Fiscal issues and central banks in emerging markets: the case of Peru

Kurt Burneo Farfán[1]

1. Background

Budgetary practices

Peru's main fiscal instrument is the public sector budget, which is approved by Congress. The budget covers most central government operations, but not health and social security institutions, local governments or state-owned enterprises. It sets limits for non-financial expenditure and both domestic and foreign public debt service. It also includes detailed projections of tax and non-tax revenues and domestic and foreign debt disbursements.

The fiscal year begins on 1 January. The budgetary process begins in May with the setting of the key macroeconomic assumptions for the following year: the real growth rate, inflation, the exchange rate and the level of exports and imports. The Ministry of Finance's forecasts of aggregate revenue are then used in the expenditure estimates prepared by each government department. The budget proposal, which has to be consistent with the fiscal stance expressed in the multiannual macroeconomic framework,[2] is passed to Congress by 30 August in order to be approved as a budget law no later than 30 November. Otherwise the executive authority will enact it by decree.

Congress cannot increase expenditure beyond the executive's proposal. Moreover, any provision for tax exemption or benefit must be commented on by the Ministry of Finance. Supplementary budgets follow the same procedures as the budget itself; any increase in spending or transfer of funds requires congressional approval.

A set of laws enacted by the Congress complement budgetary practices:

- the Law of Financial Equilibrium specifies the amount of the deficit to be financed within the year according to the maximum level of spending and estimated revenues;
- the Law of Borrowing fixes the maximum amount of borrowing from abroad and domestic sources;
- the Law of Budget Management sets the fundamental budgetary procedures to be followed by public sector entities.

Coverage of public sector statistics

The Central Reserve Bank of Peru (CRBP) compiles government financial statistics in accordance with the IMF's *Manual for Government Financial Statistics* published in 1986. It does so not merely to satisfy its legal duty of informing the public about the nation's finances, but because of the implications of public finances for the current and future state of the economy and inflation.

Graph 1 shows the structure of the Peruvian public sector employed in the CRBP's fiscal statistics. This institutional coverage includes both on-budget and off-budget operations of the central government, social security system, regional and local governments, state-owned enterprises; other

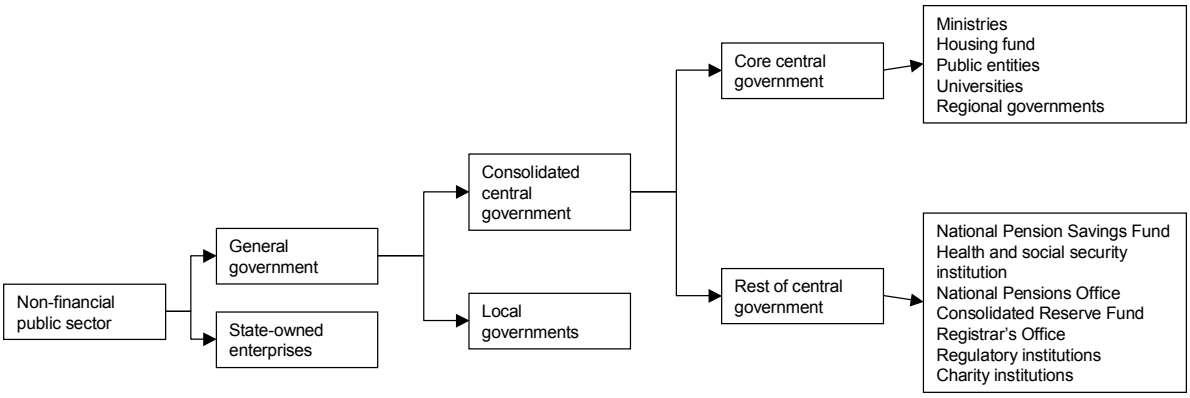
[1] Vice Minister of Finance and member of the Board of Directors of the Central Reserve Bank of Peru.

[2] The Law of Prudence and Fiscal Transparency requires that a multiannual macroeconomic framework containing fiscal and macro projections for the next three years be prepared by 30 April and presented to Congress by 30 August with the budget proposal.

public entities (eg universities, regulatory agencies and decentralised agencies), and public funds such as the Consolidated Pension Fund and National Savings Fund.

