III Fiscal Sustainability

Difficulties in ensuring credible sustainability of fiscal policies have been central to the problems of Latin American economies.[34] Notable examples over the past decade have been the financial crises in Mexico (1994–95), Ecuador (1999), Brazil (1999 and 2002), Argentina (2001), and Uruguay (2002). Although the relative importance of domestic policy errors versus external developments is a matter of debate, it is clear in retrospect that these economies were not sufficiently "crisis-proofed" to weather the global shocks that materialized in the late 1990s.[35] Most of the region continued to experience procyclicality in fiscal policies that contributed to macroeconomic volatility and reduced resilience with respect to external shocks. In contrast, Chile is an example of a country in the region that has followed generally sound fiscal policies and avoided financial crises under similarly challenging external circumstances.

This section first discusses why fiscal policy lacked discipline in many Latin American economies in the 1990s, despite its importance in their overall policy frameworks and the common fragilities that resulted: rising debt levels combined with fragile financing structures and hidden government exposures, particularly to the financial sector. It then turns to the deeper weaknesses in fiscal structures that gave rise to these fragilities, including narrow tax bases, spending rigidities, inadequate coordination among different levels of government, hidden government liabilities, and institutional arrangements that failed to create incentives for setting sound policy. Finally, it draws some key lessons from the fiscal experiences in the 1990s and explains how countries in the region are responding to these lessons and preparing to address future challenges.

[34]Of course, debt problems in the region have a long history, dating back to the Peruvian default in 1826; see Kaminsky, Reinhart, and Végh (2003).

[35]See Montiel and Reinhart (2001) for a general discussion of different views on the role of "push" versus "pull" factors in causing volatility in capital flows. On Argentina's widely analyzed experience in the late 1990s, Mussa (2002) and Perry and Servén (2003) emphasize domestic policy errors, while Calvo, Izquierdo, and Talvi (2002) place more weight on external influences.

Lack of Short-Term Policy Constraints

Conceptually, government debt should be used to fund projects that have long-lived streams of benefits and to finance short-term countercyclical policies. Of course, many advanced countries have deviated from these principles by allowing debt levels to rise over extended periods to finance current spending, without triggering financing crises. Latin American economies, however, faced particularly demanding fiscal challenges in the 1990s. Fiscal slippages were not as well tolerated as in other regions owing to existing structural weaknesses, including inefficient revenue mechanisms, weak domestic financing channels, low trade shares, and macroeconomic volatility (as discussed in Section II).

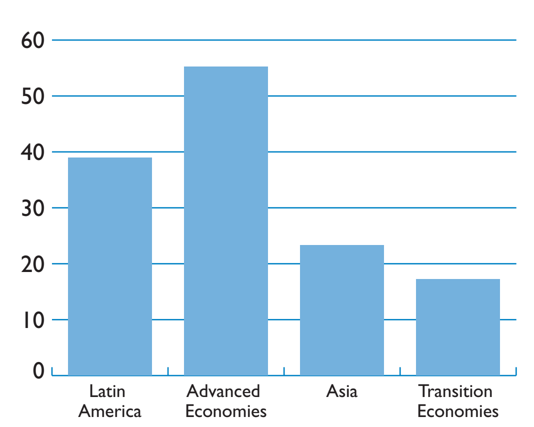
In the 1990s, against the background of these longstanding weaknesses, prudent fiscal policies were particularly important to support exchange rate-based stabilization plans in an environment where underlying credibility was fragile. Fiscal discipline was crucial for several reasons: (1) to moderate expansions in aggregate demand in the initial stages of exchange rate-based stabilization plans; (2) to prevent an accumulation of public debt that would raise the risk of financing crises; (3) to provide scope for countercyclical fiscal policy, given constraints on monetary policy; and (4) to establish credibility that fiscal deficits would not eventually be monetized.[36]

Absence of Immediate Constraints on Fiscal Policy

Although these issues were widely recognized in the early 1990s, the limitations they imposed on policies were less clear. Following the Brady debt restructuring, initial public debt levels of 40–50 percent of GDP in major Latin American countries did not seem

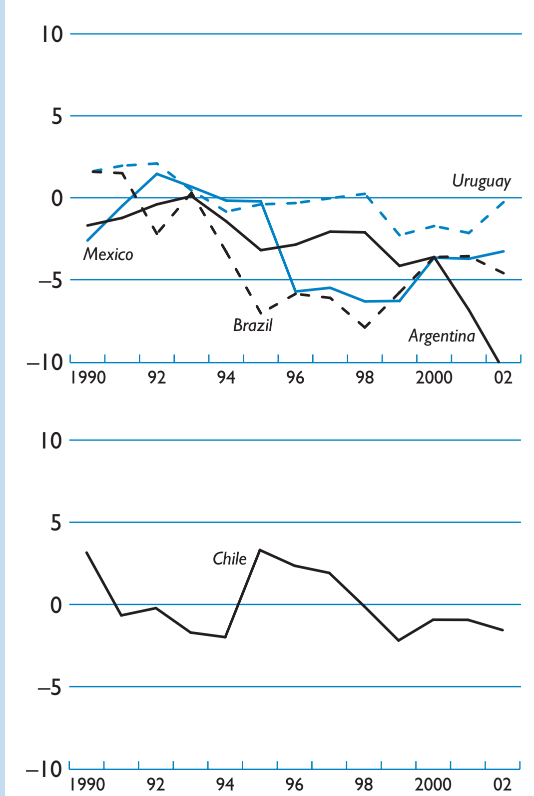
[36]Contrary to the widespread view at the time that exchange rate-based stabilization plans would discipline fiscal policies, Tornell and Velasco (1995, 1998) and, more recently, Sun (2003) provide theoretical models of why fixed exchange rates would not have this effect. Empirically, Hamann (2001) finds no evidence that fiscal discipline has been enhanced by exchange rate-based stabilization plans.

Figure 3.1. International Comparison: Government Net Debt,[1] 1996
(In percent of GDP)



Source: IMF, *World Economic Outlook*, various issues.
[1]Group of Seven data are used as a proxy for advanced countries.

Figure 3.2. Selected Latin American Countries: Public Sector Balances
(In percent of GDP)



Source: IMF, *World Economic Outlook*, various issues.

high compared with those in advanced economies, although they were above debt ratios in countries of some other emerging market regions (Figure 3.1).[37] At the same time, reform programs were expected to yield substantial dividends in terms of economic growth, while financing conditions were favorable: interest rates were low in industrial countries and markets endorsed the overall change in policy strategy in the region. Furthermore, underlying fiscal positions were sometimes obscured by cyclical effects and accounting ambiguities—for instance, in dealing with privatization receipts and recognition of fiscal "skeletons." Taken together, these factors led to uncertainty about what constituted sustainable fiscal policy in the initial stages of reform programs.

