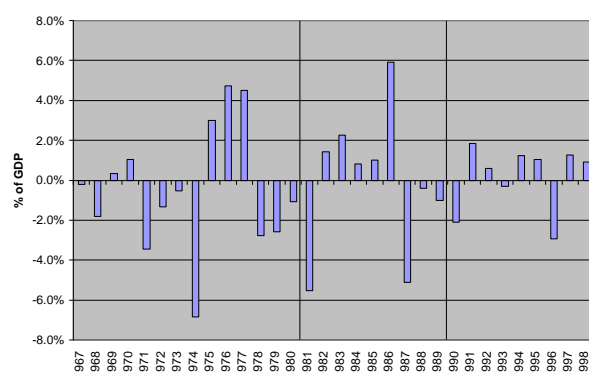
### **1. TERMS OF TRADE AND REAL LINKS WITH MAIN TRADE PARTNERS**

The reduced GDP volatility that may derive from the smaller standard deviation in the rate of growth of real exports of goods and services is most certainly a net result of the substantial changes that Costa Rica achieved in the size, composition and markets of its exports of good and services. These changes in export diversification have dominated both the larger variability in import growth and the larger share of trade to GDP, allowing for smaller macroeconomic effects from terms of trade shocks.

From Figure II.2 it can be seen that the average size of the terms of trade effects (weighted by previous year quantities) as percentage of GDP is considerably lower in the nineties than in previous years and the variability has also been markedly reduced. Therefore, it may be safe to sustain the thesis that terms of trade shocks have been less important in explaining macroeconomic volatility in Costa Rica in the nineties.

Another consequence of the foreign trade sector changes is that the Costa Rican economy has lowered its interrelationship with its main trade partners, the USA and Central American economies. From Table II.3, the correlation coefficients between the series of growth rates of Costa Rica with those countries have diminished in the nineties compared to the pre-eighties period. Here, again, it seems that the Costa Rican economy is less prone to be influenced by external trade and output shocks coming from the ups and downs of economic activity in the USA and the rest of Central America.

Figure II.2: Terms of Trade Income Effect (goods & services) volatility



Source: Dirección General de Estadísticas y Censos, Banco Central de Costa Rica. Note.

Table II.3: Costa Rica, Rest of Central America and USA: Correlation Coefficients between Rates of Growth of Real GDP

Region or Country	Period	Costa Rica	Rest of Central America
Rest of Central America	1967-80	0.548	
	1981-89	0.806	
	1990-96	0.504	
United States	1967-80	0.706	0.382
	1981-89	0.878	0.679
	1990-96	0.316	0.462

Source: World Bank. World Development Indicators. 1998. Rest of Central America includes El Salvador, Guatemala, Honduras and Nicaragua.

## 2. DEBT, CAPITAL FLOWS AND DOMESTIC INTER-SECTOR BORROWINGS AND LOANS

Costa Rica experienced a deep crisis in 1981-82 when real GDP declined by a combined 10% while private investment went down by 46% and inflation reached its historic annual peak of 91% (Figure II.1). The public sector external debt reached a level of more than 100% of GDP and the large swings experienced in macroeconomic conditions in those years, together with unsustainable foreign debt reschedulings, made the eighties in Costa Rica, as well as in many other Latin American countries, a period of almost continued struggle with stabilization and external debt reduction.

During the eighties, Costa Rica's efforts in economic reforms concentrated mainly in the trade sector and in timid reforms to open the state-banks dominated banking system to private competition. In 1989-90, the country finally reached a sustainable (i.e. non-defaulted or non-repeatedly renegotiated) agreement with its foreign commercial bank creditors as part of the Brady plan.<sup>3</sup>

These agreements signaled a turning point in economic confidence in Costa Rica. The large foreign debt

<sup>3</sup> The agreement included a considerable write-off in the contractual value of the public sector debt, that complemented the agreements reached in its bilateral government to government debts under the Paris Club arrangements (mainly longer maturity terms) in reducing the burden of the foreign debt. Since then, Costa Rica has been current in the service of its public sector foreign debt, except for a period when the government accumulated arrears in its bilateral debt in 1994-95. The reschedulings left Central Bank as the main debtor to foreign commercial banks, with assets against the Governments and its agencies that had foreign commercial debts. In 1995, it started to prepay some of the Brady bonds, under the "value-recovery" clause.



burden was correctly perceived at that time as a strong limitation to long run growth and development. The country then faced an opportunity to reform and to modernize and go back to 6% or higher annual growth levels and more accumulation in human and physical capital. This is the main reason why this report concentrates its analysis in the nineties, comparing mainly to the pre-eighties. Regrettably, the country did not fully take advantage of that opportunity. It continues with moderate levels of success and probably accumulating dangerous potential crisis generating problems, manifested in the lower average growth rates in the nineties and the still high volatility in GDP and even larger in private investment growth, with a very high correlation between the rates of change of these two variables.

Given the smaller effects of terms of trade shocks and diminished links with the USA and Central American economies, we now look at external and domestic financial flows and surpluses or deficits in the search for the main sources of the volatility shown by macroeconomic variables in Costa Rica.

Table II.4. Net Foreign Liabilities of Public and Private Sector as proportion of GDP

Period	Public Sector Net Foreign Liabilities			“Private” Sector Net Foreign Liabilities (*)			Total Net Foreign Liabilities	Banking System Net International Reserves		
	NFPS	Central Bank	Total Public Sector	Banking Sector	Non Financial Private Sector	Total		Central Bank	Rest of Banking System	Total
	Average of Ratios to GDP									
1950-66	0.094	-0.017	0.076	-0.006	0.130	0.124	0.200	0.038	0.011	0.050
1967-80	0.195	0.011	0.206	0.011	0.388	0.399	0.606	0.041	0.013	0.054
1981-89	0.437	0.366	0.803	0.006	0.455	0.460	1.263	0.119	0.019	0.138
1990-97	0.229	0.066	0.295	-0.008	0.549	0.541	0.836	0.128	0.023	0.151

(\*) Includes state commercial banks.

Source: IMF-IFS, 1998 and Central Bank of Costa Rica. Balanza de Pagos. Various years.

Notes: NFPS= Non-financial public sector. The "Private" Sector Net Foreign Liabilities data was estimated with the annual private sector capital outflows or inflows from the balance of payments statistics (including "errors and omissions").

Beginning with external inflows and outflows and in order to give a long-term context to the analysis, Table II.4 presents some information on the stocks of public and private net foreign liabilities. The pattern shown is that of increased net foreign liabilities of the private sector with a considerable decrease in the ratio of public sector net liabilities to GDP during the nineties after reaching very high levels in the early eighties.<sup>4</sup> In terms of net international reserves, there has been a mild increase from the level of the eighties but their variability

<sup>4</sup> This is especially true in the case of the Central Bank. In the case of private sector liabilities, we have to bear in mind the limitations imposed by using data that includes "errors and omissions" as part of private net capital flows to build-up the stock figures.

has increased.<sup>5</sup> As analyzed further below, what lies behind those changes are lower and decreasing net public sector foreign liabilities but higher and growing domestic public debts.<sup>6</sup>

In this context, and by putting together the information from the current account of the balance of payments and its financing as well as the fiscal deficit, it is possible to have an idea of the size, volatility and correlation between the flows of funds in the Costa Rican economy, and the possible causes and effects on macroeconomic volatility.<sup>7</sup>

Table II.5. Costa Rica: Descriptive Statistics of Flow of Funds, Gaps and Rates of Growth in Real GDP and Private Investment

Variable	Mean			Standard Deviation		
	1967-80	1981-89	1990-97	1967-80	1981-89	1990-97
Real GDP Growth	0.060	0.024	0.037	0.023	0.047	0.026
Real Private Fixed Capital Formation Growth	0.086	0.052	0.052	0.110	0.221	0.165
Current Account / GDP	-0.098	-0.069	-0.040	0.033	0.043	0.029
Public Sector Fiscal Surplus (+) or Deficit (-) / GDP	-0.046	-0.081	-0.037	0.020	0.053	0.024
Public Sector Foreign Inflows (+) or Outflows (-) / GDP	0.042	0.066	-0.003	0.031	0.056	0.018
Public Sector Use (+) or Source (-) of Intl. Reserves /GDP	-0.001	-0.002	0.007	0.005	0.012	0.018
Private Sector Surplus (+) or Deficit (-) / GDP	-0.053	0.012	-0.002	0.030	0.028	0.044
Private Sector Foreign Inflows (+) or Outflows (-)	0.057	0.029	0.052	0.027	0.029	0.018
Private Sector Use (+) or Source (-) of Intl. Reserves / GDP	0.000	-0.024	-0.016	0.020	0.020	0.023
Public Sector Loans (-) or Borrowings (+) to or From Private Sector / GDP	0.005	0.017	0.033	0.020	0.014	0.039

Source: Banco Central de Costa Rica and Mideplan. Costa Rica en Cifras.

From the economic growth perspective, Table II.5 shows that there has been an important decrease in the average current account deficit of the balance of payments from the pre-eighties to the nineties, with a cut of about 6 percentage points of GDP, from 9.8% to 4% of GDP. This large cut has had its main counterpart in the average deficit of the private sector, which fell by almost 5% of GDP to almost equilibrium.<sup>8</sup> Also, Table II.6 shows that the correlations between the current account as percentage of GDP and the growth rates of real GDP and real private investment in fixed capital have turned from positive in the pre-eighties to negative in

<sup>5</sup> The standard deviation of the ratio of international reserves to GDP was 0.019 during 1967-80 and 0.028 in 1990-98.

<sup>6</sup> Total public debt has decreased from levels above 100% of GDP in the early eighties to the range around 65% of GDP since 1993, but with the composition changing towards more domestic debt. In the early eighties foreign public debt represented almost 90% of total public debt, while in 1997-98 it represented almost half that proportion.

<sup>7</sup> Errors and omissions in the balance of payments are included as part of private sector capital.

<sup>8</sup> The private sector deficit is calculated as the difference between the current account deficit of the balance of payments and the consolidated public sector deficit (including the financial losses or "quasifiscal" deficit of the Central Bank).

the nineties. This change in the sign of the correlation is consistent with the thesis that the foreign savings gap has become a more binding constraint for growth in Costa Rica during the nineties.

From the financing point of view, the large cut in the current account deficit has had its counterpart in lower average public sector foreign capital inflows, which had its annual average falling by 4.5% of GDP. In fact, they turned negative in 1995-97 reaching between minus 1.5 and 2% of GDP annually [see panel (b) in Figure III.3 below]. This is basically due to a self-imposed constraint in contracting new foreign public debt, after the abuses of that led to the debt crisis. The private sector mildly decreased its average foreign capital inflows by 0.5% of GDP and there has been an average flow of 1% of GDP per year added to international reserves.<sup>9</sup>

But what matters most for the analysis of volatility, is the almost doubling of the standard deviation in the annual amounts borrowed by the public sector from the private sector as proportion of GDP. As can be seen in Table II.6, that measure of volatility in the inter-sector loans increased from 2% of GDP in 1967-1980 to 3.9% of GDP in 1990-97. In addition, the added volatility in those inter-sector domestic loans is reflected mainly in the larger variability in the deficit of the private sector. That is, the public sector has been able to smooth better the fluctuations in its deficit in the nineties than has been the private sector. These are very important facts, to be studied in more detail in this report as they enclose several clues on the sources of the macroeconomic volatility experienced in Costa Rica in the nineties.

In this sense, a factor that may constitute an important hint on the source of the added volatility in private investment growth in the nineties, is the fact that the correlations coefficients between, on the one hand, public sector borrowings from private sector and, on the other hand, GDP and private investment growth, have also turned from negative to positive (see Table II.6 and panel (a) in Figure II.3).<sup>10</sup>

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<sup>9</sup> Accordingly, the net effect has been that the public sector moved, in average, from financing 91% of its consolidated fiscal deficit with foreign capital inflows in the pre-eighties to finance with domestic borrowings almost that same percentage (89%) of its lower but still high average deficit in the nineties. By almost eliminating its own deficit, and keeping its rate of foreign capital inflows, the private sector turned these flows from financing its own deficit to finance the public sector deficit plus the net amortization of public foreign debt and the Central Bank accumulation of international reserves. Obviously, the transfer of these external resources has been effected through the accumulation of public sector debts in the hands of the private sector.

<sup>10</sup> Note that the left hand side vertical axis measures the negative of public sector borrowings from private sector. The correlation coefficients in Table II.6 used public sector borrowings.