Graph 1

Non-financial public sector



In recent years a significant effort has been made to improve the government's financial management system. The "Integrated System of Financial Management", launched in 1999, centralised the budgetary and treasury operations of all spending units. As it covers all operations, it provides the Treasury with a continuously updated flow of information regarding the budgetary acquisitions, payments and balances of all units in the public sector, which facilitates the compilation, monitoring and analysis of public sector financial statistics.

Monetary policy framework

The Peruvian constitution, enacted in 1983, establishes two fundamental aspects of monetary policy:

- The CRBP's objective is to preserve monetary stability: to contribute to economic welfare through the elimination of inflation. International experience shows the impossibility of economic development in an inflationary environment. A general increase in the price level adversely affects productivity and imposes a burden on the poor through the inflation tax.
- The CRBP relies on the autonomy established in its charter. This autonomy is necessary to insulate monetary policy from political pressure to fund public expenditure or overheat the economy. International experience shows that countries with autonomous central banks have the lowest and most stable inflation rates.

In order to ensure its independence, the CRBP is legally prohibited from undertaking the following operations:

- Financing the public sector. The CRBP can only buy government securities in the secondary market up to 5% of the base money stock as at the end of the previous year.
- Providing guarantees to public or private financing operations.
- Granting selective credit. There is no development banking system in Peru. It was deactivated in the early 1990s following poor performance in the 1980s. During that time central bank credit to development banks was a major source of base money creation and contributed to higher inflation. However, in 2002 an agrarian bank was established with a small capital base.
- Operating a multiple exchange rate regime. Such a regime existed in Peru during the second half of the 1980s and was also a source of inflationary pressures.

This strong legal framework guarantees the CRBP's balance sheet independence. Therefore it is not engaged in any quasi-fiscal operations. When fiscal support was given to domestic commercial banks, only government funds were used.

During recent years, monetary policy was conducted by approving an operating target for the disposable volume of banks' liquidity, aimed at a predetermined base money growth. This growth was consistent with the inflation target established in the annual monetary programme, after considering the determinants of the demand for money. The base money growth rate was therefore considered an intermediate target between the operating target of banks' liquidity and the target inflation rate considered relevant to anchoring the inflation expectations of economic agents.

Since the early 1990s some central banks have adopted explicit inflation targeting, aimed at directly relating monetary policy decisions, based on an operating target, to the inflation outcome. To anchor inflationary expectations, these central banks announce an inflation target and employ an information strategy to communicate the policy actions to be adopted to achieve the target.

In January 2002, the CRBP's directors announced that monetary policy would be based on explicit inflation targeting (Box 1). Decisions on the monetary policy operating target are based on assessments of inflation determinants such as surveys of inflationary expectations, the growth rate of monetary aggregates, real GDP growth and fluctuations in the exchange rate. For example, if weak domestic demand pushes inflation below target, monetary policy will be expansionary, but if excessive aggregate expenditure growth compromises the inflation target, then monetary policy will be tightened. The target for annual inflation is 2.5% with a margin of ± 1 percentage point. This range is the target for 2003 and beyond, so it is also the medium-term goal of monetary policy in Peru.

Box 1

Main features of the new inflation targeting regime

- Announcement of an inflation target.
- Autonomy to implement an operating target, which is discretionally modified by the CRBP according to an integral analysis of the factors affecting the price level.
- Management of an operating target, according to the achievement of the inflation target and not of any other nominal variable, such as a monetary aggregate or the exchange rate. Hence this scheme is consistent with a floating exchange rate regime.
- Transparency on the objectives and monetary decisions of the central bank.

Since January 2003, the CRBP has been taking and releasing monthly its monetary policy decisions in terms of its interest rates for lending and borrowing with banks. These rates establish a reference corridor for interest rates in the interbank market.[3] They are still related to the operating target (the average monthly balance of the accounts banks hold at the CRBP). In addition, the CRBP continues to release each month estimates of the banks' average daily disposable liquidity.

In order to achieve the banks' monthly ranges of liquidity, the CRBP relies on tools to inject or withdraw liquidity from the market. To inject liquidity, the CRBP temporarily repurchases its own certificates of deposit. It also grants monetary regulation credit and purchases foreign currency in the spot market. Conversely, the CRBP withdraws liquidity by auctioning certificates of deposit, taking overnight deposits and selling foreign currency in the spot market.

[3] If the interbank rate is higher than the rate used for liquidity lending by the CRBP, then the higher one will continue to be applied. Thus, the provision of liquidity by the CRBP will not validate abrupt changes in short-term expectations.