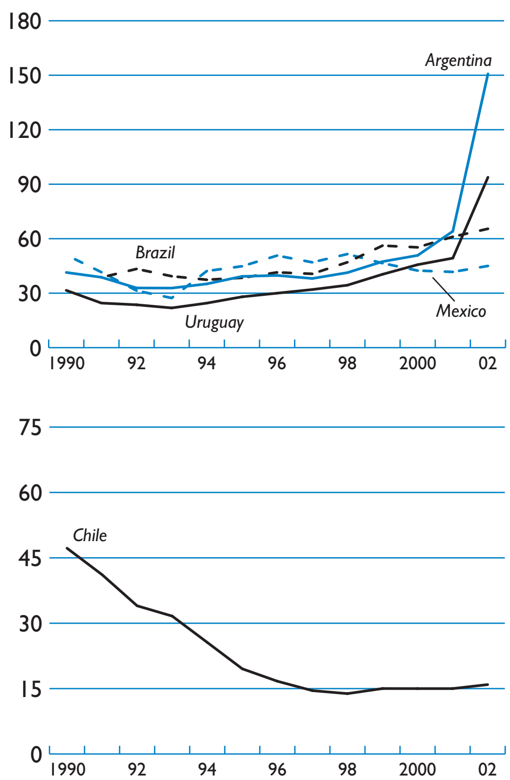
Absent unambiguous criteria for assessing fiscal sustainability, and with external financing readily available, there were few immediate constraints on policy. Nevertheless, budget deficits did fall somewhat in the early 1990s, though part of the improvement was cyclical and another part reflected the impact of lower inflation on nominal interest rates and, thus, on debt-service payments (Figure 3.2).

As the cyclical impact faded later in the decade, persistent deficits contributed to gradual increases in debt-to-GDP ratios, which had previously declined from peaks reached during the debt crises of the 1980s (Figure 3.3). With economic growth slowing, underlying imbalances in fiscal positions became increasingly apparent as debt and debt-service ratios in several countries began to rise more visibly. As discussed in the subsections below, a number of other factors also contributed to rising debt levels in Latin America.[38] A large portion of

[37]As discussed in IMF (2003), external public debt was not notably high relative to GDP in Latin America, as ratios for countries in this region were similar to those in emerging Asian economies in the 1980s and 1990s. There was an important difference, however, in the ratio of external public debt to exports, which was much higher in Latin America than in Asia. The implications of this imbalance are discussed in more detail in Section VII.

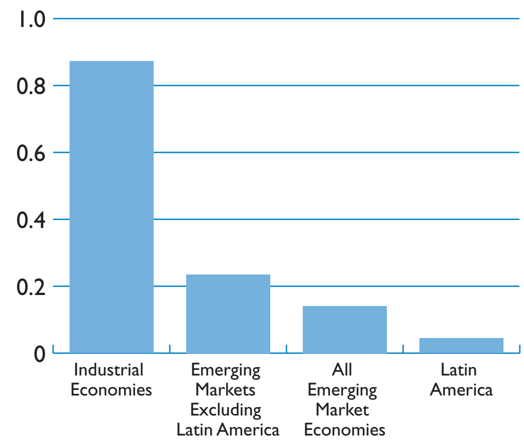
[38]The average public debt ratio in Latin America rose by 13 percentage points during 1993–2002. Replicating the decomposition used in IMF (2003) indicates that cumulated primary balances over this period caused the ratio to fall by 10 percentage points while real growth contributed to a decline of another 9 percentage points. In contrast, "other factors"—including interest costs and off-balance-sheet and contingent liabilities, and, in many cases, the fiscal costs of bank restructuring—contributed to a 32 percentage point increase in the ratio.

Figure 3.3. Selected Latin American Countries: Public Debt
(In percent of GDP)



Source: IMF, *World Economic Outlook*, various issues.

Figure 3.4. International Comparison: Cyclical Sensitivity of Primary Balance[1]
(In percent of GDP, 1990–2002)



Source: IMF (2003).
Note: A higher response indicates more countercyclical fiscal behavior.

public debt was issued at short maturities, indexed to overnight interest rates or the exchange rate, or denominated in foreign currencies, leaving the stock of debt vulnerable to movements in interest rates and exchange rates. Moreover, one-time influences such as the recognition of off-balance-sheet and contingent liabilities also added to debt burdens, as did the cost of banking crises. Chile is a notable exception to the pattern of rising public debt burdens, as is shown in the lower panels of Figures 3.2 and 3.3.

Common Fragilities

Rising Debt

The absence of a decisive policy response to this upward drift in debt-to-GDP ratios led to an important common fragility in the region.[39] Rising indebtedness and debt-service payments also contributed to a tendency toward procyclical fiscal behavior in Latin America.[40] Indeed, empirical evidence suggests that a 1 percentage point narrowing in the output gap improved the primary balance by just 0.04 percentage point of GDP in Latin America, compared with 0.87 percentage point in industrial countries (Figure 3.4).[41]

Underlying this procyclical fiscal behavior was a tendency for governments to increase spending in response to a pickup in growth, favorable terms of trade shocks, and surges in capital inflows, while cutting spending during downturns when financing dried up. As a result, debt accumulated during periods of abundant capital inflows, exacerbating the procyclicality of

[39]See Mussa (2002) for a discussion of the Argentina case. Reinhart, Rogoff, and Savastano (2003) show that countries with characteristics common in Latin America become vulnerable to crises at debt levels that are moderate by international standards.

[40]See IMF (2003) and Perry (2002) for an overview of this procyclical bias. See also López Murphy (1994) for Argentina; Gavin and others (1996) and Gavin and Perotti (1997) for Latin America; Talvi and Végh (2000); and Hausmann (2002a). Calderón and Schmidt-Hebbel (2003) present evidence that procyclicality was specific to countries with low credibility and larger associated risk premiums.

[41]See IMF (2003).

Box 3.1. Chile's Fiscal Consolidation in 1990s

Chile stands out among Latin American countries with its strong, crisis-free growth record since the late 1980s. Prudent public finances have played an important role in achieving this outcome. In particular, net government debt fell from more than 40 percent of GDP in 1989 to about 10 percent in 1996 (see figure). Accordingly, spreads on debt have been well below those on other sovereign credits in the region in recent years, and market access was retained during September–October 2001 amid turmoil in Argentina and a sharp drop in the terms of trade. Continued market confidence, in turn, has allowed the government to avoid forced procyclical fiscal policies, thereby reinforcing confidence in economic management.

Several elements have contributed to this record of successful fiscal management. Strong expenditure adjustment occurred in the 1980s, complemented by growth in the tax base owing to expanding activity. Losses in the state enterprise sector were reversed to yield significant profit transfers, especially during copper-boom years, without spurring higher spending. The government often ran overall, as well as primary, surpluses, allowing the nominal debt stock to fall. Net debt was also reduced through privatization, while real exchange rate appreciation lowered the ratio of external debt to GDP.

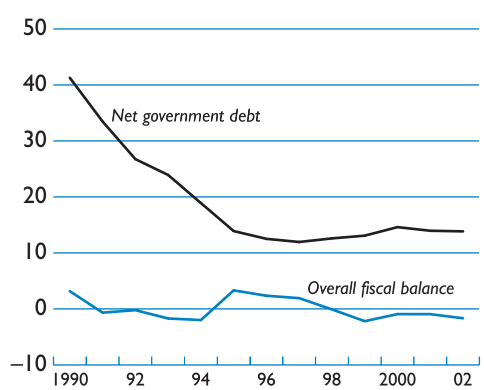
Chile did not impose specific rules requiring fiscal balance until 2000, but other long-standing institutional factors played useful roles in maintaining discipline. These included giving more power to the finance ministry than to other ministries; prohibiting the central bank from extending credit to the government; and preventing lower levels of government from borrowing, thereby eliminating subnational free-rider problems.

As net debt declined, its composition became more stable. Most debt is now denominated in local currency and inflation indexed, although unindexed instruments are being increasingly promoted. Long-term instruments pay a real return of about 3 percent, similar to the yield in industrial countries. The public sector has positive net foreign assets, since official reserves exceed foreign currency debt; short-term external debt is less than 2 percent of GDP.

Since 2000, the government has committed to an annual target for the central government structural balance, adjusted for cyclical effects and copper-price movements, thus allowing automatic stabilizers to work. This is central to the design of each year's budget. The target currently aims for a surplus of 1 percent of GDP. To further boost credibility, an expert committee determines the methodology used to calculate the structural balance.