Table II.6. Costa Rica: Correlation between Gaps, Inter-Sector Loans and GDP and Private Investment Growth

Variable	Period	Real GDP Growth	Real Private Gross Fixed Investment Growth	Current Account / GDP
Current Account / GDP	1967-80	0.591	0.283	
	1981-89	0.642	0.677	
	1990-97	-0.698	-0.845	
Public Sector Fiscal Surplus (+) or Deficit (-) / GDP	1967-80	0.512	0.318	0.433
	1981-89	0.788	0.775	0.849
	1990-97	0.453	0.547	-0.358
Private Sector Surplus (+) or Deficit (-) / GDP	1967-80	0.309	0.099	0.806
	1981-89	-0.504	-0.427	-0.072
	1990-97	-0.710	-0.859	0.855
Public Sector Borrowings (+) or Loans (-) from or to Private Sector / GDP	1967-80	0.238	0.326	0.501
	1981-89	0.174	0.116	0.457
	1990-97	-0.453	-0.614	0.608

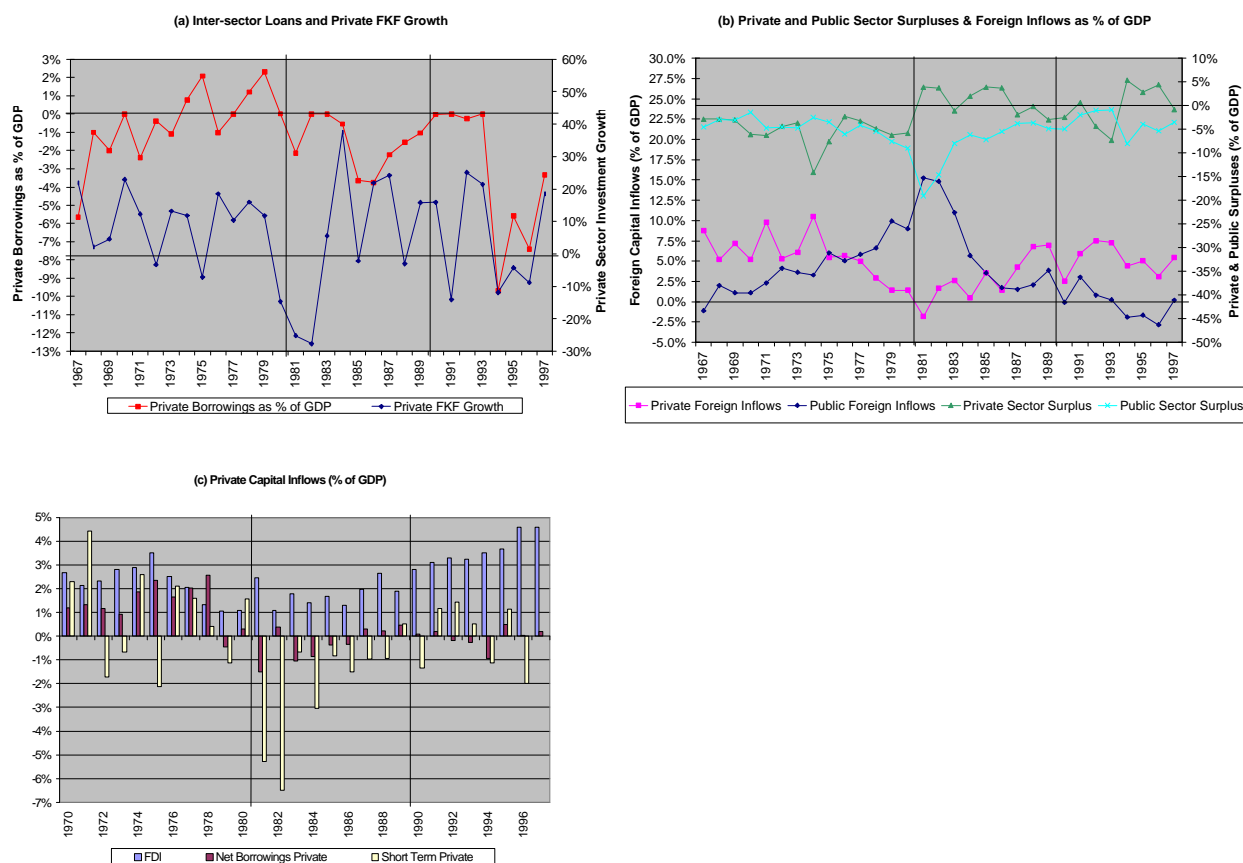
Source: Banco Central de Costa Rica and Mideplan. Costa Rica en Cifras.

That is, in the nineties, whenever the public sector increased its domestic borrowings, there seems to have been a constraint that restrained the private sector from increasing its foreign borrowings to offset the higher domestic public sector borrowings. This, even though the capital account was fully opened, the legal prohibition to enter into contracts in foreign currency was declared unconstitutional, and the foreign exchange market was open and free, all since the early nineties. Thus, when the mix of monetary and fiscal policy may have required tightening the supply of credit to the private sector in the domestic financial markets, the result has been a decrease in funds available for private investment and GDP growth.

Moreover, from panel (b) in Figure II.3, private and public sector foreign capital inflows shifted from being negatively to positively correlated between the two sub-periods. It is quite possible, then, that the bottleneck that has kept the current account deficit at relatively lower levels comes not only from the public sector self-imposed limitation on foreign borrowings.

Also, it seems, it comes from the fact that private and public foreign inflows have turned to be more complementary to each other than substitutes, as was the case before the eighties. This observation lies probably at the core of the explanation of the sources of volatility shown by the rates of growth of GDP and private investment in the nineties. Finally, panel (c) in Figure II.3 tells us about one condition that has differentiated private foreign inflows in the nineties relative to the pre-eighties.

Figure II.3: Crowding Out Private Sector Fixed Capital Investment in the Nineties



Source: Banco Central of Costa Rica and Mideplan. Costa Rica en Cifras. FKF: Fixed Capital Formation.

Foreign direct investment (FDI) has been the most important source of financing with a steady increase channeled mainly to firms in free trade zones producing non-traditional exports. Foreign borrowings of any maturity have diminished considerably and are positively correlated with the ups and downs in GDP and private investment growth. It is also clear that it has been since 1994, when public sector capital inflows turn negative, that the crowding-out of private investment has been more severe.

### C. THE HYPOTHESIS

There are several stark facts from the information reviewed so far. On the one hand, although still important, there has been a smaller role played by terms of trade effects and foreign real output cycles in explaining volatility in Costa Rica. On the other hand, we have a sort of self-imposed constraint on new foreign

borrowings by the public sector even after it had substantially cleaned up its high external indebtedness. Therefore, the hypothesis in this report is that the observed high GDP and private investment growth volatility and correlation in the nineties, is a result from the fact that occasionally the public sector has displaced the private sector from domestic financial market. The private sector has faced a binding constraint to increase its financial inflows abroad even with an open capital account.

It may well be that, when there has been a larger fiscal deficit or large foreign debt amortization or monetary tightening, the underdeveloped domestic financial and institutional conditions have made almost prohibitive to increase the private sector access to additional foreign liquidity and the public sector has crowded-out the private sector from domestic sources of financial funds negatively affecting GDP and private investment growth.<sup>11</sup>

Consequently, the economic policy instrument mixes, the direct and indirect access, links and costs of Costa Rican public and private sector financing in the international markets and the economic expectations of local and foreign economic agents towards these conditions, as well as the degree of institutional development seem to hinge considerably in the volatility problems observed both in GDP and private investment growth in the Costa Rica of the nineties. These are the main sources of volatility analyzed in this report.

In this context, the slow pace of reform mentioned in the introduction may explain why Costa Rica has avoided, so far, the deep economic crises experienced by other Latin American or Asian emerging economies, since it has avoided the risks that have been unearthed by economic reforms in other emerging economies in a globalized environment. But, the price paid for not observing those extreme outliers in the distribution of output growth and unemployment may be lower growth and still high volatility.

Therefore the report, then, also addresses the main reforms in these areas needed to reduce future volatility and to avoid the downside outliers in the growth rates of output, employment and investment if the pace of economic reform is accelerated in Costa Rica.

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<sup>11</sup> Note that we refer here to deviations from average, in the sense that the crowding-out takes place when there is a surge in domestic public sector borrowing above its average level. This does not contradict the fact that, in average, the private sector has kept relatively constant its ratio of foreign capital inflows to GDP in the nineties relative to the pre-eighties.

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### III. EXPLAINING VOLATILITY IN GDP GROWTH AND PRIVATE SECTOR INVESTMENT GROWTH

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#### A. OVERVIEW OF EXTERNAL AND INTERNAL SHOCKS TO GDP GROWTH AND PRIVATE INVESTMENT GROWTH

During the nineties, growth in private sector fixed capital investment and in GDP both showed their lowest values in 1991 and in the triennia 1994-96.

Table III.1: Costa Rica: Shocks to Private Sector Investment Growth in the Nineties

Year	Real GDP Growth	Private Fixed Capital Formation Real Growth	US Real GDP Growth	Rate of Change in Merchandise External Terms of Trade	Current Account Surplus (+) or Deficit (-) BOP as % of GDP	Private Sector Inflows (+) or Outflows (-) of Foreign Financing (% GDP)	Change in International Reserves as % of GDP, (-) increase
1990	3.6%	15.9%	0.8%	-8.0%	-7.5%	2.5%	5.0
1991	2.3%	-14.0%	-1.0%	6.1%	-1.3%	6.0%	-7.6
1992	7.7%	25.1%	2.7%	-0.2%	-5.5%	7.5%	-2.9
1993	6.3%	21.4%	2.2%	-2.2%	-8.3%	7.3%	0.7
1994	4.5%	-11.9%	3.5%	2.5%	-2.8%	4.4%	0.3
1995	2.4%	-4.3%	2.0%	4.0%	-1.1%	5.0%	-2.3
1996	-0.6%	-8.8%	2.8%	-4.4%	-1.1%	3.1%	0.8
1997	3.7%	18.5%	3.8%	3.0%	-4.3%	5.4%	-1.3
1998	6.2%	25.9%		2.1%	-4.4%		
Mean	4.0%	7.5%	2.1%	0.3%	-4.0%	5.2%	-0.9
Std Dev	2.5%	16.9%	1.6%	4.5%	2.7%	1.8%	3.6

Source: IMF. IFS 1998, Banco Central de Costa Rica and Mideplan. Costa Rica en Cifras. 1998.

From Table III.1 it can be seen that the economic slowdown in 1991 owed partially to the negative growth rate in the US. But, on the other hand, the merchandise external terms of trade and large private sector capital inflows equal to 6% of GDP allowed for a substantial increase in international reserves, given the reduced current account deficit. As analyzed in more detail below, restrictive domestic monetary and fiscal policies interacted with these mixed external conditions to produce a slowdown in economic growth and in private investment in Costa Rica.

In the other economic slowdown, during 1994-1996, the external conditions were also mixed. The US

economy was already in its present abnormally long expansive cycle, and private capital inflows were at normal levels. But, although in 1994 and 1995 the merchandise terms of trade moved favorably, during 1996, the year where the economy had negative real growth, they decreased by 4.4%. Again, as it was the case in the slowdown in 1991 and is developed further in the coming sections too, internal conditions also moved unfavorable for GDP and investment growth in 1994-96.<sup>12</sup> In the rest of the decade, despite some years with negative changes in terms of trade, other favorable external and internal conditions combined to produce positive output and investment growth rates.

In conclusion, in both of the main slowdowns of economic activity and investment growth decline in the nineties, it can be said that external conditions have been about neutral. But, both cases have in common that domestic contractionary factors have played an important part, signaling again that we must look in detail at those factor to understand volatility, as we turn now to do. The focus is on the traditional determinants of investment: cost of capital, risk and expectations about the future economic conditions including the credibility of economic policy, and financial market infrastructure. We start with the latter, to set the stage for the remainder of the discussion.

## B. FINANCIAL MARKET INFRASTRUCTURE

In Costa Rica, the financial infrastructure consists mainly of the domestic banking system (included the parallel or off-shore banks) that provides the traditional basic deposit/loan operations, and brokerage houses that deal almost exclusively in the management of money market type of instruments.

As Costa Rican private firms, even the larger ones, are either micro or small by international standards their access to direct placement of debt or equity in international bond or equity markets is almost inexistent. A few regional funds have been recently established by governments from developed economies and some local firms have had investments made by the private sector branches of the multilateral organizations, like the IFC

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<sup>12</sup> Although there was a reduction in the size of foreign capital inflows they still continued to be positive even in the wake of the “Tequila” effect. In any case, Costa Rica has avoided, so far, the very negative and rapid changes in foreign capital flows that have critically affected other Latin American and Asian emerging market economies.



and IIC. Also, some firms do obtain loans from foreign banks, generally linked to exports or are firms in the foreign exchange earning activities. As already seen, FDI has been playing an important and steadily growing role in private sector foreign financing, but probably this FDI goes into firms that are “protected” by the incentives granted through the “free trade zone regimes” and similar schemes of incentives to producers of non-traditional exports. These are firms that normally export a large proportion of its production under favorable tax treatment.

Therefore, the normal firm in Costa Rica producing for the internal market, highly dependent from the domestic sources of financing, sees as the relevant costs of the sources of financing those that prevail in the domestic markets, except for the opportunity costs of investing in foreign markets by the owners of Costa Rican firms. That is, the stability or volatility of their sources of financing and their costs mostly depends from what happens in the domestic financial markets. This must be specially true of the small and medium size firms (PYME's).