2. Fiscal positions in emerging economies in the medium term

Measuring fiscal positions

The main fiscal indicator used by the CRBP is the overall balance of the non-financial public sector.[4] For the economic programme and the targets published in the multiannual macroeconomic framework, the performance criteria are expressed in terms of this measure of the fiscal position.

The advantage of setting fiscal targets using this measure is its wide coverage, which eliminates the incentive to move expenditure among government units that is present when targets are set using a measure with narrow institutional coverage, such as central government. The main drawback is data availability. As statistics on the non-financial public sector are only available quarterly, the CRBP also looks at the monthly central government accounts. The CRBP also monitors fiscal actions on a daily basis through the Public Treasury Cash Flow. This statement comprise inflows and outflows of cash in the main accounts of the Treasury at its financial agent, Banco de la Nación. These accounts are important not only because a large proportion of fiscal operations are recorded in them, but because movements in these balances affect the level of deposits held by Banco de la Nación at the CRBP, thus directly affecting the creation of base money.

Assessing fiscal policy sustainability

The CRBP's assessment of fiscal policy sustainability focuses on the public debt/GDP ratio. The main difference between the CRBP's practice and standard assessments is the stress on the process of issuing new (marketable) public debt. As at end-2002 a significant share of the outstanding public debt was issued at very low (concessional) interest rates. Since the government will rely in the coming years on capital markets to finance deficits and amortise the current public debt, it will face a higher interest rate. The main implication is that in order to reduce the burden of interest payments and control pressure on the fiscal balance, a sustainable fiscal policy will have to reduce the debt/GDP ratio. Just keeping the ratio constant would require continuous adjustments in the primary balance, which is in itself inconsistent with the definition of a sustainable fiscal policy.

Constraints on provincial and local fiscal positions

Currently there are no hard fiscal rules on sub-national (local) governments. However, as part of the ongoing decentralisation process, provisions are being taken to avoid their excessive indebtedness. Newly elected regional governments took office in 2003, resulting in three tiers of government: national, regional and local. These new regional authorities will receive resources and perform duties previously assigned to central government units. According to the Decentralisation Law of July 2002, this transfer will be based on five principles:

i. Clearly defined responsibilities for the national, regional and local levels of government to enhance accountability.

ii. Transparency and predictability.

iii. Neutrality, which means that no resources will be transferred to the regional government without the corresponding functional responsibility. This will reduce the scope for discretionary use of fiscal resources at the regional level.

iv. The final decision on fiscal indebtedness is reserved for the national government. That means that regional and local governments can issue debt only with the guarantee of the central government.

v. Fiscal responsibility: fiscal rules that limit the growth rate of regional and local government expenditure and debt will be drawn up and enacted. These rules should be consistent with

[4] As defined in the IMF's *Manual for government financial statistics*.

the limits approved in the Fiscal Law. Moreover, the central government will be prohibited from assuming debts issued by regional and local governments.

These principles should help avoid pressures on the fiscal deficit arising from these new governmental entities.

As at end-2002, local governments were able to issue debt backed by their own resources without central government authorisation. Local government debt is currently insignificant (USD 40 million in December 2001) and has only involved credit from banks, principally the state-owned Banco de la Nación.

Enhanced market determination of interest rates and fiscal discipline

During 1975-90 Peru had increasing inflation. This unstable environment reduced the ability of the government to issue securities in financial markets. The main source of government financing was central bank credit and external debt, with further arrears on public external debt. During the 1990s fiscal operations were mainly financed from proceeds of privatisation and borrowing from multilateral agencies. There is therefore no developed market for government bonds. Recent issuance of domestic public debt started in 2001. The main objectives of public debt management strategy are to:

- Develop domestic capital markets. Government bond issues generate a yield curve that serves as a benchmark for other domestic bonds.
- Create an institutional framework. This is essential since the Treasury has no reputation as a bond issuer.
- Generate resources to service external debt. Although fiscal adjustment and privatisation constitute important mechanisms for meeting external debt repayments, in the medium term additional resources will be needed. Domestic financing also reduces the exchange rate risk.
- Manage short-term debt. The introduction of short-term liabilities (treasury bills) improve management of seasonal and other short-term fluctuations in the public finances.

It is very important to guarantee the domestic financing framework as an additional source of funds to avoid adverse effects from external shocks, as happened in the past. It is highly recommended to keep this domestic framework transparent and reliable. Prudent treasury management will contribute necessary financial support to fiscal policy in the long term.