Challenges remain, however, to sustaining a strong fiscal performance. The structural budget target has been introduced at a time of cyclical weakening in the overall budget position. Preserving sound policies will require distinguishing temporary from permanent shocks in real time, a notoriously difficult task. An important challenge will be to ensure that any errors in estimating the structural balance average out over time.

Chile: Fiscal Indicators
(In percent of GDP)



Source: Chilean authorities.

policies by increasing the magnitude of the adjustments that became necessary when conditions deteriorated. An important counterexample in the region is Chile, which engaged in a concerted debt-reduction effort throughout the decade (Box 3.1).

Weak Financing Structures

A second common fragility was weak financing structures for public debt. The availability of external financing, combined with limited development of domestic capital markets and incomplete policy credibility, encouraged the issuance of debt at short maturities and/or linked to foreign currencies (Table 3.1).[42] This approach to financing shifted the risks of market movements, in the first instance,

[42]The difficulty for emerging markets borrowing abroad in domestic currency—"original sin"—has been extensively analyzed. See Hausmann (2002a) and Eichengreen, Hausmann, and Panizza (2002) for recent discussions. Ortíz (2002) notes, however, that Chile and, more recently, Mexico are examples of countries that have overcome original sin through the promotion of domestic financial markets.

Table 3.1. Selected Latin American Countries: Composition of Public Debt, 2000

	Public Sector Gross Debt	External Debt	Domestic Debt: Exchange-rate-indexed	Domestic Debt: Other indexation mechanism
	(In percent of GDP)	*(In percent of total debt)*		
Argentina	51.0	58.0	37.5	. . .
Brazil	69.0	22	22.3	52.2
Chile	33.7	20.6	6.1	70.2
Colombia	58.0	. . .	6.2	23.8
Costa Rica	46.7	42.3	11.5	6.3
Ecuador	103.6	100.0	. . .	. . .
Mexico	49.0	29.9	. . .	63.2
Peru	45.9	73.6	7.7	. . .
Uruguay	45.5	66.6	33.4	. . .
Venezuela	33.6	77.0	. . .	22.9

Sources: National authorities; and IMF staff estimates.

Table 3.2. Selected Latin American Countries: Real Effective Exchange Rates and Foreign Currency Debt

	Period	Real Effective Exchange Rate Appreciation *(Cumulative percentage over pre-crisis period)*	Pre-Crisis Public Debt: External and Foreign Currency Linked *(In percent of GDP)*
Mexico	1990–94	23.1	31.3
Brazil	1993–98	30.8	18.9
Ecuador	1990–98	41.6	74.0
Argentina	1990–2001	87.7	64.1
Uruguay	1990–2001	82.6	70.3

Sources: IMF Information Notice System; and IMF staff estimates.

from lenders to governments, lowering short-run financing costs and making it easier to market the debt initially. But to the extent that governments were ill-equipped to bear the risk, this approach amplified the fragilities in the underlying policy framework and reduced the scope for corrective measures when problems arose. Weak financing structures then created room for self-reinforcing and, ultimately, self-validating market pressures.

A related issue was the effect overvalued real exchange rates had in understating the medium-term burden associated with debt denominated in foreign currency. Real exchange rates tended to appreciate sharply when monetary stabilization was achieved using exchange rate anchors, as is discussed in Section IV. Real exchange rate appreciation, in turn, tended to reduce the value of foreign currency-denominated debt in relation to GDP (Table 3.2). Again, this contributed to a belated recognition of the true magnitude of the fiscal problem, which only became apparent when exchange rates eventually adjusted downward.[43] In Argentina, for instance, almost all of the 65 percentage point increase in the

[43]The view that equilibrium real exchange rates would be more appreciated as a result of structural reforms contributed to this belated recognition. For Argentina, however, Calderón and Schmidt-Hebbel (2003) calculate that even large productivity increases would have an effect of less than 1 percent on the real exchange rate over three years.

public debt/GDP ratio in 2002 was due to exchange rate depreciation.[44]

Exposure to Financial Sector

The third common fragility was a variety of hidden and contingent liabilities to the public sector. Government exposure to the financial sector was particularly important in amplifying shocks, since many financial institutions faced the same mismatches as the government in the event of sharp exchange rate or interest rate movements (as is discussed in Section V). Supervision and regulation of these exposures were often weak.[45] This strong correlation of risks meant that governments were less equipped to provide support to the financial sector when the need was greatest. Again, the result was to increase the scope for self-reinforcing financial market pressures. The cost to the financial sector of these hidden exposures added substantially to government debt burdens at the same time other factors were working in the same direction—as shares of GDP, the estimated costs amounted to 19 percent in Mexico (1995–97), 14½ percent in Argentina (1999–2002), and 8½ percent in Brazil (1996–2000).[46]

In the reverse direction, high levels of government debt posed risks for financial systems even if they appeared to be well capitalized and regulated. The experience of Argentina in 1999–2001 is a case in point. Reduced access to international capital markets, followed by a public debt restructuring, resulted in a substantial increase in the exposure of Argentina's banks to the government (to more than 20 percent of bank assets at the end of 2001, compared with around 10 percent a few years earlier), thereby linking the fate of the banking system to that of the public finances.[47] At the same time, the increased government borrowing from banks crowded out credit to the private sector, which was already suffering from financing constraints. Credit constraints further depressed economic activity, which, in turn, exacerbated the fiscal problems and undermined bank asset quality. Ironically, however, one of the effects of the substitution of public debt for private credit in bank portfolios was to raise measured capital ratios, since public debt carried a much lower risk weight than private sector exposures under the Argentine prudential framework.[48]

Underlying Weaknesses

Fiscal indiscipline and procyclical policies in the 1990s were the result of deeper systemic weaknesses that made implementing corrective measures more difficult, both politically and administratively.[49] As a result, fiscal adjustments were often ad hoc and undermined the longer-term sustainability of the reform process. Cuts in infrastructure spending, for instance, reduced longer-term growth prospects and, thus, contributed to problems of fiscal sustainability, while reductions in social programs exacerbated income inequality and weakened support for market-oriented reforms.

Narrow Tax Bases

A common structural problem in achieving fiscal sustainability was narrow tax bases, combined with weak tax-collection mechanisms and frequent resort to amnesties. Little progress was made in expanding stable and predictable tax bases: general government tax revenues accounted for less than 14 percent of GDP in roughly half of the economies in the region in the mid-1990s, and this share increased only modestly in the latter part of the decade (Table 3.3). Brazil and Colombia were, however, notable exceptions. Brazil, in particular, increased general government tax revenue by more than 5 percentage points of GDP in the years following the 1998 financial crisis, largely reflecting increases in indirect taxes and the financial transaction tax (see Section V).

The most notable weakness in tax systems related to revenues from taxes on incomes and profits—as a share of GDP, these amounted to less than 5 percent in 2001 for Latin America, compared with 12½ percent for OECD countries and 6½ percent for emerg-

[44]Of course, part of the eventual depreciation in Argentina likely reflected an overshooting of the real exchange rate. Using a model-based estimate of the equilibrium real exchange rate, Perry and Servén (2003) calculate an overvaluation of the Argentine peso of 53 percent in 2001, implying an adjusted debt-to-GDP ratio of 95 percent, in contrast to the measured 62 percent.

[45]Carstens, Hardy, and Pazarbaşioğlu (2004) observe that these failures in supervision were generally not due to a lack of technical skill or ignorance of the true situation, but rather to political interference in oversight of the financial system. They stress the need to insulate supervision from political influences and to ensure that these institutions have the appropriate resources and legal authority to operate effectively.