From the point of view of domestic financial sources, and keeping the small size of the economy in mind, the larger Costa Rican private corporations that have gone public issuing either commercial paper or equities in the domestic securities markets have a high property concentration on a few hands. Their governance practices are much to be improved before they meet international standards that may satisfy institutional investors.<sup>13</sup>

Domestically, then, both the private equities and corporate bond market are very small even for Costa Rican standards and the few medium or long-term instruments that exist have low turnover. Liquidity is expensive in the secondary markets, even for public debt, by far the instrument with the largest share in Costa Rican portfolios, since trading volumes are small rendering unprofitable the business of specialists and market makers. In a vicious circle, brokers and banks charge too high a commission to earn even a fair return on their security trading and this kills turnover, which in turns makes liquidity a dear commodity.

Debt issues have not been homogeneous and this has probably also penalized long term maturities, since high liquidity premiums make them almost prohibitively expensive.

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<sup>13</sup> See Caballero (1999.a) and (1999.b) for the standards and relevance of proper governance and transparency.

As the Central Bank has been unable to foster a short-term money market among banks, liquidity trading is quite segmented. Banks trade directly over the phone in “you-help-me-today I-help-you-tomorrow” operations where costs do not generally vary according to market pressures but reflect the unwritten agreement to help each other at “reasonable rates”, if they trust each other. On the other hand, important amounts of liquidity are also traded among security brokers in an automated more transparent market. In this latter market, when conditions become very tight, liquidity costs may jump to 3 to 4 times the short term rates applied by banks. Although banks may do some arbitrage through their own brokerage affiliates, the amounts they may channel are sometimes small. This because the access to that market has to be done through the money market mutual funds (OPAB and CAV) operated by the brokerage houses in order to avoid the large brokerage fees and because of the low solvency position of some brokerage houses.

Banks have their own short-term lines that provide liquidity to their customers, and may have also access to international lines of credit. But, and this is a topic worth researching in more detail in order to understand the limitations faced by the Costa Rican private sector, the foreign sources of funds are too small, as we saw in section II.B.2 above.

In terms of the credit market, a relevant characteristic is that settling disputes and collecting principal and interest in overdue loans (banks or corporate liabilities) are still costly procedures in Costa Rica, despite recent advances in reducing or eliminating some fees and taxes that weighted on those costs (see Monge, *et. al.*). This has led to a concentration of loans guaranteed with real property and low use of other types of collateral. This probably favors the large and established corporations as well as those firms with ties to the owners of banks. I suspect that PYME's do not fare well under this system and, in particular, they are probably the first ones to be crowded-out of domestic banking credit by cost and guarantees whenever there are tightening monetary conditions. See Caballero (1999.a, b and c) for analysis of similar problems in other Latin American countries.

In summary, the cost of capital in Costa Rica is still the cost of banking sector credit and of the funds supplied by the few owners of the corporations. Loans are supplied mostly against real property collateral. Liquidity is expensive and trades in segmented markets. Domestic corporations have almost no direct access to international liquidity, especially in times of crises when PYME's probably fare worst than larger firms, and

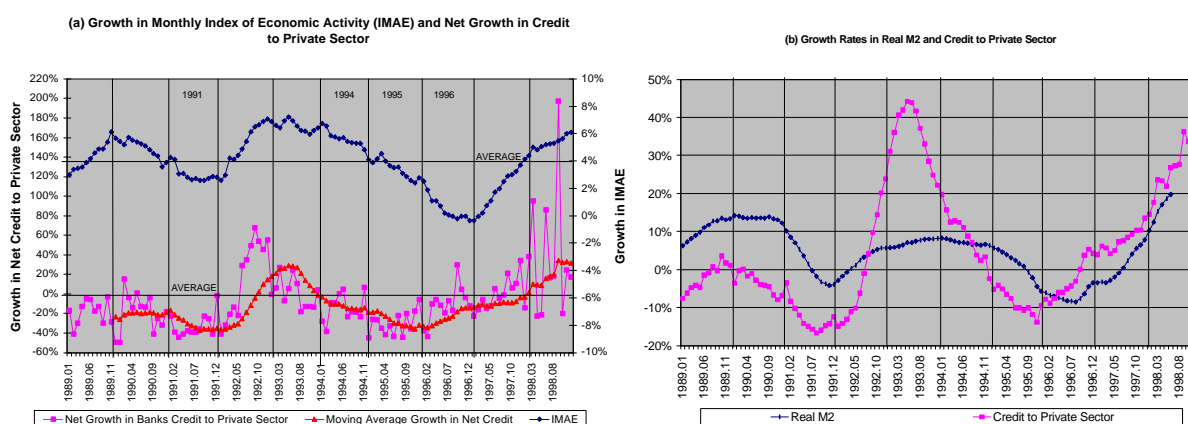
neither Costa Rican firms nor domestic banks have been able to obtain enough sources of foreign liquidity. Under these conditions, the debt management of the Central Government and the Central Bank becomes a crucial influence in Costa Rican financial markets and its effects on the costs and risks of private investment are fundamental for explaining its volatility as well as that of GDP growth and their increased positive correlation. In the section on policy recommendation, we will stress not only the policies and measures to improve the efficiency of the financial system and corporate governance, as well as the links to international financial markets, but also how to improve the public sector debt management efficiency and its coordination with other aspects of monetary and fiscal policy, so as to reduce the recurrent crowding-out of private investment from domestic financial markets .

## C. THE COST OF CAPITAL AND DOMESTIC SHOCKS TO PRIVATE INVESTMENT GROWTH AND GDP GROWTH

### 1. CREDIT CRUNCHES AND ECONOMIC ACTIVITY

Given that the private sector faces important restrictions to finance itself abroad, either directly or indirectly through the intermediation of foreign funds via the domestic financial system, in explaining the larger volatility in private investment growth and its larger correlation with GDP growth as well as the volatility in GDP growth it is important to look at the behavior of domestic credit to the private sector.

Figure III.1: Credit to Private Sector



Source: Banco Central de Costa Rica. Cuentas Monetarias. Several issues.

Figure III.1 shows some key indicators of changes in credit to private sector. Panel (a) shows the rates of change of the domestic banks nominal credit to the private sector minus the average nominal loan rate. It can be clearly seen that growth in economic activity measured by the Monthly Index of Economic Activity (IMAE) and that measure of domestic banking system growth in net credit to the private sector follow remarkably similar trends, allowing for lags. From both panels in Figure III.1, it is quite clear that the slowdowns in economic activity in 1991 and 1995-96 must owe a considerable amount of their existence to the credit crunches of those years if we keep in mind the constraints in foreign capital inflows. Also, to an important degree, the upturns in output in 1992, 1993, 1997 and 1998 probably respond to domestic banking system credit bursts. Given the large and increased correlation coefficient between real GDP growth and growth in private sector real fixed capital investment shown in Table II.2, there must also be substantial

influences of the credit bursts and crunches on private investment growth volatility.

In the following sections, we analyze in more detail the links between domestic banking sector credit to the private sector and monetary and fiscal deficit and its financing, looking for the ways that all these variables interrelate with each other in the underdeveloped Costa Rican financial infrastructure to produce the observed larger volatility in GDP and private sector investment growth and their increased correlation.

## 2. PUBLIC SECTOR DEBT AND DOMESTIC CREDIT TO THE PRIVATE SECTOR

Table III.2 summarizes the annual flows of domestic debt placed both by the Central Government and the Central Bank during the nineties as percentage of GDP; also included are the mean and standard deviations for the 3 sub-periods studied in this report.

Table III.2: Change in Central Government and Central Bank Domestic Debt as % of GDP

Period	Changes in Total Domestic Public Debt				Changes in Central Government Debt				Changes in Central Bank debt			
	Total	Held by:			Total	Held by:			Total	Held by:		
		Banks	Rest Public Sector	Private Sector		Banks	Rest Public Sector	Private Sector		Banks	Rest Public Sector	Private Sector
1990	5.9%	4.1%	1.2%	0.6%	3.3%	1.0%	1.5%	0.9%	2.6%	3.2%	-0.3%	-0.3%
1991	9.7%	4.5%	2.1%	3.1%	4.3%	-0.2%	2.8%	1.7%	5.4%	4.7%	-0.7%	1.4%
1992	2.9%	-0.5%	2.2%	1.2%	2.4%	-0.5%	2.1%	0.9%	0.5%	0.1%	0.1%	0.3%
1993	4.8%	0.4%	1.9%	2.5%	4.1%	0.2%	1.9%	1.9%	0.7%	0.1%	0.0%	0.6%
1994	10.6%	5.2%	2.4%	3.0%	6.4%	3.1%	1.9%	1.4%	4.2%	2.1%	0.4%	1.6%
1995	11.3%	3.0%	1.8%	6.4%	5.6%	-1.3%	1.7%	5.2%	5.6%	4.3%	0.1%	1.2%
1996	9.7%	5.5%	1.0%	3.2%	7.4%	3.1%	1.4%	2.8%	2.4%	2.3%	-0.3%	0.4%
1997	10.9%	1.9%	4.0%	5.0%	7.3%	-0.3%	2.7%	5.0%	3.6%	2.3%	1.3%	0.0%
1998	5.8%	-0.7%	5.1%	1.5%	4.7%	0.2%	4.3%	0.2%	1.1%	-1.0%	0.8%	1.3%
Subperiod	Mean of Change in Domestic Debt as % of GDP											
1967-80	3.7%	2.3%	0.6%	0.7%	2.4%	1.3%	0.7%	0.5%	1.3%	1.1%	-0.1%	0.3%
1981-89	5.3%	2.5%	1.3%	1.5%	2.4%	0.8%	1.1%	0.5%	2.9%	1.6%	0.3%	1.0%
1990-98	8.0%	2.6%	2.4%	2.9%	5.1%	0.6%	2.3%	2.2%	2.9%	2.0%	0.1%	0.7%

Source: Central Bank of Costa Rica: Tenencia de la Deuda Bonificada. Several years.

It is clear from Table III.2, that both the Central Bank and the Government increased their bond placement substantially in the nineties (they placed 8% of GDP annually in 1990-98, up from 3.7% in 1967-80) and that the larger increases have been in the Government debt placed with the private sector. In contrast almost two

thirds of the new Central Bank debt has been placed with the domestic banking sector during the nineties.<sup>14</sup>

In addition, it is clear that in the years with negative growth in private sector fixed capital investment (1991 and 1994-96) the increments in Central Bank and Central Government domestic debts were the highest among those observed since 1967, adding support to the hypothesis of the public sector's crowding out of private investment.

We now turn to the policy instruments used by the fiscal and monetary authorities to influence their debt flows and stocks as well as domestic credit to the private sector.

#### a) Monetary policy and the crowding out of private investment

Both in 1991 and 1995-96, the periods of low growth in output and negative growth in private fixed capital investment, were periods that followed expansionary fiscal policy that led to unsustainable deficits in Central Government accounts, fueled probably by the desire of incumbent administrations to help their parties win the upcoming elections. Elections were held in 1990 and 1994, precisely the years before the slowdowns.

Also, these periods of downturn in output and private investment growth were times when the Central Bank faced the dilemma of how to cope with growing fiscal imbalances. In both cases, the Central Bank decided to follow restrictive monetary policies, in order to reverse the declining trend in international reserves and to "buy" time so that the fiscal measures that the new administrations that took office in May of 1990 and 1994, respectively, were approved.<sup>15</sup>

As can be seen in Table III.3, generally the credit crunches have been accompanied by substantial increases in the real ex-post interest rates on Government and Central Bank bonds and their volatility, or in their premium over Libor,<sup>16</sup> although in 1991 the fluctuations in the real rates and premiums were inordinately high.

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<sup>14</sup> This has been specially the case since 1995, when the Central Bank started a reduction in the average minimum legal reserve requirement on bank deposits while the banks invested the added available liquidity in Central Bank Bonds.

<sup>15</sup> In Costa Rica there is a widespread belief that this fiscal/monetary adjustments are the result of an electoral cycle. The outgoing administrations expand public expenditures, delay public utilities tariff increases, reduce the rate of the crawling peg to force a deceleration in inflation and international reserves decrease as the election approaches. The new team has to reverse these trends and impose restrictive monetary and fiscal policies. This seems to have been the case in 1990 and 1994 but not in 1986 or 1998.

<sup>16</sup> The 6 months bonds sold by the Government and Central Bank are the main instruments in the financial market in Costa Rica and their interest rates are generally taken as the reference by the rest of the market in setting deposit and loan rates. Generally the

Table III.3: Interest Rates, Credit to Private Sector and Private Investment Growth

Year	Private Fixed Capital Formation Growth	Public Sector Loans (-) or Borrowings (+) to or From Private Sector (as % of GDP)	Average of Monthly Govt. Bonds Real ex-post real interest rate	Standard Deviation of Monthly Govt. Bonds ex-post real interest rate	Premium of 6 months Govt. Bonds over Libor	Growth of Real Credit to Private Sector	Growth in Real Central Bank Bonds
1990	15.9%	0.0%	-3.6%	5.5%	-12.0%	-3.6%	-17.6%
1991	-14.0%	0.0%	17.2%	13.7%	11.3%	-12.8%	-18.9%
1992	25.1%	0.3%	14.8%	8.2%	10.8%	0.1%	12.1%
1993	21.4%	0.0%	7.6%	6.8%	4.1%	35.5%	4.6%
1994	-11.9%	9.7%	9.8%	2.8%	4.6%	9.0%	14.0%
1995	-4.3%	5.6%	10.8%	1.7%	4.7%	-8.7%	35.3%
1996	-8.8%	7.4%	9.6%	1.4%	4.1%	-3.0%	18.6%
1997	18.5%	3.3%	8.6%	1.4%	2.8%	7.6%	7.3%
1998	25.9%		7.5%	2.5%	2.0%	26.9%	10.6%
Mean	7.5%	3.3%	9.1%	4.9%	3.6%	5.7%	7.3%
Std Dev	16.9%	3.9%	5.8%	n/a	6.7%	16.2%	17.0%

Source: Banco Central de Costa Rica and Mideplan. Costa Rica en Cifras.