As argued above, as the government will face market interest rates higher than those currently applicable to the public debt, there needs to be a gradual adjustment to the fiscal balance. The most recent revision of the multiannual macroeconomic framework proposes a decreasing path for the deficit from 2.3% of GDP in 2002 to 0.8% by 2005.

Effectiveness of fiscal rules

The Fiscal Law of December 1999 aimed at contributing to economic stability and growth by creating a sound fiscal framework for the medium-term. It restricts the fiscal deficit, limits the growth of non-financial expenditures of the general government and establishes a stabilisation fund intended to smooth income fluctuations associated with the business cycle. In election years, the Law imposes additional restrictions on both the public sector balance and general government non-financial expenditures.

In order to render fiscal management both transparent and reliable, the Law requires the publication of a three-year macroeconomic framework containing the fundamental principles of fiscal policy, as well as macroeconomic forecasts for variables such as income and fiscal expenditures, investment and public indebtedness. It also describes how the macroeconomic framework is to be approved and published so that the government's fiscal policy intentions will be clearly understood by economic agents.

Rules and exceptions

The quantitative rules are set out in Table 1. However, in cases of national emergency or international crises, the executive authority can request Congress to suspend any of them for one year. If there is

evidence of a decrease in output or the significant likelihood it may decrease in real terms in the following period, the fiscal deficit could be allowed to exceed 1% of GDP, but not more than 2%.

Table 1

Fiscal Law: quantitative limits[1]

	2000		2001	
	Rule	**Actual**	**Rule**	**Actual**
Overall balance (as % of GDP)	2.0	3.2	1.5[2]	2.5
Real non-financial expenditure (maximum % change)	2.0	0.6	2.0	–5.0
For election years (Jan-Jul as % of annual total)				
Non-financial expenditures	60	58	60	56
Budget deficit	50	39	50	20

[1] In 2001 Congress enacted a law declaring that the quantitative limits of the Fiscal Law for 2001 and 2002 were not binding. [2] 1% in following years.

Fiscal stabilisation fund

The fiscal stabilisation fund is constituted by the following resources:

- current revenues from ordinary sources exceeding the average of the last three years by 0.3% of GDP;
- 75% of privatisation revenues;
- 50% of net revenue from concessions.

However, accumulated savings must not exceed 3% of GDP and the excess will be applied to the Consolidated Provision Reserve Fund or a reduction of public debt.

The use of the resources of the fund is contingent on an expected decrease in ordinary revenues of more than 0.3% of GDP relative to the average of the last three years, adjusted by significant changes in tax policy.

However, the Annual Budget Law for 2002 reduced the amount of privatisation revenue directed to the fund to 10% and the Decentralisation Law made it permanent.

Transparency procedures

The multiannual macroeconomic framework includes a statement of fiscal policy principles, which contains the economic policy guidelines and long-run fiscal objectives. In addition, the framework presents the three-year targets for the fiscal deficit, as well as macroeconomic forecasts, fiscal revenues and expenditures, investment and public indebtedness. The CRBP issues a technical report, which includes an analysis of the consistency of the framework with the forecasts for the balance of payments and international reserves, and with monetary policy.

The Law establishes how the framework will be approved and published, as well as the performance reports, the responsibility fulfilment statement and the interpretation and prohibition procedures, designed to convey to the public the intentions of the government concerning fiscal matters.

Despite the deficit ceilings not being achieved in 2001-02, due to the adverse international shocks that affected the Peruvian economy, the limits on non-financial government expenditure growth were respected (Table 1). The Fiscal Law also succeeded in imposing a higher level of transparency on fiscal policymaking due to the periodic publication of the Multiannual Macroeconomic Framework, which enhanced communication between the public and the fiscal authorities.

3. Countercyclical policy: monetary policy, fiscal policy or both?

Risks in departing from the medium-term orientation of monetary and fiscal policies

The main role of the CRBP is to promote price stability. That goal is understood as avoiding both inflationary and deflationary pressures. For example, in 2001 inflation was –0.1%, indicating weak domestic demand. This was well below the 2.5 ± 1% target for 2002 and beyond. Accordingly, a more expansionary monetary policy was adopted in August 2001.

With respect to fiscal policy, the medium-term orientation was set in the multiannual macroeconomic framework published by the Ministry of Finance. That document suggests a decreasing path for the fiscal deficits which is consistent with the inflation target set by the CRBP and with a sustainable path for public debt.