[46]See Hemming and Ter-Minassian (2003). In some countries, such as Brazil, the eventual cost may decrease as guarantees are liquidated.

[47]Some authors characterized the increase in bank exposure to the government as involuntary, as described, for example, in de la Torre, Levy Yeyati, and Schmukler (2003): "in April 2001, the government used moral suasion to place some $2 billion of bonds with banks in Argentina, allowing banks to use those bonds to meet up to 18 percent of the liquidity requirement."

[48]Indeed, this was common to the prudential frameworks of all countries that subscribed to the Basel I capital-adequacy guidelines.

[49]The role of structural fiscal weaknesses in contributing to failed stabilization efforts in the region is discussed in Ter-Minassian and Schwartz (1997).

Table 3.3. Selected Latin American Countries: General Government Tax Revenues[1]
(In percent of GDP)

	1994	2001
Argentina	16.2	17.6
Bolivia	17.2	18.1
Brazil	21.1	24.3
Chile	16.0	16.7
Colombia	12.8	16.6
Ecuador	10.9	12.3
Mexico[2]	11.3	11.2
Peru	13.6	12.2
Uruguay	20.5	22.6
Venezuela	13.3	12.2
Latin America average[3]	17.6	20.4
Excluding Brazil[3]	14.9	16.1

Source: IMF staff calculations.
[1]Excluding social security contributions and taxes on state-owned oil companies.
[2]Central government only.
[3]Excluding Mexico.

ing market countries in other regions.[50] In addition, property taxes accounted for an insignificant share of revenue in Latin America, compared with about 3 percent of GDP in OECD countries.[51]

Problems of tax evasion remained severe, as weak legal enforcement and repeated amnesties undermined incentives for compliance. (Box 3.2 discusses the experience with tax amnesties in Argentina.)[52] In addition, extensive recourse to tax expenditures created an implicit drain on revenues while hiding the true extent of subsidies to various special interests.[53] The problem of exemptions and avoidance in many of these countries is illustrated by the relatively low yield from value-added taxes compared with statutory tax rates in many countries (Table 3.4). The inefficiency of tax systems in the region was also reflected in higher administrative costs than in other countries (Table 3.5).

Besides being low in relation to GDP, government revenues tended to be volatile owing to the importance of income associated with production of primary commodities. Obvious examples were the strong dependence of Ecuador, Mexico, and Venezuela on oil revenues; other countries were affected by sharp swings in agricultural prices, notably for coffee. Of the few formal attempts in the region to insulate fiscal positions from swings in commodity prices through mechanisms such as stabilization funds, only Chile's copper stabilization fund appears to have demonstrated lasting effectiveness.[54]

Government Spending Rigidities

Inflexibility in government spending was another obstacle to imposing fiscal discipline. The estimated extent of spending rigidities varies widely across countries in the region, from around 80 percent in Brazil and Colombia to virtually none in Peru (Table 3.6).[55] In Brazil, spending rigidities took several forms:

- measures to earmark revenue to specific expenditures, particularly for social purposes such as health, social security, and the Poverty Fund;
- constitutional or legislative mandates that set floors on certain types of spending (again, often aiming at protecting social spending);[56]
- automatic adjustments of expenditure items to movements in other macroeconomic variables (e.g., linking of social and pension benefits to the minimum wage);
- inflexible labor legislation and powerful unions that constrained the public sector's ability to adjust personnel costs (one of the largest components of fiscal outlays);[57] and
- mandatory revenue transfers to subnational governments.

Although these measures were intended to protect key spending categories, they impaired allocative efficiency and fiscal flexibility. With about 80 percent of Brazil's public spending being nondiscretionary by the end of the 1990s (Figure 3.5), its ability to adapt to changing macroeconomic circumstances was compromised. In addition, rigidities in these areas meant that most of the adjustment undertaken

[50]See Artana, López Murphy, and Navajas (2003).
[51]In addition to lack of institutional capacity at the local government level, this may have reflected weak incentives for local governments to raise revenues given the availability of federal transfers in several countries.
[52]See, for example, Silvani and Brondolo (1993) and Silvani and Baer (1997).
[53]In Mexico, for instance, tax expenditures are estimated to amount to about 5 percent of GDP, compared with total tax revenues of 12 percent of GDP.
[54]See Davis and others (2001).
[55]Earmarked spending is defined to include constitutionally mandated floors on certain spending items and subnational government transfers.
[56]Since 1999, for example, the Brazilian constitution has required that spending on health care rise by at least 5 percent per year.
[57]Another contributor to high and rigid wage costs was generous pension plans provided to the public sector, including public enterprises, teachers, and the military.

Box 3.2. Tax Amnesties in Argentina

Argentina has long suffered from poor revenue collection, reflecting administrative and enforcement weaknesses. Repeated tax amnesties—11 since 1990—have thwarted efforts to improve efficiency and led to the view that taxes can be avoided by waiting until the next amnesty (see table). A credible commitment to ending amnesties is likely to be a prerequisite for a turnaround in tax compliance.

- Amnesties appeal to cash-constrained governments because they tend to raise revenue in the short run. An amnesty today raises expectations of future amnesties, however, undermining future tax compliance and producing a long-run drain on the budget.
- Indicators of the cost of amnesties are difficult to collect. After adjusting Argentina's revenue-to-GDP ratio for changes in tax policy, however, we observe that tax yields fell significantly over the 1990s. For instance, revenue would have fallen by 2½ percent of GDP during 1996–2000 if new taxes had not been introduced. (This includes the revenue losses from the crisis as well as from weaker compliance.) Sectoral compliance rates are also down: the tax administration estimates that the construction industry now pays only one-third of its value-added tax (VAT) obligations and only 40 percent of its social-security obligations; for agriculture, the corresponding ratios are one-half and two-thirds, respectively. Compared with other countries in the region that have used amnesties infrequently, Argentina's compliance rates are low. In Chile, for instance, the overall compliance rate is around 80 percent.
- Tax amnesties create other administrative problems besides deterring compliance. These include an additional workload (to manage the amnesty), diversion of resources from other taxpayer services, and an undermining of existing court cases (since all delinquent taxpayers have access to the amnesty). These inefficiencies are seen as contributing to tax-collection difficulties. Staff estimates suggest that in 2000, tax collection in Argentina cost 2 percent of total tax revenue, compared with 1½ percent in Mexico, around 1 percent in Bolivia and Ecuador, three-fourths of 1 percent in Chile, and less than ½ of 1 percent in the United States.
- Given the high costs of amnesties, legislation to preclude the granting of further amnesties without congressional support would be an important first step toward reestablishing the credibility of tax enforcement.

Argentina: Recent History of Tax Amnesties

Date	Minister	Terms and Conditions
August 1990	E. Gonzales	2 percent, 40 installments
May 1993	D. Cavallo	1 percent, 50 installments
March 1995	D. Cavallo	1.15 percent, 48 installments
February 1997	R. Fernandez	2 percent, special payment regime
September 1997	R. Fernandez	3 percent, 50 installments
January 1999	R. Fernandez	2 percent, 60 installments
May 2000	J. L. Machinea	1–3 percent, 60 installments
October 2000	J. L. Machinea	1.5 percent, 60 installments
July 2001	D. Cavallo	Payment of tax debt with public bonds
November 2001	D. Cavallo	0.5 percent, 120 installments
April 2002	J. Remes-Lenicov	0.5 percent, 8 installments

in the late 1990s was disproportionately carried out by reducing capital spending, to which there was less political opposition.