Probably, the Central Bank attaches an important weight to the costs of deep balance of payments crises as experienced in 1981-82 and has so far preferred to use its monetary and exchange rate policy instruments to reduce the external imbalances before things “get out of hand”. This even at the cost of higher inflation arising from the faster devaluation rate that was part of the actions taken. This use of the crawling peg when managing economic shocks imposes limits to the option of establishing inflation targeting in Costa Rica if the causes of macroeconomic volatility are not eliminated.

Here, it must be noted that the effects of the higher real cost of capital coming from the larger real and nominal interest rates forced upon the rest of the domestic economy by the Central Bank actions in 1991 and in 1995 [see panel (b) in Figure III.2], have been accompanied by negative economic expectations about the future course of events in terms of the growing fiscal deficit and the deteriorating balance of payments situation.

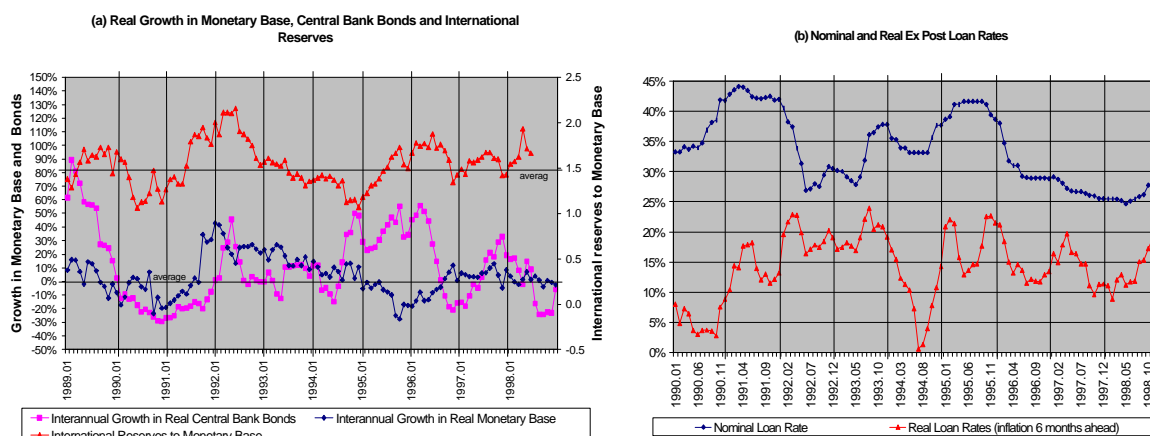
It could be said that in the periods like 1990-91 and 1994-96 the Central Bank had to act not only to reduce private domestic demand to temporarily make room for the larger public sector deficit while preserving the

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interest rates paid by both institutions on their primary bond placement are very similar. Since 1995 a new mechanism was introduced where both types of bonds are auctioned together.

country's balance of payment position. But, it also had to counter the incipient short term capital outflows coming from the negative expectations and increased perceived risks that prevailed in the private sector due to the lack of action from the political authorities to define and then implement the corrective fiscal measures.

Figure III.2: Monetary Policy Instruments



Source: Banco Central de Costa Rica. Cuentas Monetarias. Various issues. Estadísticas de Tasas de interés.

In this sense, and also given the initial delay by the Central Bank itself to act on both counts, led eventually to monetary tightening that were more severe than looked only from the perspective of the fiscal imbalance. As a result, the decline in the growth in domestic demand was larger than the increase in government expenditure growth, and the ensuing credit crunches decreased output growth as well.

Under these circumstances, the Central Bank has, together with Central Government placements of domestic bonds to finance its deficit, displaced the private sector from the domestic sources of financing and has led to an increased volatility in private sector real investment growth. Without a financial escape valve abroad, the private sector has been financially locked-in both by increases in the cost of capital and by the negative expectations mentioned above and has consequently acted by cutting its investment and output growth.

#### b) Fiscal policy, its interaction with monetary policy and volatility

The Central Government deficit has been the more volatile component on the consolidated public sector deficit and has moved cyclically. Also, fiscal expansion has eventually led to monetary tightening that have crowded-out the private sector from domestic financial markets. Therefore, in order to ascertain the fiscal



Table III.4: Central Government: rates of change in deficits, revenues and expenditures deflated by CPI during the nineties

Year	Change in Primary Surplus / Total revenues	Change in Financial Surplus / Total revenues	Averages of inter-annual rates of change weighted by share of variable in total revenues (or expenditures)					Non-interest Expenditures / Total revenues	Total Expenditures / Total revenues	Total revenues / GDP
			Total revenues	Non Interest Expenditures	Total Expenditures	Nominal Interest on Domestic Debt	Interest on Foreign Debt			
1990	-0.1%	-4.8%	-3.0%	-2.1%	1.6%	3.7%	0.1%	105.3%	125.2%	14.3%
1991	10.0%	6.0%	0.5%	-7.7%	-4.4%	3.5%	-0.2%	95.6%	119.3%	14.6%
1992	4.7%	-1.0%	12.0%	5.6%	10.8%	3.0%	2.3%	91.4%	118.5%	15.7%
1993	7.7%	7.2%	20.0%	8.7%	9.3%	-2.3%	2.8%	84.9%	108.0%	15.5%
1994	-14.8%	-17.6%	-2.9%	10.7%	13.1%	3.8%	-1.4%	99.2%	125.8%	14.6%
1995	0.0%	-6.0%	4.0%	3.2%	8.1%	6.0%	-1.1%	99.2%	130.7%	15.7%
1996	2.8%	-7.2%	5.2%	1.7%	9.8%	7.6%	0.5%	96.5%	136.3%	15.9%
1997	2.7%	6.8%	5.9%	2.2%	-0.9%	-1.6%	-1.6%	93.9%	127.5%	16.1%
1998	3.0%	5.4%	9.4%	4.8%	2.7%	-2.0%	-0.1%	91.4%	119.7%	16.5%
Mean	1.8%	-1.2%	5.7%	3.0%	5.6%	2.4%	0.1%	95.3%	123.5%	15.4%

Source: Ministerio de Hacienda. Flujo de caja mensual.

sources of that volatility and its effects on private investment and GDP growth, Table III.4 and Table III.5 summarize the behavior of the Government's revenues, expenditures and deficit during the nineties.

As Table III.4 shows, from a weak fiscal position in the election year of 1990 where expenditures exceeded revenues by 25%, in the economic slowdown of 1991 there was a large cut in Central Government real expenditures, especially non-interest expenditures. The new government that came into office in May 1990 presented Congress with legislation proposals including several revenue measures that were finally approved by Congress during 1991 after some delays, the main one being the increase and broadening of the base of the value added tax,<sup>17</sup> and some changes in the income tax (Table III.5).

During 1990, even before taking office, the incoming administration magnified the inherited fiscal deterioration in order to find political support for the higher taxes and lower expenditures that it wanted to execute to bring the deficit down. This situation added to the negative expectations that agents had on the stability of the economy, and after some months of inaction in the fiscal front, the Central Bank eventually moved to stop the deteriorating balance of payments, as described in the previous section. The negative

<sup>17</sup> The tax rate was raised from 10 to 15% but, contrary to the Executive's initial proposal, the same law established that it was to be gradually reduced back to 10% in 1993 the year previous to the next election. The justification was that this should force a reduction in public expenditures, which never materialized.

expectations, the increase in the nominal and real cost of credit by early 1991, the substantial amounts of domestic debt being placed both by the Central Bank and the Government since 1990 (5.9% and 9.7% of GDP in 1990 and 1991) and a 7.6% of GDP increase in international reserves in 1991 led to the credit crunch and to the correlated decline in private investment growth and GDP growth (see Table III.1) observed in that year.

The fiscal measures enacted in 1991 produced the large rates of increase in real revenues in 1992 and 1993, although in the latter year the large rates of growth in real GDP and imports had also an important influence. After the temporal squeeze in expenditures in 1991, this variable rose again in real terms in 1992-93, but still the primary surplus increased. Despite the increase in interest rates of 1991-92 (see Table III.2), the financial deficit also declined but in the second half on 1993 it was already rapidly increasing as real expenditures were

Table III.5: Central Government: Average of monthly inter-annual rates of change in deflated revenues (weighted by share of variable in total revenues)

Year	Total revenues	Taxes collected in customs	Income Tax	VAT (Domestic Sales)	Selective Consumption Taxes	Export Taxes	Other
1990	-3.0%	4.7%	-0.3%	0.4%	0.2%	-2.8%	-5.1%
1991	0.5%	2.7%	-0.5%	2.4%	-1.2%	-1.0%	-1.9%
1992	12.0%	5.4%	-0.5%	5.1%	0.1%	0.6%	1.3%
1993	20.0%	14.6%	3.8%	0.3%	0.9%	-0.5%	0.8%
1994	-2.9%	-2.6%	1.5%	-0.2%	-0.3%	0.0%	-1.3%
1995	4.0%	0.8%	2.0%	-0.6%	0.0%	1.5%	0.3%
1996	5.2%	-0.4%	0.3%	5.3%	0.8%	-0.5%	-0.3%
1997	5.9%	3.4%	0.7%	2.7%	1.5%	-0.8%	-1.5%
1998	9.4%	5.1%	2.7%	-0.6%	1.1%	0.0%	1.2%
Mean	5.7%	3.7%	1.1%	1.6%	0.3%	-0.4%	-0.7%

Source: Ministerio de Hacienda. Flujo de caja mensual. Note: Taxes collected in customs include import tariffs and the value added and selective consumption taxes levied at customs.

rapidly raising and revenues growth was subsiding. At the same time monetary policy was being eased, and together with large foreign capital inflows this allowed credit to the private sector to grow well above M2 [see panel (b) in Figure III.1]. With lower cost of funds and improved expectations, private investment and output growth entered again positively correlated into an expansionary cycle lasting until mid-1993. We have to bear in mind that, as was the case in 1989-90, a lax mix of monetary and fiscal policies again fueled this fiscal expansion cycle during a pre-election period of 1992-93.

The fiscal situation deteriorated significantly in 1994, in good measure by the heavy losses in one of the

largest state commercial banks that added to the already deteriorating fiscal accounts that prevailed before the elections of February, 1994. These bank losses alone added to 2% of GDP to the fiscal deficit and also caused an important monetary expansion. Non-interest expenditures were rising fast and real revenues were already falling.<sup>18</sup>

As has also happened in the slowdown of 1990-91, after some initial hesitation from the Central Bank, monetary policy was tightened in 1995 and led to another credit crunch with higher real and nominal interest rates. Given, also, the fiscal pressures and the uncertainty created by the new government's initial lack of definition about the fiscal measures to be taken and the protracted discussions in Congress that ensued once the Administration presented the fiscal package to the Legislative, plus the political and economic turmoil from the state bank losses and its subsequent closing and liquidation, there came the slowdown in GDP and private investment growth of 1995-96 analyzed in the previous sections. Short-term private capital inflows were negative in 1996 [see panel (c) in Figure II.3], thus adding to the squeeze in private liquidity.

From the fiscal standpoint, by August 1995, Congress finally approved another hike in the VAT rate, from 10 to 15%, but again with a provision mandating that the rate was to decrease to 13% in 1997. It also granted better provisions to enforce tax laws. Despite the economic recession in 1996, real revenues then increased at annual rates in the range of 4 to 6% annually in 1995-97, above real GDP growth. As again both the Central Government and the Central bank were also placing new domestic debt at the combined rate of around 10% of GDP annually in 1995-96 as seen Table III.2 in previous section, it is no wonder that real private investment showed negative rates of growth in those years and a correlated downfall in GDP growth.<sup>19</sup>

The crowding-out of private sector investment in those years is best seen in the fact that contrary to what happened in 1991, in 1995-96, the private sector was running a surplus and devoting all the capital inflows

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<sup>18</sup> Part of these fiscal cycles owe to the ups and downs in the tax rate in the value added tax mentioned above and subsequently repeated in the tax measures taken in 1995 by the new Administration that came into office in May, 1994. The decision process in Congress generally became entangled with the electoral cycle and the final changes approved by Congress added a portion of their own to the volatility. The hikes in tax rates had both a permanent and a transitory element, the latter adding some sort of political cycle to the public finances since the tax rates were to decrease gradually as the elections approached.