Cyclically adjusted budget position

A simple measure of structural balance is used to assess discretionary changes in fiscal policies. The structural deficit is defined as the level of deficit that would prevail if the economy were on its long term growth trend. Changes in the structural balance are therefore a measure of discretionary changes in fiscal policy.

Estimating this measure requires calculation of the GDP trend and the responsiveness of each component of fiscal revenue and expenditure to changes in economic activity:

- Trend GDP is estimated using a production function approach. A Cobb-Douglas aggregate production function is estimated using long-term data on output, capital and labour inputs. Thus, a measure of total factor productivity is derived. Trend output is defined as the level of output consistent with the trend total factor productivity (estimated using a Hodrick-Prescott filter) given actual levels of capital stock and labour input.
- Revenue responsiveness to GDP is calculated as a weighted average of elasticities of tax and non-tax items with respect to GDP. The weights are the proportion of each item in general government revenues in 2000.
- Expenditure responsiveness to GDP was assumed to be zero as Peru has neither unemployment benefits nor other kinds of fiscal expenditure stabilisers such as agricultural or mining price stabilisation funds.
- Therefore, structural balances can be computed using the following expression:

$$sb = t\left(\frac{1}{1+gap}\right)^{\beta} - g$$

where

sb = structural balance as a percentage of actual GDP

t = fiscal revenues as a percentage of actual GDP

g = fiscal expenditure as a percentage of actual GDP

β = tax elasticity with respect to GDP

gap = GDP gap as a percentage of trend GDP.

Clearly, when the GDP gap is zero the actual and structural balances are equal. A positive GDP gap corresponds to a structural balance lower than the actual fiscal balance, reflecting the positive impact on fiscal revenue of a high level of economic activity.

Using these assumptions, Table 2 shows the evolution of the estimated structural fiscal balance.

Table 2

Peru's structural budget balance[1]

		1997	1998	1999	2000	2001
I.	Primary balance	2.2	1.3	–0.8	–0.9	–0.1
II.	Interest payments	–1.9	–2.0	–2.2	–2.3	–2.2
III.	Overall balance (I + II)	0.3	–0.7	–3.0	–3.2	–2.3
IV.	GDP gap	4.1	0.2	–1.7	–0.8	–2.9
V.	Cyclical component of the deficit	0.8	0.0	–0.3	–0.1	–0.5
VI.	Structural balance (III - V)	–0.5	–0.7	–2.7	–3.1	–1.8
VII.	Fiscal impulse[2]	–0.7	0.2	1.9	0.4	–1.3

[1] Consolidated public sector as a percentage of GDP. [2] Measure of change in fiscal stance corresponding to change in structural balance.

Table 2 shows the importance of fiscal stabilisers. During 1991-2001 the absolute value of the cyclical component of the deficit averaged 0.5% of GDP, while the average fiscal balance was a deficit of 2.4% of GDP.

The last episode of significant fiscal expansion occurred in 1999, when the government reacted to the drop in domestic demand caused by external shocks (Russian and Brazilian crises) by expanding the coverage of tax exemptions and increasing non-financial expenditures. The fiscal expansion was financed using public sector deposits generated by previous privatisations. Thus, it was not necessary to issue new debt. This point is relevant as those deposits are no longer available, and given the previous discussion on debt dynamics the scope for an expansionary countercyclical fiscal policy is now reduced.

Relative weights given to monetary and fiscal countercyclical policies

The combination of flexible exchange rates and the liberalisation of the capital account usually reduces the power of fiscal policy. In addition, Peru's relatively high public debt limits the scope for a proactive countercyclical fiscal policy. A certain amount of macroeconomic stabilisation is possible by changing the composition of government expenditure. For example, a shift from imported military goods to domestically produced goods and services could raise effective demand. However, under current budgetary procedures the time needed for such shifts could be so long that they would not respond in time to disturbances affecting the economy. Therefore, most of the stabilising effects of fiscal policy should occur through the operation of built-in stabilisers (basically in the revenue side of the budget).

Accordingly, the responsibility of macroeconomic stabilisation will be mainly assumed by monetary policy. The new inflation targeting regime implies that the stance of monetary policy will be adjusted in response to shocks that may drive actual inflation above or below its target level. Typical demand shocks, associated with unexpected changes in private consumption or investment, would generate monetary responses aimed at reducing their likely impact on inflation. Thus, monetary policy would perform an important stabilising role.