Deterioration in Spending Quality

Narrow tax bases and spending rigidities heightened pressures on unprotected expenditure areas—such as infrastructure investment and social safety nets—during periods of fiscal adjustment. Since the 1980s, public infrastructure investment as a share of GDP has fallen throughout Latin America without being offset by higher private investment, including that which might have been associated with privatization of public enterprises (Box 3.3). Calderón, Easterly, and Servén (2002a and 2002b) estimate that more than half of the total fiscal adjustment in Argentina, Bolivia, Brazil, Chile, and Peru during

Table 3.4. Selected Latin American Countries: Value-Added-Tax (VAT) Revenue Productivity

	Total VAT Revenue *(In percent of consumption)*	Revenue Productivity *(Ratio of effective tax rate to statutory tax rate)*	Applicable Year
Argentina	7.9	0.38	2000
Bolivia	5.1	0.34	2001
Brazil	10.5	0.52	1999
Chile	10.5	0.58	2000
Colombia	5.1	0.32	1999
Dominican Republic	3.1	0.31	1999
Mexico	4.5	0.30	2000
Peru	7.8	0.43	2000
Uruguay	7.6	0.35	2001
Venezuela	4.5	0.31	2000
Average of above countries	6.7	0.38	. . .
OECD average	9.3	0.54	2000

Sources: IMF, *Government Financial Statistics,* various issues; *International Financial Statistics,* various issues; and World Economic Outlook database; International Bureau of Fiscal Documentation, *Taxation in Latin America* and *Taxation and Investment in the Caribbean,* various issues; and PriceWaterhouse Coopers, *Corporate Taxes 2001–02, Worldwide.*

Note: OECD refers to the member countries of the Organization for Economic Cooperation and Development.

Table 3.5. Selected Latin American Countries: Cost of Tax Collection, 1998[1]

	Percent of Total Tax Revenue
Argentina	2.2
Bolivia[2]	1.3
Brazil	1.6
Chile[3]	0.7
Ecuador[2]	2.0
Mexico	1.5
Peru[2]	2.0
Canada	1.1
Spain	0.9
United States[4]	0.4

Source: IMF staff calculations.

[1]Primary sources are annual reports and statistical tabulations of the national tax authorities. Tax authorities generally do not reveal the approach used to derive their cost computations; and, in turn, their reported ratios may not be fully comparable.

[2]National tax authorities in these countries receive a fixed proportion of revenue collected.

[3]Does not include customs administration.

[4]U.S. authorities compute their ratio using "gross" revenue—use of net revenue would increase the reported ratio by about 10 percent.

Table 3.6. Selected Latin American Countries: Earmarked Spending, 2002
(In percent of primary spending)

Argentina	60
Brazil	80
Colombia	81
Peru	1
Guatemala	55
Costa Rica	45
El Salvador	12
Honduras	11

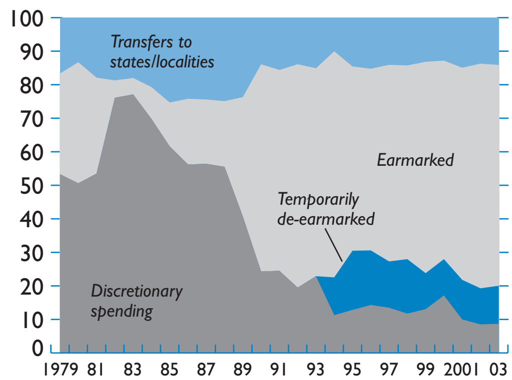
Sources: National authorities; and IMF staff estimates.

the 1990s reflected infrastructure compression. As a result, long-run growth may have been lowered by 1 percentage point per year. Similarly, during the Mexican crisis in 1995, capital spending was cut sharply.[58] At the same time, the share of public wages in GDP steadily increased through the 1990s, with Chile again being an exception (Figure 3.6).

Concerns about the low level of public infrastructure spending have led several countries in the region to question the treatment of public investment and the operations of public enterprises in fiscal accounts. In particular, a public sector "net worth" calculation would subtract the stock of productive capital from the financial debt. On a net worth basis, then, the measured deficit should exclude borrowing to finance in-

[58]See World Bank (2001).

Figure 3.5. Brazil: Composition of Spending
(In percent of total spending)



Source: Brazilian authorities.

vestment in new productive capital. It is also argued that commercially run public enterprises should be excluded from the fiscal data and treated similarly to private-sector firms. This would allow them to undertake profitable investment projects, free from deficit target constraints. Similarly, investment carried out through public-private partnerships (PPPs) should be treated as private-sector investment.

Although these points have conceptual merit, there are also important, offsetting practical issues to consider. Financial debt, whether used for capital or current expenditures, creates financing vulnerabilities, which have proven problematic for these countries. Furthermore, there are questions of how to measure the quality and productivity of public investment, and depreciation on the existing capital stock, which should be treated as a current expense. Finally, the operations of public enterprises and PPPs are likely to expose the government to significant implicit risks of the type discussed earlier.

Although it is needed most during economic downturns, social spending on the poor has tended to be procyclical in the region.[59] Wodon and others (2000) estimate that each percentage point decrease in GDP per capita reduces targeted public spending per poor person by about 2 percent. In Argentina and Mexico, targeted spending per poor person decreased by 28 and 24 percent, respectively, between 1994 and 1996—the reductions were driven both by reductions in social spending and an increase in poverty rates.[60] Moreover, the bulk of social spending in Latin America was used to subsidize social security systems, which exclude the neediest segments of society, while only a relatively small share of it went toward primary education or basic and preventive health care, which are of most benefit to the poor.[61]

Intergovernmental Relations

Fiscal activities by subnational governments also created an underlying weakness in some countries.[62] Local governments may have been better able to identify where budgetary resources should be used, but they also often had limited institutional capacity to effectively implement spending; in addition, they had less incentive to observe macroeconomic budget constraints. Local autonomy was particularly strong in Argentina, where provinces received automatic shares of tax revenues and the federal government was constitutionally prohibited from infringing upon provincial autonomy.[63]

In Brazil, chronic inflation in the early 1990s artificially boosted the finances of state governments, with deficits being financed at low real interest rates through borrowing from state banks. The drastic reduction of inflation under the *real* plan revealed the weaknesses in local finances (Figure 3.7). Agreements covering the debts of local governments to federal banks were first reached in 1993. In 1997, agreements were reached with states and municipalities to restructure outstanding liabilities incurred before 1996. The federal government assumed state liabilities and, in return, states entered contracts that placed limits on new borrowing and set schedules for paying off restructured debt. States were required to pledge their federal transfers and their own revenues as collateral, which could be withheld in the event of noncompliance. In addition, agreements were reached for the federal government to intervene and subsequently liquidate or privatize many state banks. This was followed, in 2000, by further institutional changes to establish a cooperative, rules-based framework for decentralized fiscal policymaking.

[59]See Hicks and Wodon (2001), Wodon and others (2000), and Braun and di Gresia (2003).

[60]See Hicks and Wodon (2001).

[61]See Lloyd-Sherlock (2000) and Chu, Davoodi, and Gupta (2000). A study by the World Bank (1994) reveals that social insurance programs in Latin America rarely cover more than half of the labor force, versus an estimated 94 percent in OECD member countries.

[62]See Fukasaku and Hausmann, eds. (1998); Ter-Minassian, ed. (1997); and Dillinger and Webb (1999).

[63]In Colombia, by contrast, although public expenditure has been decentralized, the central government has retained considerable control (for example, in setting wages and earmarking intergovernmental transfers for specific functions). Mexico is another example of limited decentralization, with the central government maintaining control over the majority of expenditures.