<sup>19</sup> In late 1994 and early 1995, Latin America faced the regional consequences of the Mexican crisis. As mentioned before, although capital outflows were in those years below the peak of 1992-93, they were still positive and it seems that the "Tequila" effect had mild consequences for Costa Rica (see Table III.1). But, in any case, it probably had the effect of hampering the possibilities that the private sector obtained larger resources abroad.

from abroad and its domestic saving to finance the public sector deficit and an increase in net international reserves (see Table III.3).<sup>20</sup> As the fiscal position started to improve by mid-1996, the Central Bank eased monetary policy and credit to the private sector accelerated in real terms.

In 1997 and 1998, private investment and economic growth again turned positive (in 1998 GDP grew by 6% and the estimate for 1999 is near 8%) and with a lower burden of interest payments, the Central Government financial deficit also declined.<sup>21</sup>

In summary, the evidence analyzed supports to the hypothesis that the mix of fiscal and monetary policies has produced shocks resulting in crowding-out the private sector from domestic financial markets. Although this type of cycle was not present in the pre-election year of 1997, in the two previous economic slowdowns in 1991 and 1995-96, the contractionary policies followed the expansions of the pre-electoral years of 1989 and 1993. The shocks during the adjustment periods that followed had raised the cost of capital, precisely in moments when expectations about the stability of the economic were negative. These facts fed back on each other to produce downturns in private investment and GDP growth. The process has reversed when the fiscal deficit has been reduced and monetary policy eased, resulting in more positive expectations and lower cost of capital, and a correlated upturn in private investment and GDP growth.

#### D. RISKS AND ECONOMIC EXPECTATIONS: ITS EFFECTS ON INVESTMENT VOLATILITY

In the nineties, economic expectations have not only turned negative when the fiscal deficit gets out of hand and the Central Bank has tightened monetary conditions to compensate for the delays in the approval and implementation of the fiscal measures. There are another two important factors bearing in the risks that economic agents have faced and that have almost certainly adversely affected volatility in output and private investment growth. These factors add to the perceived difficulties and limitations that the monetary and fiscal

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<sup>20</sup> In 1991, the private sector ran a deficit.

<sup>21</sup> But, an important fact to bear in mind for the discussion of sections below on potential risks, the nominal interest payments of Central Government domestic and foreign debt run at a rate of almost 30% of revenues, or about 4.5% of GDP.

policy makers have had in the use of the traditional policy instruments at their disposal to face foreign and domestic shocks, problems that would continue if no adequate reforms are undertaken.

One is the mounting domestic public debt, accumulated to finance both the Central Government and the Central Bank deficits. The other, closely related to the former, is the weak financial position of the Central Bank. These problems have interacted with the underdeveloped financial infrastructure and the changes in the cost of capital to bring the observed high volatility and increased correlation in output and investment growth.

## **1. THE MOUNTING DOMESTIC PUBLIC DEBT PROBLEM**

The larger stocks of public domestic debt that have accumulated have led to important premiums paid on interest rates. As was seen in Table III.3, the real interest rate on Government Bonds has fluctuated around 9% per year since mid-1993, not being below 7.5%. There have been important premiums associated with currency and country risks that reached levels above 100 basis points in the 1991 slowdown and 45 basis points in the contraction in 1994-96.

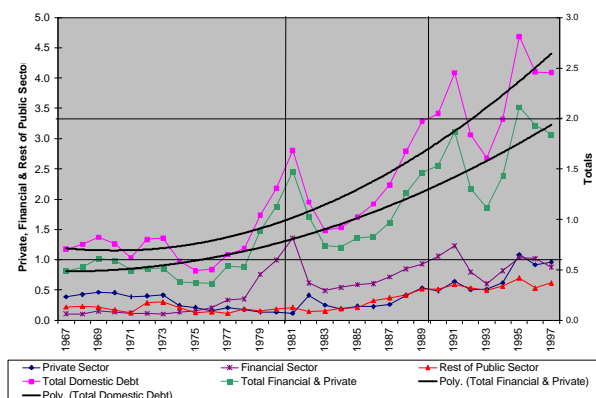
As these ex-post real interest rates far exceed the real GDP growth rates, they are clearly unsustainable, potentially leading to the self-fulfilling prophecy of the “peso problem”. Eventually the expectations that the situation is unsustainable could catch up with reality and the debtors may be unable to keep paying those rates, leading possibly to defaults by both public and private debtors.

From Figure III.3, in the second half of the nineties, the ratio domestic public debt to banking credit to the private sector has been around 2.5 (around 2.0 if we only consider the debt held outside the non-financial public sector). The ratio is reduced to half that value if we take into consideration the estimated loans of the parallel or offshore banks (see section IV.A.1 below). But, in any case, as pointed out by Caballero (1999.a) for the case of Argentina, which probably has a better access than Costa Rica to the international financial markets, a ratio of 1.5 was high relative to other countries and signaled the weakness in the public finances.

In Costa Rica, not only the recent level but the exponentially growing trend in the ratio as well, is a sign of the weaknesses in public finances and of the risks associated with the continuation of the present debt management policies, a fact with negative consequences for interest rate premiums and economic

expectations at home and abroad.

Figure III.3: Domestic Public Debt Ratio to Banking Sector Loans to Private Sector



Source: Banco Central de Costa Rica. Tenencia de la Deuda Bonificada. Various issues. Note: the solid upper two lines are tendencies (2<sup>nd</sup> degree polynomials).

Recently, the Central Government started to relax its self-imposed constraint on new foreign borrowings and has gone back to place sovereign bonds in the international markets. This may help and may be a desired financial bridge to alleviate the pressures on private sector domestic financing. But, as long as the fiscal deficit (including Central Bank losses) continue to pressure domestic real interest rates and the growth of domestic debt, the sovereign bonds may be only a temporary palliative. After all, with them, Costa Rica is in the way of increasing its dependence from foreign financial markets, a dangerous road if other crisis hit those markets with runs against emerging economies while other structural problems explaining volatility in Costa Rica are not removed. This road does not lead to reform with less volatility, all but the contrary. In the policy recommendations section we deal with this situation.

## 2. THE FINANCIAL LOSSES OF THE CENTRAL BANK: IS LOW INFLATION SUSTAINABLE?

The Central Bank in Costa Rica has had interest earning assets that have been below its interest paying liabilities, even if one counts among the assets credits to the Central Government that have been worthless because they have not been serviced.

Before 1980, the balance sheet of the Central Bank of Costa Rica was relatively sound. As can be seen from Table III.6, although lower than the 96% of total liabilities that it had in 1950 (the year of its foundation), the Bank's monetary base was still around three fourths of liabilities.<sup>22</sup> But, the situation had gradually worsened by 1980, since the Central Bank had borrowed abroad an amount near 20% of GDP and received an additional 10% of GDP in domestic foreign-currency-denominated deposits in order to finance the public sectors and the banking system, decreasing the share of the interest-free monetary base in total liabilities to 23%.

Table III.6: The imbalance in the Central Bank balance sheet (figures as % of GDP unless otherwise indicated)

Assets and liabilities	1950	1960	1970	1980	1985	1990	1995	1997
<b>TOTAL ASSETS</b>	10.1%	12.5%	11.3%	41.8%	37.3%	29.6%	22.3%	19.3%
Foreign Assets	1.9%	2.8%	1.8%	8.2%	14.3%	11.1%	12.1%	12.6%
Claims on Public Sector	1.7%	0.6%	5.1%	17.4%	17.7%	13.2%	7.6%	4.3%
Claims on banks	6.5%	9.1%	4.4%	16.3%	5.3%	5.2%	2.6%	2.3%
<b>TOTAL LIABILITIES</b>	8.9%	12.9%	12.1%	39.7%	82.1%	61.3%	42.0%	41.7%
Monetary Base	8.6%	9.5%	8.9%	9.1%	11.2%	8.3%	9.9%	10.3%
Bonds	0.0%	0.0%	0.1%	0.7%	2.8%	5.3%	5.7%	7.2%
Foreign Liabilities	0.0%	3.0%	0.8%	18.4%	59.3%	31.8%	14.9%	10.9%
Central Government Deposits	0.3%	0.3%	2.1%	1.6%	3.0%	3.2%	1.8%	3.1%
Time, Savings & F. E. Deposits	0.0%	0.0%	0.0%	4.6%	0.4%	2.0%	0.3%	0.4%
Banks Foreign Currency Deposits	0.0%	0.1%	0.2%	5.2%	5.4%	10.7%	9.4%	9.9%
<b>NET ASSETS</b>	1.18%	-0.38%	-0.78%	2.17%	-44.84%	-31.72%	-19.72%	-22.47%
<b>Memorandum items:</b>								
<b>MONET. BASE/TOTAL LIABILITIES</b>	96.1%	73.8%	74.0%	22.9%	13.7%	13.6%	23.7%	24.6%
Currency in circulation/Total Liabilities	76.6%	71.7%	65.2%	60.0%	44.7%	63.2%	52.6%	47.0%
Currency in circulation/GDP	6.6%	6.8%	5.8%	5.4%	5.0%	5.3%	5.2%	4.8%
GDP (millions of colones)	1,446	2,861	6,525	41,405	197,920	522,848	1,621,644	2,214,229

Source: IMF. IFS. 1998 and Banco Central de Costa Rica. Cuentas Monetarias. Various issues.

<sup>22</sup> Usually the Central Banks of developed countries like the Federal Reserve Bank or the German Bundesbank, the monetary base is above 90% of total liabilities. Although they have net assets that generally do not exceed 2.5% of GDP, the seigniorage from the monetary base is a source of important profits.

The risks that the Central Bank was running materialized during the foreign debt crisis of 1980-81, since the Bank had loaned in domestic currency and owed hard currency. Also, it was used by the Administration of 1978-82, with the complacency of the Board of Directors, to finance large balance of payment deficits with very large foreign debts that also sustained the exchange rate.

When the situation became unsustainable, Costa Rica suspended payments in its foreign debts and had to go through a disorderly adjustment through devaluation, inflation and recession, as documented in the previous sections.

In the aftermath of the debt crisis, the Central Bank emerged with an imbalance of assets below liabilities equal to 45% of GDP! With a monetary base of 10% of GDP, with loans to the Central Government and other public institutions that were not being serviced, the Central Bank was running a structural financial deficit of around 4% of GDP per year. By 1990, when the Central Bank received a substantial portion of the foreign debt write-off negotiated under the Brady plan with the foreign commercial creditors, and the workings of the inflation tax, the situation had improved and the net asset imbalance was reduced to near 30% of GDP. The financial losses decreased to around 2.5% of GDP.

The subsequent additional reductions in the net asset imbalance of the Central Bank have been due to the inflationary tax it has been collecting.<sup>23</sup> As it has been politically unpalatable to use other non inflationary sources of taxation to finance the “quasifiscal” operations of the Central Bank, the Costa Rican society has then chosen to finance the Bank structural losses with earmarking the inflation tax for those purposes.

A cost of this situation is that the Central Bank has not only had to recur to inflationary financing in the order of 2% of GDP. As its annual nominal cash losses are above that level, it has had to accumulate domestic debt “borrowing” from future inflation tax revenues to lower the average inflation rate but at the cost of having to live with that inflation rate for a longer period (see below). Also, another important cost has been that the Central Bank has been left without the usual profits of other Central Banks that could be used to “purchase”

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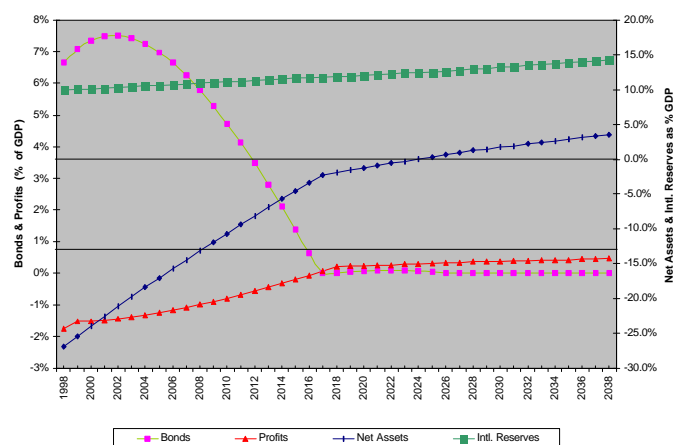
<sup>23</sup> Obviously, the only way such large albeit decreasing imbalance could have been maintained without being forced out of business has been the non-reported “assets” of the Central Bank: the “money-printing machine” or the present value of the inflation tax. With an average inflation of 17% since 1983, annual real GDP growth of 4%, a ratio of non-interest bearing monetary base to GDP of around 10%, the average revenue from the inflation tax is 1.7% (=17% inflation times 10%) of GDP and the seigniorage is 0.4% (=4% real growth times 10%), for a total average annual revenue of 2.1% of GDP.



international reserves to serve as cushions for foreign and domestic shocks. The Central Bank has accumulated the equivalent of up to 12% of GDP in international reserves but borrowing internally. As these have been short-term debts, the international reserves accumulated are as volatile as those purchased with monetary base.

Under these circumstances, it is appropriate to consider whether the Central Bank net liabilities and losses will continue to decrease or whether they could explode, especially since the Central Bank uses expensive domestic debt to finance portions of its losses and to accumulate international reserves. Is there an equilibrium with a sustained inflation rate that could eventually eliminate the imbalance and the financial losses? The answer to this relevant question also has to do with the sustainability of future inflation in Costa Rica.