Long-term interest rates

Long-term government bond yields are currently used as a benchmark. The government has been issuing bonds in the domestic market since 2001, as a way of developing the domestic capital market. However, this is a fledgling market given the short history of public domestic bonds.

As Peru is a small open economy, foreign currency interest rates are mainly determined by international rates plus a spread reflecting sovereign risk. Domestic currency interest rates are also affected by depreciation expectations. Thus, a sustainable fiscal policy would end up endogenously

with a lower interest rate rather than an unsustainable one. Interest rates have been market-determined since 1990.

Monetary and fiscal coordination

Monetary policy decisions are taken by the CRBP board in an autonomous way. However, since fiscal actions affect the current state of the economy and its likely evolution, forecasting inflation requires close coordination with the fiscal authorities. This is carried out at different levels:

- Treasury cash flow management. The CRBP's General Manager is a member of the Treasury Cash Flow Committee, which is responsible for setting the level of government expenditure according to the revenue projections each month. Daily information on treasury operations is very important for programming monetary operations at the central bank as it can affect the money market.
- Financial programming. Fiscal accounts are an important component of financial programming exercises at the CRBP. The projection of fiscal variables is made in close coordination with the Ministry of Finance. This allows the CRBP to incorporate them into its monetary programme, taking into account its effect on total currency and credit availability to the private sector, and the projections of the balance of payments and the accumulation of international reserves.

Table 3 shows the evolution of inflation, the ranges announced by the CRBP and a measure of the change in the fiscal policy stance since 1994. Both fiscal and monetary policy were consistent with the main goal of bringing inflation down to international levels. Moreover, when actual inflation showed a rising trend (for instance in 1996) the stance of fiscal policy was adjusted to dampen aggregate demand and help reduce inflationary pressures and current account deficits. When weak domestic demand drove inflation below the range, fiscal policy was relaxed to avoid deflation.

Table 3

Inflation and fiscal impulses

	Target range	Actual inflation	Fiscal impulse
1994	15.0-20.0	15.4	0.8
1995	9.0-11.0	10.2	0.8
1996	9.5-11.5	11.8	–2.8
1997	8.0-10.0	6.5	–0.7
1998	7.5-9.0	6.0	0.2
1999	5.0-6.0	3.7	1.9
2000	3.5-4.0	3.7	0.4
2001	2.5-3.5	–0.1	–1.3
2002	1.5-3.5	1.5	
2003	1.5-3.5		

4. Central bank balance sheets and fiscal policy-type operations

The importance of seigniorage

Table 4 shows the evolution of seigniorage, measured as the flow of base money expressed as a percentage of nominal GDP. The narrow definition of money was used to approximate the real

resources the public sector obtains from issuing money. Table 4 shows that this variable is small and is basically explained by the CRBP's foreign exchange market operations. Public sector operations are essentially movements in Treasury accounts with the CRBP. Its sign is usually negative, which means that fiscal operations have been financed mainly by non-inflationary issuance of (both internal and external) public debt.

Table 4

Seigniorage[1]

	1995	1996	1997	1998	1999	2000	2001
Seigniorage	**0.8**	**0.2**	**0.5**	**0.2**	**0.5**	**–0.2**	**0.2**
Public sector operations	0.0	–0.3	–0.1	–0.3	–0.1	0.0	0.1
Foreign exchange operations	0.6	0.1	0.9	–0.6	0.5	0.1	0.2
Other	0.2	0.4	–0.3	1.1	0.1	–0.3	–0.1

[1] As a percentage of GDP.

Quasi-fiscal operations of the central bank

As mentioned in Section 1, the CRBP's operating framework guarantees balance sheet independence, which means that the central bank's resources are not employed in quasi-fiscal operations. This independence is necessary to allow the CRBP to accomplish its main goal of price stability.

Bank balance sheets and central bank resources

From the point of view of the CRBP, the decision to rescue a troubled financial institutions is a matter of fiscal policy design. Correspondingly, neither central bank resources nor guarantees have been devoted to this kind of programme. However, since 1998 the government has decided to help stressed financial institutions by buying part of their poorly performing assets. This operation has been financed through the issuance of Treasury bonds that are mainly held by the banking system. As at end-June 2002, the stock of such bonds was equivalent to USD 770 million, or 1.4% of GDP.