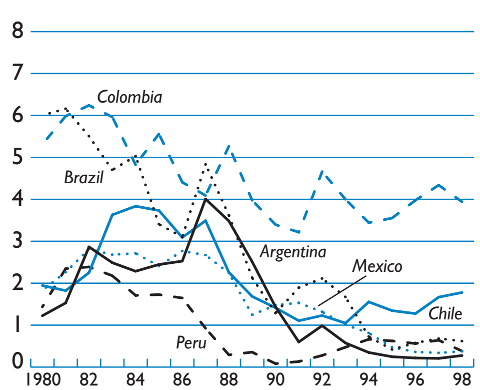
Box 3.3. Infrastructure Spending and Growth in Latin America[1]

Weak fiscal institutions and spending rigidities have complicated the task of budget consolidation in Latin America. As a result, adjustment measures have tended to focus on a narrow spending base—frequently public infrastructure spending. Although cuts in this area narrow the fiscal deficit in the near term, public sector capital formation is neglected. This, in turn, lowers longer-term output growth and government debt-servicing capacity.

Since the mid-1980s, infrastructure spending as a share of GDP has fallen in most Latin American countries (see figure). Empirical evidence suggests that fiscal consolidation has played a small but significant role; negative time trends indicate that other factors have been important as well. One explanation is that privatization—and thus private investment—simply displaced public infrastructure spending. Statistical tests reveal, however, that lower infrastructure spending was not matched by higher private investment.

Owing to persistently weak infrastructure spending in Latin America, the quality and quantity of its public assets have decreased relative to those of other developing regions. Compared with the fast-growing East Asian economies, for instance, Latin America's infrastructure shortfall—that is, East Asia's infrastructure stock per worker minus that in Latin America—has widened dramatically since the early 1980s.

Selected Latin American Countries: Public Infrastructure Investment
(In percent of GDP)



Source: Calderón (2002).

Empirical studies confirm that infrastructure compression has negatively affected overall economic growth:

- On average, reduced infrastructure spending has lowered long-run GDP growth by 1 percentage point per year. Results vary from 3 percentage points in Argentina, Bolivia, and Brazil; to 1½–2 percentage points in Mexico, Chile, and Peru; and to very little in Colombia and Venezuela, where investment cuts were modest.
- The gap in GDP per worker between East Asia and Latin America increased by about 90 percent during 1980–97. About one-third of this appears to be linked to Latin America's relatively weak public infrastructure spending.

These results do not imply that infrastructure spending should never be cut, but rather that such compression may be inefficient in achieving fiscal adjustment over the longer term. Improvements in fiscal systems that would allow better-balanced adjustments would be less harmful to sustained growth. Hence, revenue mobilization efforts; de-earmarking of budget expenditures; and rationalization of wages, entitlements, and other current outlays should be seen as important elements in a strategy for supporting growth through investment. Moreover, fiscal targets should be consistent with investment priorities. The IMF is currently reexamining the coverage of its targets to ensure that high-priority investments—notably, those by fully commercial public enterprises—are not inadvertently crowded out.

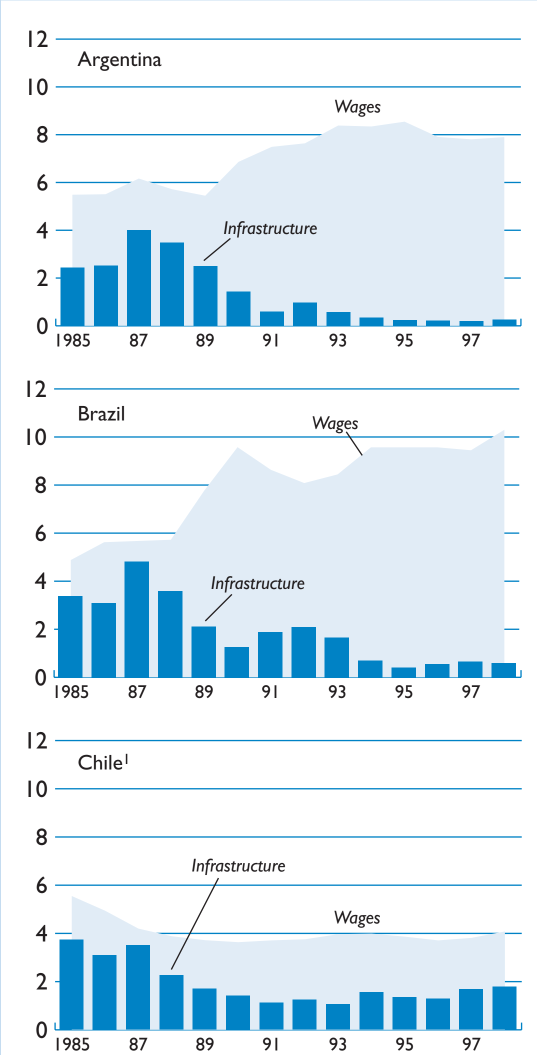
Public-private partnerships (PPPs) may permit more resources to be channeled to infrastructure investment than is desirable to include in the country's budget and may enhance efficiency. PPPs have begun to account for significant shares of public investment in some Latin American countries (Mexico, Chile) and in Europe. It is, however, important that government commitments under PPPs be transparent and consistent with medium-term budget priorities; that PPPs involve clear transfers of risk to the private sector; and that independent assessments are made to ensure that PPPs have appropriately high rates of return.

[1]This box draws on Calderón, Easterly, and Servén (2002a, 2002b); and Calderón and Schmidt-Hebbel (2003).

Off-Balance-Sheet Operations and Fiscal Skeletons

Published fiscal balances often failed to measure the full extent of fiscal operations owing to nontransparent accounting practices and reliance on off-balance-sheet spending. In some countries, the recognition of off-balance-sheet liabilities led to increases in debt that were much larger than the cumulative sum of headline budget deficits. These liabilities were generally linked to losses from central bank operations, support to the financial system (in-

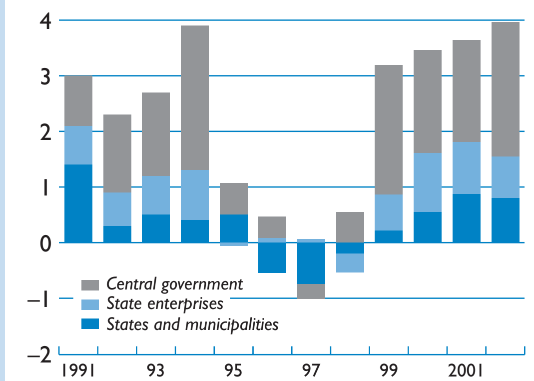
Figure 3.6. Selected Latin American Countries: General Government Expenditure on Wages and Infrastructure
(In percent of GDP)



Sources: Calderón, Easterly, and Servén (2002a); IMF, Government Finance Statistics database; IMF, *International Financial Statistics*, various issues.
[1]For Chile, data on central government only.

cluding development banks), and compensation payments to pensioners and suppliers. Although such hidden liabilities pose problems for many countries, their significance for Latin America in the 1990s was particularly great, since many shocks were experienced when the credibility of sustained prudent policies was central to the policy framework.