Figure III.4: Path of convergent Central Bank variables



Using a simple model, there seems to be a set of parameters that provide a positive answer to the above question. If a financial crisis or other severe shocks are barred, and this is clearly a big if given the risks underlying the country's economy, a situation like the Central Bank has experienced in the nineties, if continued in the future, could resolve the imbalance and the financial losses, as presented Figure III.4.<sup>24</sup>

The results of the simulations are interesting. As long as the Central Bank is able to collect an inflation tax of about 12.5% per year over the next 20 years the revenues from the inflation tax and seigniorage eventually lead to the elimination of the Central Bank asset imbalance and to profits. But, if the inflation tax rate is lower, say below the 8 to 10% per year range, the projections do not converge and the assets imbalance and

<sup>24</sup> The paths of the variables shown in that Figure were calculated projecting the balance sheet of the Central Bank and its financial losses with the parameters presented in Table III.7, with the assumption that the Costa Rican inflation rate remains above the world inflation level as long as the Central Bank has positive financial losses. Once the financial losses turn into profits, inflation is equal to world inflation. The tax base is assumed constant at near 10% of GDP.

Table III.7: Parameters used in Figure III.4

Annual real GDP growth	4.0%
Annual Costa Rican inflation	12.5%
Nominal GDP growth	16.5%
Rate of world inflation	3.0%
Annual increase in International reserves (% of GDP)	0.10%
Annual rate of amortization of foreign long term debt	7.5%
<b>INTEREST RATES:</b>	
Rate on international reserves	4.0%
Spread on foreign currency deposits	0.5%
Spread on foreign long term debt	1.0%
Spread on domestic currency bonds	4.0%
Spread on credit to Government	0.0%
Spread on credit to banks	2.0%
Spread on other domestic liabilities	1.0%
Interest rate on Monetary base	0.0%
Interest rate on Government deposits	0.0%
Annual rate of devaluation	9.5%

Note: the interest rate spreads are measured over the rate in international reserves (plus devaluation in domestic debt). Source: see text.

the financial losses explode.<sup>25</sup>

Therefore, unless other non-inflationary ways to finance the Central Bank losses are used, the Costa Rican economy would have to live with inflation rates in the order of 12- to 15% per year for the next 15 to 20 years, so as to solve the financial imbalances in the Bank. That is, according to this exercise, there seems to be no possibility of reducing the inflation rate in Costa Rica to levels below the 8 to 10% per year range, without risking much higher

inflation rates in the future or a crisis due to a collapse in the demand for money because of confidence reasons.

In addition, if we do not want to add to the existing volatility, the solutions to the moderate inflationary environment in Costa Rica preclude that the liabilities of the Central Bank be shifted to the Central Government if the latter is to finance them with additional debts, foreign or domestic, without recourse to the inflationary tax. This is so, because the Central Government would have to substitute for the inflation tax that provides around 1.5% of GDP in real annual revenues with additional borrowings, thereby increasing the “peso problem” mentioned above, adding to the risks that are already imbedded in the growing domestic public debt problem.<sup>26</sup>

<sup>25</sup> There are two forces working against each other. One is the fact that with a 20% of GDP asset imbalance and 16.5% nominal GDP growth, nominal financial losses could be below 3.3% of GDP without increasing the asset imbalance and even decreasing it if they are well below that level (currently they run at 2.5% of GDP). On the other hand, the rising service cost of the increasing Central Bank domestic debt used to postpone a portion of the monetization of the nominal losses and to pay for the Central Bank foreign liabilities tends to increase, ceteris paribus, the size of the losses. If inflation is lowered too much, this triggers the growth of domestic debt and could lead to an explosive path. On the other hand, if in the simulations inflation is raised above 12.5%, the period to reach equilibrium in Central Bank finances shortens.

<sup>26</sup> As mandated by a new law, in May 1998 the Central Government and the Central Bank signed an agreement, whereby the former issued a large amount of bonds to the latter. The service of the bonds was tailored to start providing revenues to the Central Bank by the equivalent of 0.2% of GDP in 1999 and gradually grow over 15 to 20 years until they eliminate the losses. The problem with this solution is the deficitary position of the Central Government. Unless there is a substantial reform of the Government finances, either the Government would eventually have pressures stop servicing those bonds, as has normally happened in the past with other Government debts with the Bank, or it will add to the pressures on real interest rates, as mentioned above, increasing the possibilities of shifting to unstable explosive solutions.

Obviously, this analysis depends on the crucial assumption that no severe crisis hits the Costa Rican economy with a collapse in the demand for money. If such a crisis develops, the weaknesses in the Central Bank finances would most probably lead to inflation rates well above those mentioned here and more output and investment volatility. One of the potential causes of those crises is the already analyzed growing domestic debt, and another is the financial system. In the next sections, we turn then to analyze the latter in more detail.

### **3. POSSIBLE VOLATILITY CONSEQUENCES OF RISKY SCENARIOS**

As mentioned before, the dangerously rising domestic Central Government and Central Bank debt levels plus the weak financial position of the Central Bank limit the degrees of freedom faced by monetary and fiscal policies to cope with foreign and domestic shocks, in addition to being themselves and their mix sources of shocks. Each additional percentage point in real interest rates raise the cost of domestic public debt by near 0.5% of GDP and add to the already large premiums on domestic debt limiting the use of real interest rate hikes for monetary and fiscal policies reasons. On the other hand, the low and fragile international reserves of the Central Bank mean that there is a well-known lack of cushion to soften internal and external shocks. The Central Bank is well aware of this limitation and from a policy point of view has preferred to increase inflation and lower output growth and crowd-out the private sector than let a fall in reserves turn into a currency crisis.

Volatility also comes from the legitimate but ill solved political pressures to lower inflation below its sustainable level, given the Central Bank losses. For example, in 1989, 1993 and 1998-99 inflation has been at relatively low levels, and presently is running at an annualized rate below 10%. Given the previous analysis, it is important to research whether those inflation levels are unsustainable and being bought at the price of more inflation and volatility in the future or are a transitory adjustment towards an appreciation of the real exchange as a consequence of the larger public sector foreign inflows as well as to the large FDI by Intel Corporation and other microprocessors and similar investments.<sup>27</sup>

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<sup>27</sup> Except for the rise in Central Bank international reserves in the last 12 months that may have prevented the appreciation in the real exchange rate, which does not show-up in the statistics, my opinion is that the evidence supports the first explanation. The Central Bank increased its domestic debt by 90% in 1999, and its financial losses have consequently risen, despite the fall in the bonds nominal interest rates. Probably, in my view, the Central Bank has reduced too much the rate of devaluation and inflation.

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## IV. OTHER SOURCES OF FUTURE VOLATILITY: FINANCIAL SYSTEM STABILITY

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Before going into the policy recommendations to reduce volatility and allow further economic reforms that avoid the crises that have plagued early reformers among emerging economies, it is important to look at other potential sources of volatility, that although had not shown their destabilizing effects in the recent past, they may do so in the future. Therefore, in this part of the report, the financial stability of the financial sector is analyzed and seen from the perspective of its potential implications for future macroeconomic stability in Costa Rica. Next section analyses the banking system as a whole and the current trends in corporate financing.

### A. THE DOMESTIC BANKING SYSTEM AND ITS OFFSHORE PARALELLS

In addition to its underdevelopment as analyzed in the Financial Market Infrastructure section above, the Costa Rican financial system contains other conditions that are sources of potential crisis. On the one hand, there is a considerably large offshore or parallel banking system. On the other hand, there is the increasing risk associated with large spreads in domestic currency loans that have led to increasing foreign currency financing by private firms.<sup>28</sup> These risks may be compounded by the present absence of financial instruments to hedge the foreign exchange risk.

We now turn to analyze these risks in more detail and their implications for macroeconomic volatility.

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<sup>28</sup> This is not contradictory with the hypothesis being tested in this report. We have to remember that the private sector has kept its level of foreign capital inflows (as % of GDP) but has been unable to borrow more abroad whenever monetary and fiscal policies have led the public sector to increase its internal borrowings above its average level. Also, it may be that the process contains a share of domestic creation of foreign currency deposits. Deposits can easily be shifted from colones to dollars and the banks may fund foreign currency loans with these deposits. Clearly, these substitutions decrease the demand for monetary base and lower the supply of domestic currency loans.

## 1. THE OFFSHORE OR PARALLEL BANKS AND THEIR SUPERVISION

The same groups that own private local banks in Costa Rica own offshore or parallel banks. Generally all medium and large private banks have their offshore entity. These banks have been in existence since the early eighties when the Costa Rican financial sector was quite closed to the private sector and even the existing state banks faced several limitations to supply services that led even them to create their own offshore. These limitations were related to foreign trade financing and foreign currency loans, due to the very tight restrictions that were imposed on foreign exchange dealings in Costa Rica after the debt crisis of the early eighties, and to the outright prohibition to supply demand and time deposits by private banks. In this sense, this offshore system provided useful banking services to key areas of the Costa Rican economy, supplying loans and services in foreign currency that could otherwise not been obtained domestically or were excessively costly, and added competition to the supply of deposits.

The main question mark about the operation of the offshore banks is the quality of their supervision. Their owners and managers (located in Costa Rica) argue that the Bank Superintendents of the place where they are located adequately supervise them. This may be true in part, and in any case, it is difficult to compare the quality of the Costa Rican supervision to that of those other places, even though the Costa Rican supervisions has been improving, a fact recognized by the same private bankers. But, there is another part to the truth and it has to do with elements such as the fact, for example, that the documents supporting the loan operations of the offshore banks are physically kept in Costa Rica. This most probably means that the Bank Superintendents in the places where the offshore entities are legally based do not review or sample that information, considered critical by many specialists in bank supervision. Moreover, they probably rely in the offshore activities are being supervised in Costa Rica, which they are not.<sup>29</sup>

Under these conditions, the supervision of the offshore bank is at least incomplete. Clearly then, the whole

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<sup>29</sup> It seems that most of the licenses authorize the offshore banks to operate outside the places where they have their legal address but not within that place (that is why they are called offshore after all). The Banks Superintendents there carry a supervision that requires at least a personal visit from the bank managers to discuss at length the financial statement of the offshore banks. It is not clear whether these Superintendents are aware that the Costa Rican Superintendency of Banks does not supervise these entities, since they have always alleged that they carry operations with Costa Rican residents under the umbrella of extra-territoriality. The only thing that has existed in Costa Rica has been a classification by the Central Bank that, by law, entailed recognition to foreign banks that allowed them, among other things, to benefit from a lower tax withholding on interest paid abroad by Costa Rican borrowers. But, in no case, that recognition entailed supervision of the offshore banks by the Costa Rican supervisors in the sense the term is being used here.

financial system in Costa Rica may be subject to the risks that may arise from a business where it is not hard to accepted the existence of all sort of externalities from asymmetric information, moral hazard, adverse selection and the like. Therefore, even in the case where all but one of the offshore behave correctly, that one “rotten apple” may be enough to pose a serious threat to the whole Costa Rican financial system and maybe

Table IV.1: Estimates of the size of offshore banks in Costa Rica. 1998

Assets or Liabilities	Percentage of GDP					Offshore as % of Total Local Banks	Average annual growth (1993-98)	
	State banks	Private Local	Total Local	Estimated Private Off-shore	Total		Local banks	Offshore banks
ASSETS	33.8%	13.7%	47.5%	24.6%	72.1%	51.8%	14.8	22.9
Cash	4.7%	1.8%	6.6%	1.6%	8.1%	23.7%	16.3	16.4
Loans	10.9%	7.9%	18.8%	19.1%	37.9%	101.2%	11.4	23.0
Securities	13.7%	1.6%	15.3%	2.9%	18.2%	18.7%	7.8	24.6
Other assets	4.4%	2.4%	6.8%	1.1%	7.9%	16.7%	41.0	26.8
LIABILITIES	31.6%	12.2%	43.7%	22.7%	66.4%	51.8%	15.2	22.6
Sight deposits	12.3%	1.4%	13.7%	2.0%	15.8%	14.9%	96.8	17.4
Term deposits	15.6%	5.6%	21.2%	17.0%	38.2%	79.9%	5.2	20.1
Loans	1.2%	2.7%	3.9%	2.0%	5.9%	52.1%	12.5	42.1
Other liabilities	2.4%	2.4%	4.8%	1.6%	6.4%	33.3%	66.7	61.6
CAPITAL	2.2%	1.6%	3.8%	2.0%	5.7%	52.0%	11.9	27.3

Source: Banco Central de Costa Rica and estimates. The estimates are based in a sample of private offshore banks and their local Costa Rican counterparts and compares them to the total private banking sector for 1998. The sampled Costa Rican banks represent around 30% of the assets and liabilities of all Costa Rican private banks. Their offshore counterparts had 1.8 times as much assets and liabilities as the Costa Rican sampled banks and the sampled local banks had a very similar assets and liability composition as the whole private banking system located in Costa Rica.

even to those of some other Central American countries, given the increasing links among banks in the region.

The scarce available information on offshore banks allows only for some projections of their importance, but in any case the data show impressive growth in the last 5 years, relative to their local counterparts, with assets in offshore banks growing at an annual rate of 23% against 15% in their local counterparts, in 1993-98.<sup>30</sup>

As presented in Table IV.1, it is estimated that, in 1998, the offshore banks may have represented the equivalent of 25% GDP in additional assets and 23% of GDP in liabilities, with a loan portfolio that could have the same size as that of the total domestic Costa Rican banking system (public and private banks). This is quite an important amount of resources, and problems with such a large loan portfolio outside proper

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<sup>30</sup> This growth existed even though the Costa Rica banking system has eliminated many of the important restrictions to private banks in that period.

prudential supervision may lead to problems to attend the liquidity of the sight and term deposits, which in that table are estimated to be around 20% of GDP, or the equivalent of near 60% of the deposits of the Costa Rican based or local banking system.<sup>31</sup>

## 2. THE COST OF CREDIT AND CORPORATE FINANCING

Loans in Costa Rican colones are an expensive commodity and this probably explains why Costa Rican firms have been recently borrowing more and more in foreign currency, where local and foreign, including offshore banks, charge lower equivalent rates. Lower taxes on nominal interest on dollar deposits and reduced minimum liquidity reserve requirements explain a large part of the differences in favor of loan interest rates.

In Table IV.2 it is possible to observe that spreads between loan and deposits rates in domestic currency transactions are close to 100% of the average cost of funds in the public banks. As the local private banks were prohibited from supplying checking account services until very recently, their average cost of funds has been 70% or more above the cost for the state banks, which held the monopoly on those services until 1996.<sup>32</sup>

Table IV.2

Costa Rican Banking system: interest rate spreads in domestic currency loans (percentages)

Variable	PUBLIC BANKS					PRIVATE BANKS				
	June 93	June 95	June 96	Dec 96	March 97	June 93	June 95	June 96	Dec 96	March 97
Loan rate	25.5	28.7	27.7	25.8	25.1	25.7	38.0	30.9	29.4	28.4
Cost of funds	7.3	13.5	12.4	13.8	12.8	18.8	30.2	25.9	23.5	22.1
Spread	18.1	15.2	15.3	12.0	12.3	6.9	7.9	5.0	5.9	6.4
Reserve requirements costs	5.3	6.0	6.6	3.4	3.7	2.3	3.7	2.9	2.7	2.7
Cost of other liquid assets	4.1	1.0	-0.1	-1.1	-1.0	1.5	2.6	0.6	0.2	0.9
Loan loss provisions	1.3	1.0	1.7	1.8	0.4	0.5	0.7	0.9	1.0	0.6
Operating costs	9.5	8.9	9.6	9.6	8.0	7.4	8.6	10.9	11.3	10.7
Gross Profits (+)	0.5	0.7	1.8	1.5	3.6	3.1	4.3	2.9	3.1	2.9
Other revenues, net	-2.6	-2.4	-4.2	-3.2	-2.5	-7.9	-12.0	-13.1	-12.4	-11.4

Source: Banco Central de Costa Rica. Rates are measured as proportion of deposits.

<sup>31</sup> Recently the Superintendency of Banks started some limited type of monitoring about the offshore banks indirectly, through requiring the registration and consolidation of information of the financial conglomerates with offshore banks, still the risks are potentially high since still the offshore banks are outside true prudential supervision.

<sup>32</sup> Spreads in state-owned commercial banks have been reduced by a third since 1993, mainly through a combination of lower liquidity reserve requirements,<sup>32</sup> higher revenues from investment in government securities and more competition that did not allow these banks to shift the increase in the nominal cost of funds into higher nominal loan rates.

Although competition may tend to partially eliminate the funding cost differences between state-owned and private banks, the government guarantee on state bank deposits and the much wider geographical coverage of these banks versus the private banks will still maintain important difference between costs and spreads inside the banking system. Therefore, the state banks may still charge large spreads in domestic currency colones to cover for their other large costs, including excessive operating costs,<sup>33</sup> taxes on interest paid on deposits and the costs of the minimum liquidity reserve requirements. In these conditions, the “disguised” tax on colones loans will probably continue and with it the incentive for some firms to look for cheaper sources of financing as suggested in Table IV.3.

From Table IV.3, domestic banks have increased the share of foreign currency loans in total loans to the private sector from 4.4% at the beginning of the nineties to 30.5% in 1998. At the same time, private sector deposits in foreign currency have grown from 37.3% of total deposits to 47.4%. This has turned a negative exposure in foreign currency to a positive one. If we add to this figures the estimated loans from the offshore banks, the share of foreign currency loans rises to 45% and that of private sector foreign currency deposits to 55% in 1998 (22% and 34% in 1993, respectively).

Finally, information from the currency composition of the liabilities of Costa Rican corporation with debts traded in the securities exchange tend to support the “dollarization” of liabilities. This is a tendency that according to verbal comments from private bank managers applies both to firms with revenues in foreign currencies and to those with revenues in domestic currency. This bankers do not seem concerned with the foreign currency exposure risk of their debtors since they expect the nominal exchange rate to follow the relatively predictable path that is has been following for several years. That is, they are probably betting that in the event of a currency crisis the Government and the Central Bank would also step in to help banks to reschedule their foreign currency liabilities and the foreign currency debts of local corporations, shifting the costs to taxpayers and depositors. It may well be that agents expect a possible Costa Rican government bail-out even in the offshore banks, anticipating that the authorities would not let a failure in such banks since that

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<sup>33</sup> The operating costs of private local banks are larger than those of state banks, probably because of two reasons. One is that the deposit base is relatively smaller in the private banks and those costs are measured as a proportion of deposits. Secondly, there may be an incentive to reduce the income tax burden of the local bank by shifting portions of the operating costs of the offshore counterpart that generally operate at smaller or null tax rates.



may produce adverse contagion effects on the domestic private banks.

Obviously, the above scenario not only entails that there are risks that are not being charged in interest rates in the Costa Rican financial system. Probably, loan rates in foreign currency loans should be higher to reflect the risks of the uncovered foreign exchange exposure of debtors and the interest rates paid on foreign currency deposits should be also higher to reflect that same risk.<sup>34</sup> It also limits the use of deviations of the nominal exchange rate from its expected trend as an instrument to help cope with foreign and domestic shocks, since there would be strong pressures on the Central Bank to avoid “surprise” movements in the exchange rate, and biasing the choice of instruments in favor of the nominal and real interest rates, worsening the biases towards credit crunches in the design of policies to deal with economic shocks.

Table IV.3  
Domestic Banking System: Assets and liabilities: proportion in foreign currency and distribution of totals

Asset or liability category	1986		1990		1995		1998	
	% in foreign currency	% Share in Total Assets	% in foreign currency	% Share in Total Assets	% in foreign currency	% Share in Total Assets	% in foreign currency	% Share in Total Assets
TOTAL ASSETS	18.9%	100.0%	26.1%	100.0%	35.3%	100.0%	39.2%	100.0%
Foreign assets	100.0%	3.4%	100.0%	3.1%	100.0%	4.9%	100.0%	4.0%
Liquidity and reserve requirements	46.4%	22.6%	69.3%	24.8%	56.1%	34.6%	55.0%	19.8%
Total domestic credit	2.2%	40.5%	3.5%	42.4%	19.4%	39.8%	31.5%	48.2%
Credit to private sector	2.5%	34.6%	4.4%	33.3%	22.1%	34.4%	30.5%	41.3%
Other assets	12.3%	33.6%	14.8%	29.8%	15.4%	20.7%	32.8%	28.0%
TOTAL LIABILITIES	23.9%	93.5%	27.3%	92.3%	34.5%	89.1%	38.6%	91.2%
Total deposits	22.5%	62.6%	33.5%	64.7%	38.9%	65.9%	44.1%	65.6%
Private sector deposits	28.3%	49.0%	37.3%	57.5%	42.1%	60.0%	47.4%	59.3%
Public sector deposits	1.7%	13.6%	3.1%	7.2%	6.5%	5.9%	13.1%	6.3%
Foreign liabilities	97.5%	3.6%	88.1%	2.0%	79.6%	4.1%	89.3%	5.3%
Other liabilities	17.3%	27.3%	6.8%	25.5%	9.4%	19.1%	7.3%	20.3%
NET WORTH	-53.3%	6.5%	12.0%	7.7%	41.8%	10.9%	46.4%	8.8%

Note: For each year the column labeled “% in foreign currency” measures the proportion of the asset or liability category in foreign currency as % of the total for that category (domestic plus foreign currency). Source: Banco Central de Costa Rica.

Anticipating some policy recommendations, probably this situation requires imposing higher minimum prudential reserves to foreign currency loans granted by banks to corporations without proper foreign exchange risk coverage. This has to be coupled with the incorporation of the offshore banks to the prudential supervision, since otherwise the loans to the exposed corporations would be granted through the parallel

<sup>34</sup> These comments also apply to offshore operations.

system increasing the risks of a crisis.

## B. OTHER RISKS IN THE FINANCIAL SYSTEM

There are also other risk that add to the sources of potential crisis:

- 1) The limitations imposed by law on the lender of last resort function by the Central Bank;
- 2) The net clearing and settlements services supplied by the Central Bank in the interbank foreign exchange market (MONED) without charging for the credit risks involved;
- 3) The similar risks involved in the net clearing and settlement used in the security exchange transactions where the weakest and smallest of the state banks has been running credit risk without charging for them, in a system that by itself faces the risk of operating without “delivery versus payments” in security settlements (funds are transferred first to the seller and the securities are delivered later by the seller);
- 4) The mismatch between the short terms deposits used to finance long term loans in the government guaranteed financial housing system operated through the Housing Bank (BAHNVI) and the potential liquidity problems in the “repurchase” contracts in the securities market.

All these risks add to the other ones examined in previous sections. These risks contribute to volatility and must be properly addressed if it is to be reduced.

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## V. POLICY RECOMMENDATIONS

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The diagnostic of macroeconomic volatility in Costa Rica in this report contains five basic elements: 1) volatility prone mixes of fiscal and monetary policies; 2) structurally weak public finances due to large domestic debts and politically motivated expenditure cycles in pre-election years; 3) underdeveloped financial markets; 4) weak financial links abroad; and 5) risky corporate financing.

Matching these elements, the general policy recommendations are centered on the following groups: A) adding flexibility to fiscal policy; B) reducing the public debt burden and improving its management; C) giving financial and policy independence and an optimal mandate to the Central Bank; D) improving the functioning and supervision of the financial system; and, E) improving financial links abroad.

Probably the key to reduce volatility in Costa Rica resides in solving the weak finances of both the Central Government and the Central Bank. These weaknesses have led to large and growing domestic public debts, high domestic interest rate premiums, persistent inflation and low cushions of international reserves. The politically motivated increases in fiscal deficits coupled with pressures to reduce inflation below a sustainable level given the Central Bank structural financial losses have combined to produce volatility prone mixes of fiscal and monetary policy instruments.

Therefore, the measures to introduce healthier public sector finances may not only be the most important to reduce macroeconomic volatility by itself. If adopted, they would also help in reducing distortions in the financial sector and improve the chances of stronger financial links abroad that would also help in coping with volatility-producing shocks. We now proceed to develop in further detail the connections between the elements in the diagnostic and the recommendations. Given the interaction among different elements in the diagnostic, the recommendations also have common ingredients.

### A. ADDING FLEXIBILITY TO FISCAL POLICY

The aim here is to eliminate the average fiscal deficit and turn it into an average surplus (to reduce the

domestic debt) and introduce more flexibility into public revenues and expenditures so that the fiscal accounts may be able to show a larger surplus when there are pressures that tend to reduce the supply of funds to the private sector and viceversa. To achieve this goal, consider the following measures:

- 1) *Turn the public sector deficit (including the Central Bank losses) into a surplus and introduce less volatility in the mix of monetary and fiscal policies:* through wider revenue basis in the income and value added taxes eliminating exemptions, better tax enforcement and avoiding the transitory and pro-cyclical temporary tax rate increases; and reducing the wage bill and waste in public expenditures;
- 2) *Increase the flexibility in budget appropriations by eliminating the constitutional and legal expenditure and revenue earmarking* that plague the Central Government budget and reduce its flexibility to cope with economic cycles and shocks.
- 3) *Continue the public sector new borrowings in the international capital markets with adequate limitations to avoid increasing the debt burden relative to GDP and exports of goods and services:* to take advantage of the reduced premiums over private foreign borrowings as long as the country's ratios of financial solvency and liquidity remain at normal levels;
- 4) *Require by law that a fully independent Central Bank with a mandate to stabilize non-traded goods prices and the "normal" current account presents Congress with its opinion on the fiscal budget proposal for next year:* including its consistency with the objectives set forth by the Central Bank under its mandate, so as to reduce the volatility prone mixes in fiscal and monetary policies, specially in pre-election years.