Figure 3.7. Brazil: Public Sector Primary Balance
(In percent of GDP)



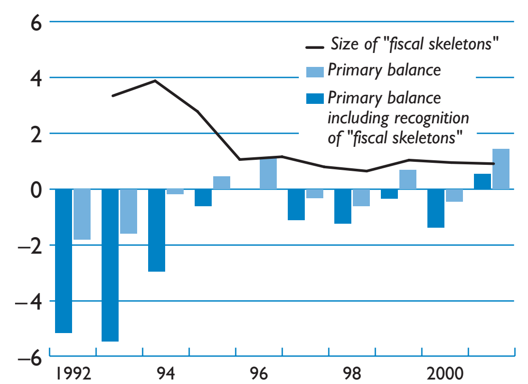
Sources: IMF staff estimates; and Brazilian authorities.

In Argentina, for instance, the recognition of fiscal skeletons—that is, the making explicit of government liabilities that had previously been implicit—is estimated to have added about 1½ percent of GDP to public debt yearly during 1992–2001—compared with a headline consolidated primary balance that averaged close to zero (Figure 3.8). During this period, more than half of the observed doubling of the debt-to-GDP ratio was accounted for by the recognition of off-balance-sheet liabilities (Figure 3.9). These mainly reflected bond-financed expenditures mandated by the judiciary, including compensation payments to beneficiaries after the social security reform of the early 1990s, payments to suppliers, refunds of tax credit arrears, and the assumption of liabilities of state enterprises prior to their privatization.[64] In Brazil, the recognition of fiscal skeletons—many arising from legal claims asserting inadequate compensation during the period of high inflation—is estimated to have led to an increase in the debt ratio of about 2½ percent of GDP between 2000 and 2002.

In other countries, lack of transparency in fiscal accounts and narrow coverage of official fiscal statistics tended to delay recognition of the true extent of government indebtedness.[65] In Mexico, until recently, headline fiscal figures failed to recognize government liabilities from bank-restructuring operations and public-investment projects with a de-

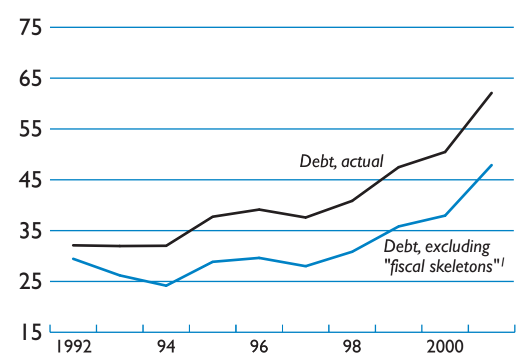
[64]See Marx (2003), Teijeiro and Espert (1996), Teijeiro (2001), and Dal Din and López Isnardi (1998).
[65]See IMF (2003).

Figure 3.8. Argentina: "Fiscal Skeletons" and Primary Balance
(In percent of GDP)



Source: IMF staff estimates using Argentine authorities' data.

Figure 3.9. Argentina: "Fiscal Skeletons" and Public Debt Paths
(In percent of GDP)



Sources: National authorities; and IMF staff estimates.
[1]Simulated debt path excluding bond issuances undertaken owing to the recognition of "fiscal skeletons."

ferred fiscal impact (the so-called PIDIREGAS).[66] In many countries, fiscal accounts were clouded by a nontransparent accounting treatment of certain financial operations—including exchanges of physical assets for financial assets, central bank transfers, debt buybacks—and by underrecording of interest costs for indexed debt and zero-coupon bonds.

Pension reforms in the 1990s revealed another form of fiscal skeleton. Public pay-as-you-go (PAYGO) pension systems in Latin America had run into serious financial problems in the 1970s and 1980s.[67] Cash deficits emerged in a number of countries—including Argentina, Brazil, and Uruguay—as adverse demographic trends and inflation indexation of benefits proved costly. To improve the longer-term fiscal outlook, reforms were common in the 1990s as countries moved toward funded, private pension systems.[68] Although holding out the promise of higher national savings and enhanced fiscal sustainability in the long term, such moves made explicit the liabilities of PAYGO systems—that is, the present value of accrued payments to current and future retirees. Attempts had been made to quantify these implicit liabilities (prior to reform) in Latin America (Table 3.7). Although the estimates reflect differing methodologies, are inherently imprecise, and tend to vary widely, the potentially large scale of these liabilities is apparent.

These liabilities often led to initial increases in government payments to satisfy the claims on public pension systems of past contributors.[69] Although these initial payments would eventually be more than offset, in present-value terms, by savings, the need to make them increased short-term financing pressures on governments. In addition, permanent fiscal costs arose in some countries where pension reform included government contributions to individual retirement accounts or minimum pension guarantees.

Fiscal Institutions

At a more fundamental level, weak institutional structures for setting policy contributed to lax fiscal discipline in the 1990s. A growing literature has analyzed ways in which institutions fail to align the in-

[66]PIDIREGAS stands for Proyectos de Infraestructura Productiva de Largo Plazo.

[67]Mackenzie (1995) surveys the problems of public pension systems in Latin America.

[68]Chile was the first Latin American country to radically reform its pension system by introducing a private, defined-contribution scheme in 1981. See, for example, Diamond (1994) and Edwards (1996). In the 1990s, Chile's reform formed the basis for reforms in other Latin American countries. For example, in Bolivia and Mexico, the public system was replaced with a privatized one, whereas Argentina, Uruguay, Colombia, and Peru added a new private tier and modified the public system. In contrast, Brazil offered supplementary pensions. For a detailed comparison, see Kay and Kritzer (2001) and Mitchell and Barreto (1997).

[69]For example, in Chile, Colombia, and Peru, active labor force participants at the time of reform were given "recognition bonds" that would mature at retirement. In contrast, Argentina and Bolivia simply pay compensatory pensions. See Schmidt-Hebbel (1999).

Table 3.7. Selected Latin American Countries: Estimates of Implicit Pension Debt in 1990s

Country	Ratio of Debt to GDP *(in percent)*
Argentina	55–305
Bolivia	40
Brazil	188–213
Chile	130
Colombia	59–88
Mexico	37–188
Peru	37–45
Uruguay	187–289
Venezuela	30–37

Sources: Kane and Palacios (1996), Bravo and Uthoff (1999), FIEL (1998), Grandolini and Cerda (1998), and Kuczynski and Williamson (2003).

centives of politicians and policymakers with the long-term public interest, focusing on[70]

- *electoral institutions* that promote polarization and fractionalization, implying government instability and, thus, policy "myopia"; and
- *budgetary institutions* that allow narrow interests to prevail or that suffer from "common pool" problems—for example, the absence of incentives for provincial governments in Argentina to internalize the costs of expenditures.[71]

The evidence suggests that institutional weaknesses in these areas have played an important role in influencing fiscal outcomes, both globally and in Latin America.[72] Countries in the region have lacked institutions that can promote sound fiscal policies, including (1) laws that establish ex ante constraints on deficits;[73] (2) "hierarchical" budget procedures that give relatively more power to the executive than to congress, and to the finance minister than to spending ministries; (3) transparency, including controls on subnational government and public enterprise budgets; and (4) judicial systems that control tax evasion and ensure prompt resolution of disputes between federal and local governments.

[70]Reviews of the literature include Alesina and Perotti (1996) and Annett (2002).

[71]See, for example, Jones, Sanguinetti, and Tommasi (2000).

[72]See Alesina and others (1999).

[73]As discussed in Kopits (2001), however, fiscal rules are not a panacea. Governments with strong fiscal records, for instance, may find explicit rules to be overly restrictive; conversely, in cases where the underlying political commitment to prudence is lacking, rules may not effectively constrain actual policy implementation.