## **B. REDUCING THE PUBLIC DEBT BURDEN AND IMPROVING ITS MANAGEMENT**

The objective must be to reduce the premium paid on domestic interest rates through: I) sounder financial position of the public sector; II) less volatility generating mixes in fiscal and monetary policies; III) a reduction in the ratio of domestic public debt to GDP, while limiting the size and service of total foreign plus domestic public debt. To this effect, consider the following actions:

- 1) *Introducing less volatility in the mix of fiscal and monetary policies:* by flexibilizing public revenues and expenditures as recommended in section V.A above and giving the Central Bank a sounder financial position, policy independence and a clear mandate as discussed in section V.C below. All these with the aim that fiscal and monetary policies should be coordinated so as to reduce the types of shocks imposed on private investment and GDP growth during the nineties and the negative

expectations created by the unsynchronized and delayed application of corrective fiscal and monetary measures;

- 2) *Improving international liquidity to absorb foreign and domestic shocks*: through larger international liquidity, either by larger Central Bank international reserves or foreign lines of credit, domestic banks international lines of credit and other measures suggested in section V.E below;
- 3) *Continuing the process of issuing homogeneous public debt instruments*: the Ministry of Finance and the Central Bank should lead the rest of the market in consolidating homogeneous debt issues, that give depth to the secondary market and allow better pricing of debt instruments, so as to reduce the long term liquidity premiums. To this effect, the present auction system used to place those bonds should be overhauled to eliminate the oligopsonistic practices of the large commercial state banks that have led to distortedly high interest rates.

### C. GIVING FINANCIAL AND POLICY INDEPENDENCE AND AN OPTIMAL MANDATE TO THE CENTRAL BANK

The objective is to have a Central Bank with financial soundness and policy independence within a clear mandate to gradually stabilize the economy both in terms of the purchasing power of money and balance of payments shocks. In this regard, consideration should be given to:

- 1) *Turn the Government deficit into a surplus*: accounting for the transfers required by the Central Bank to gradually eliminate its financial losses, avoiding unsustainable low inflation levels;
- 2) *Use the proceeds of the privatization of large public enterprises to capitalize the Central Bank*: as well as to increase its international reserves, which together with 1) above, should eliminate its financial losses, substituting for the crawling peg and the inflation tax, and improve its ability to cope with domestic and financial shocks with less dependence on credit crunches.
- 3) *Grant full independence to the Central Bank board with proper accountability and transparency about its policies*: by legal reform eliminate board members that can be removed freely by the President of the Republic, while requiring that the Central Bank makes public its monetary programming previous to the beginning of each year and to present a full evaluation of the results of the policies followed under its mandate;
- 4) *Establish by law a clear mandate on Central Bank policy*: to gradually reduce non-traded goods inflation (since there is no control on terms of trade) and to use its liquidity reserves and other instruments to target current account deficits that, in average, are sustainable with expected foreign

public and private capital inflows, using reserves and foreign lines of credit to smooth changes in terms of trade and other external shocks;

- 5) *Require by law that the Central Bank presents Congress with its opinion on the fiscal budget proposal for next year:* including its consistency with the objectives set forth by the Central Bank under its mandate, so as to: a) publicly inform about the Central Bank monetary outlook for the incoming year; b) allow for a discussion in Congress about the adequate mix of monetary and fiscal policies under the legal mandate given to the Central Bank so as to reduce their volatility bias.

#### D. IMPROVING THE FUNCTIONING AND SUPERVISION OF THE FINANCIAL SYSTEM

As the domestic financial system does not efficiently aggregate domestic liquidity nor provide adequate links with liquidity sources abroad, and there is a lack of diversity in instruments to allow domestic firms to have the proper mix of debt-equity, long term versus short-term liabilities, currency and interest rate risks, the domestic financial system requires reforms to:

- 1) *Improve liquidity aggregation in the financial system*, by:
  - a) Allowing international banks with sound quality ratings by the renowned world rating agencies and from countries with the good financial supervision to establish directly in Costa Rica (see Caballero (1999 a, b, c);
  - b) Establishing a formal and transparent money market with the participation of the Central Bank, private banks and security brokers that meet minimum solvency, transparency and governance requirements aimed at ensuring that all participants are trustworthy and that liquidity is not used to solve solvency problems;
  - c) Continue the efforts to foster and develop a corporate debt market with homogenous and standardized debt issues, with bundled issues of several corporations to enlarge the size of each issuance and the potential secondary market; and increase the domestic demand for private long term corporate bonds and equities by: i) opening the insurance market to domestic and foreign competition with adequate supervision; ii) take advantage of the imminent legal reform of the pension system that introduces mandatory components of defined-contribution individualized accounts to complement the present financially unsustainable system based on defined-benefits. Special consideration should be given to curtailing the proportion that the firms administrating the individual accounts could invest in international markets in times when the economy difficult access to liquid funds abroad. This especially since legislators seem unwisely inclined

to increase the contingencies on public finances by granting a government guarantee to the individual accounts.

- d) Allow for capital adequacy and contingent ratios that could be lowered in cases of systemic liquidity crisis, with special treatment of PYME's [see Caballero (1999 a, b, c)].
- 2) *Improve the supervision of offshore banks and eliminate the distortions that provide incentives to operate through them.* To this effect, consider the following measures:
- a) Agreements between the bank superintendents of the places where the offshore are located and the Costa Rican Superintendency to standardize minimum prudential regulations in accordance with BIS recommendations ensuring that operations of offshore banks receive the same type of in-situ supervision;
  - b) Leveling the playing field among different banks, by:
    - i) Reducing the minimum legal liquidity reserves requirements on domestic currency deposits, and eliminate the difference in these reserve rates between deposits in local and foreign currencies; also, simultaneously capitalize the Central Bank to compensate the loss of seigniorage that this would entail (see above);
    - ii) Eliminating the Government's guarantee on the deposits in state-owned banks and its substitution by a well designed deposit insurance scheme covering domestic private and state banks, making it clear that offshore banks linked to Costa Rican financial conglomerates are excluded;
    - iii) Eliminating the "access fee" to the current account services imposed on private banks in the form of a mandatory deposit of a portion of the deposits received in state-owned banks;
    - iv) Eliminating the discriminatory higher tax rate on interests in foreign currency deposits in domestic private banks while exempting them in state-owned banks, by applying the same tax rate [although see v) below] to all types of deposits in any currency in public and private domestic banks.
    - v) Eliminating the tax differences that favors tax-free interest in deposits in offshore banks, since those deposits can be used to extend loans to the depositor, whose interest can be then deducted as an expense in calculating Costa Rican income tax, where applicable rates range between 10 and 30%, generating tax arbitrage profits. There are other distortions in the tax treatment of interests, such as lower tax rates applied to interest income from domestic bonds and certificates of deposits than to loans, taxation and tax base deductions of nominal interest instead of real interests, different tax rates for dividends, almost no taxation of capital gains. In these circumstances, probably the

simple measure is to move from income taxation to a sort of expenditure taxation, by excluding all interest and dividend incomes and expenses from the income tax base. Otherwise, the solutions may be too costly, especially if we take into account international tax considerations regarding deposits in international and offshore banks, as well as the weak enforcement capacity for complex taxes in Costa Rica.

- 3) *Reduce incentives to foreign exchange risks in corporate loans*, by:
  - a) Require higher capital adequacy and prudential reserves in foreign currency loans by domestic banks (to individuals and corporations) without proper coverage of the foreign exchange risk. Negotiate with the regulators of offshore banks similar rules or change the law to require domestic financial corporations with local and offshore banks to create those types of reserves. Proper coverage of foreign exchange risks should exclude hedging instruments issued by Costa Rican firms and their offshores, unless reinsured abroad;
  - b) Reduce the high spreads in the domestic banking system by fostering competition through leveling the playing field as suggested in 2.b) above and selling one or two of the three commercial state banks to new financial groups and foster mergers between the small Costa Rican banks;
  - c) Reduce the minimum legal reserve requirements on deposits, as mentioned above;
  - d) If 2.b.v) above is not enacted, eliminate the corporate income tax base deduction of interest paid in uncovered foreign currency loans by corporations with excessive foreign exchange risk.
- 4) *Specialize one of the state commercial banks in the financing of PYME's*: by solving and/or subsidizing the costs of externalities imposed on those firms by externalities limiting their access to credit markets [see Gutiérrez (1999)];
- 5) *Redesign the clearing and settlements systems in the foreign exchange and security markets* by charging by the credit risks or moving from net to gross settlement *and enforce higher prudential reserves on housing loans financed with short-term liabilities and on repurchase agreements by brokerage houses*.

## E. IMPROVING FINANCIAL LINKS ABROAD

The small size of the Costa Rican economy and its firms limit considerably the type of links with international markets. Under this constraint, the main measures to be consider are:

- 1) *Improving the contractual environment and corporate governance*: as suggested by Caballero (1999.a,



b, c);

- 2) *Lifting the self-imposed public sector borrowing constraint*: the main measure, given its immediateness, is the lifting of the public sector self-imposed constraint on new borrowings abroad as is already being done and proposed in a legal authorization for further Central Government bonds to be placed in international markets. These bond placements be limited as not to increase the public sector foreign debt ratio to GDP and the ratio of its service to exports.
- 3) *Authorizing the Central Bank to open liquid lines of credits abroad*: the measures on these lines should involve a legal authorization to the Central Bank to borrow abroad limited amounts of liquidity, to be used in terms of emergencies. These borrowings should carry a limit not to exceed certain proportion of Central Bank international reserves and should carry the Central Government backing.
- 4) *Promoting regional funds to attract foreign portfolio investments into the small regional corporations*: there should be regional (Central American and Caribbean) efforts by small countries to look for ways of attracting financial resources from international markets. The IDB, BIRF, directly or through organizations like CABIE (Central American Bank for Economic Integration), should analyze the viability of funds that invest in the firms in small countries that meet minimum requirements of transparency and governance, and promote them if found viable. To be eligible for those funds, firms should be located in countries that not only have the blessing in terms of responsible economic policies from the IMF and the World Bank, but also must be highly committed to improving supervision, transparency, corporation governance and the contractual environment.
- 5) *Promoting the creation of emergency and precautionary funds for regional small countries*: as Lizano (1999.b) has suggested, the solutions to the externalities imposed on these countries by “heard behavior” and the like by international investors, lie in the options of establishing emergency and precautionary funds that would provide liquidity reserves to such countries if they follow sound economic policies.
- 6) *Establish and reinforce the direct links with international sources of liquidity*: by measures such as those proposed by Caballero (1999 a, b, c).

In summary, Costa Rica has, again, in the opening years of the new century, an opportunity not seized during the nineties, to move decidedly forward in the growth and development path. Volatility hampers growth and development [see Banco Interamericano de Desarrollo (1997) and Hausman (1997)]. Costa Rica faces the danger of entering into several reforms process that require appropriate handling of the volatility increasing risks outlined in this report. Otherwise, the path that lies ahead may produce more rather than less volatility.

## REFERENCES

- Banco Central de Costa Rica. Cuentas Monetarias. Various issues.
- \_\_\_\_\_. Balanza de Pagos. Various issues.
- \_\_\_\_\_. Cuenta Nacionales. Various issues.
- \_\_\_\_\_. Tenencia de la deuda interna. Various issues.
- Banco Interamericano de Desarrollo. Hacia una economía menos volátil. Progreso Económico y Social en América Latina. Informe 1995. Washington, D. C., 1995.
- Caballero, Ricardo. "Structural Volatility in Argentina: A Policy Report". 1999.a.
- \_\_\_\_\_. "Structural Volatility in Chile: a Policy Report". 1999.b
- \_\_\_\_\_. "Structural Volatility in Mexico: a Policy Report". 1999.c
- Dirección General de Estadísticas y Censos. Estadísticas de Comercio Exterior. San José, C. R. Various issues.
- Gutiérrez, Francisco and Rodrigo Bolaños. "El Financiamiento de la Pequeña y Mediana Empresa en Costa Rica: Análisis del Comportamiento Reciente y Propuestas de Reforma". Comisión Económica para América Latina. Serie de Financiamiento del Desarrollo. 1999.
- Hausman, Ricardo. Will volatility kill market democracy? Foreign Affairs, Fall 1997, pags. 54-67.
- International Monetary Fund. International Financial Statistics. Various issues.
- Jiménez, Ronulfo (editor). Estabilidad y desarrollo económico en Costa Rica. Las reformas pendientes. San José, C. R.: Academia de Centroamérica. 1998.
- Jiménez, Ronulfo (editor). Costa Rica: una economía en recuperación. San José, C. R.: Academia de Centroamérica. 1999.
- Lizano, Eduardo. Ajuste y crecimiento en la economía de Costa Rica. 1982-1994. San José, C. R.: Academia de Centroamérica. 1999.a.
- \_\_\_\_\_. Small countries in stormy weather. Mimeo. 1999.b.
- La Porta, Rafael, Florencio Lopes de Silanes and Andrei Shleifer. "Law and Finance". Journal of Political Economy, 1998, vol. 106, No. 6, pp. 1113-1155.
- Monge, Alexander, Javier Cascante and Luis Hall. "Enforcement Mechanisms, Contract Design and Default in Credit Markets: Exploring Costa Rica". Mimeo, 1998.
- Ministerio de Planificación y Política Económica. Costa Rica en Cifras. San José, C. R. 1998
- Superintendencia General de Entidades Financieras. Boletín Financiero. San José, C. R. Various issues.
- World Bank. World Development Indicators 1998. Washington, D. C. CD-ROM. 1998