Chile is a notable example of a country where institutional strengths promoted sound policies. The following factors have been at play:[74]

- *Centralization of budgetary powers*. The constitution favors the executive over the legislature, and the ministry of finance over spending ministries. Only the executive can initiate budgetary proposals; and in the event of congressional opposition, the government's initial proposal becomes law after 60 days.
- *Central government budget constraint*. The central bank (which is independent) is constitutionally prohibited from lending to the government, and other government borrowing is subject to congressional approval.
- *Constraints on subnational governments*. Subnational governments are essentially prohibited from borrowing.
- *Electoral rules that encourage political stability*. Chile's president is elected at fixed intervals of six years and does not require congressional backing to remain in office. Congressional representation is determined in a majoritarian, rather than a proportional, manner. Finally, electoral rules create incentives for parties to join stable coalitions, causing political parties to moderate their demands to find common ground.[75]

It is worth noting that Chile's record of fiscal discipline was established without the support of "rules" or targets and absent a high degree of trans-

[74]See Espinosa and Phillips (2004).

[75]See Foxley and Sapelli (1999).

parency. Nevertheless, the current government has made both of these areas high priorities, committing itself to a steady structural-balance target and improving transparency on many fronts.

Fiscal Lessons, Policy Responses, and Challenges

Following the region's experience since the early 1990s, there has generally been a renewed commitment in Latin America to learn from the lessons of this period, address fiscal vulnerabilities, and tackle the fiscal deficit and public debt problems. Recognizing that inflexible exchange rate regimes generally failed in instilling necessary fiscal discipline, countries have increasingly adopted explicit fiscal rules and budget procedures that promote sound policies, combined with more transparent, comprehensive, and frequent disclosure of their fiscal positions. Such institutional strengthening responds well to the main lessons of the last decade that have been reviewed in this section, notably the need to reform fiscal institutions; provide adequate incentives for the fiscal activities of subnational governments; focus on a broad view of the exposure of the public sector; and keep a watchful eye on implicit liabilities from pension systems, the financial sector, and other quasi-fiscal sources in comprehensive debt-sustainability assessments.

The experience of Brazil is a good example of a Latin American country's response to the fiscal lessons of the 1990s. Progressively, the Brazilian authorities have undertaken reforms to improve fiscal institutions significantly. Legislation was approved in 1995 that introduced ceilings on personnel expenditures (including retirement benefits for former civil servants) as a percentage of each jurisdiction's net revenues.[76] The law was modified in 1999 to include certain fringe benefits. In addition, as noted above, in 1997 the federal government entered into debt-restructuring agreements with subnational governments that strengthened local fiscal adjustment by prohibiting new borrowing until the ratio of existing debt to net revenues equaled one to one. Perhaps most significantly, in May 2000, the Brazilian congress approved a fiscal responsibility law to improve fiscal transparency and encourage continued fiscal consolidation at all levels of government.

- The law requires the annual submission of budget guidelines laws (Lei de Diretrizes Orçamentárias, or LDO) for each level of government, including a target for the current-year primary balance and projections for revenues, expenditures, the primary balance, and the public debt stock for the following three years.
- The law also requires that the annual budget approved by congress later in the year abide by the primary-surplus target in the LDO and include a reserve against unspent commitments from the previous year.
- In addition, the law prohibits primary deficits and the creation of unfunded permanent spending mandates, bans new spending commitments that cannot be executed before the end of the incumbent government's tenure in office, sets limits on personnel spending (as a share of revenues) for all levels of government, and contains "golden-rule" provisions that limit annual credit disbursements to the level of capital expenditure. It also bans the issuance of public debt by the central bank with effect from May 2002.
- Finally, the law provides for more transparent fiscal recording, with bimonthly reports on budget execution and more comprehensive reports every four months on fiscal performance.

Brazil's experience with the fiscal responsibility law illustrates the potential advantages associated with improving fiscal institutions. It has contributed to much stronger fiscal outturns at all levels of government and has substantially increased fiscal transparency, helping maintain continuity through the political transition in 2002–2003. Financial markets have welcomed these developments.

Other countries in the region have been taking steps in the same direction, although in some of them the process still needs to be carried to completion or be fully tested. Thus, Peru introduced a fiscal law in 1999 that, although it needed refinements in 2003, likely helped reduce Peru's fiscal deficit from 3.2 percent of GDP in 2000 to 1.7 percent in 2003. Ecuador and Colombia have also recently introduced fiscal responsibility laws in 2002 and 2003, respectively. A track record needs to be built to assess implementation. Argentina's fiscal responsibility law, approved in 1999, has not effectively disciplined policy as discussed in Gadano (2003). A law on public finances was introduced in Venezuela in 2000, with provisions to be phased in over several years. During this transition period, it is difficult to clearly judge the performance of the framework, but continuing large actual and projected fiscal deficits suggest its effectiveness has been limited. Generally speaking, the experience in the region (and elsewhere) suggests that fiscal responsibility laws can play a useful role in complementing sound policy intentions but may not effectively restrain policies when

[76]Net revenues were defined as total current revenues, *less* constitutionally mandated transfers from the federal government and social security contributions from current civil servants.

the design is flawed or the constraints conflict with the underlying intentions of policymakers.

Another important policy response in the region has been ongoing efforts to take a broader view of the fiscal situation. Mexico, for instance, has published augmented fiscal measures that reflect the overall fiscal position of the public sector since the mid-1990s, including the operations of development banks and public investment projects initially financed through the private sector. More generally, the treatment of public/private investment partnerships in the region is receiving close scrutiny, with pilot projects under way in Peru, Chile, Colombia, and Brazil to systematically assess the appropriate treatment of such activities in the fiscal accounts. Another area in which the accounting treatment has improved is in public pension liabilities, with several countries undertaking reforms that reduce the longer-term fiscal burden of maturing pension systems and aging populations. Pension reform will, in many cases, require constitutional change. For example, Colombia is discussing a constitutional amendment that would eliminate special pension regimes and implement other measures to reduce further the actuarial deficit of the country's pension system.

Owing to the experience of the imprudent financing of fiscal deficits in many cases during the 1990s, there is clear recognition of the need to strengthen public debt structures. Chile has actively moved toward longer-term, fixed-rate domestic debt instruments; and Mexico is taking similar steps to reduce vulnerabilities to exchange rate risk and short-term interest rate fluctuations. Brazil has done very well in reducing significantly the exchange rate sensitivity of its public debt. Separately, the widespread adoption of collective-action clauses in debt instruments promises to significantly enhance private sector involvement in debt-workout activities.

In a number of countries, important efforts are under way to increase the flexibility of budget structures. This is being done through progressive fiscal reforms that seek to strengthen revenue administration and tax policy, reduce revenue earmarking, and curtail the use of minimum spending floors, thereby creating room for the government to better address priority needs and reduce the procyclicality of fiscal policy. Making further progress in this direction is a major priority and challenge for the region, especially since it might entail—in some cases—constitutional change. Brazil, for example, has undertaken an important study in 2004 on the implications of budget rigidities for the management of fiscal policy, with a view to making the budget more flexible and improving the quality of public spending.

Thus, although countries have progressed at different speeds in responding to the lessons of the 1990s, considerable and welcome changes in the management of fiscal policy—and the role of the state—are in the pipeline. These efforts are already bearing fruit. In the region, primary public sector balances have generally improved since 2002, with many countries taking advantage of cyclical improvements to strengthen their policies. Latin America is by no means alone among emerging market and developing countries in confronting the consequences of past lax fiscal control and rising debt, and the manner in which Latin America deals with these challenges will be of considerable interest to countries in other regions. In this context, recent experience in Latin America has already demonstrated that fiscal discipline and reform are not inimical to growth. Indeed, growth has generally picked up in Latin America as fiscal positions have improved, thereby creating opportunities to provide benefits to the poor.

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