

POLICY RESEARCH WORKING PAPER

WPS 3080

3080

Can Fiscal Rules Help Reduce Macroeconomic Volatility in the Latin America and Caribbean Region?

Guillermo Perry

The World Bank
Latin America and the Caribbean Region
Office of the Chief Economist
June 2003



Abstract

The debate on fiscal policy in Europe centers on how to let automatic stabilizers work while achieving fiscal consolidation. There is significant agreement on the importance of using fiscal policy as a counter-cyclical instrument, as monetary policy can no longer play this role. In contrast, most of the discussion on fiscal policy in Latin America and the Caribbean region (LAC) deals just on solvency issues, largely ignoring the effects of the economic cycle. This is surprising as LAC economies are much more volatile than their European counterparts and have been generally applying pro-cyclical fiscal policies that exacerbate volatility. Some analysts and policymakers appear to think that counter-cyclical fiscal policies are a luxury that only industrial countries can indulge in or, at least, that LAC countries (with the exception of Chile) that have successfully put in place a counter-cyclical fiscal policy need to deal first with pressing adjustment and solvency issues before they attempt to reduce the highly pro-cyclical character of their fiscal policies.

Perry argues that this is a major mistake because the costs of pro-cyclical fiscal policies in LAC are huge in growth and welfare terms, especially for the poor, and because pro-cyclical policies and rules tend to develop a deficit bias, thus ending up being unsustainable and noncredible. Perry illustrates both propositions. He then examines the causes of the pro-cyclicality of fiscal policies in LAC and discusses how well-designed fiscal rules may help to deal with the political economy and credibility factors behind pro-cyclicality. He also examines conflicts between flexibility and credibility in rules, showing how a good design can both facilitate the operation of automatic stabilizers while at the same time supporting solvency goals and enhancing credibility. Perry evaluates the experience with different fiscal rules and institutions in LAC to see the extent they have helped or can help to achieve the twin goals of avoiding deficit and pro-cyclical biases.

This paper is a product of the Office of the Chief Economist, Latin America and the Caribbean Region. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ruth Izquierdo, room I8-014, telephone 202-458-4161, fax 202-522-7528, email address rizquierdo@worldbank.org. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The author may be contacted at gperry@worldbank.org. June 2003. (23 pages)

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CAN FISCAL RULES HELP REDUCE MACROECONOMIC VOLATILITY IN LAC?

Guillermo Perry,
Chief Economist for Latin America and the Caribbean,
World Bank¹

Prepared for the IMF/World Bank Conference on Fiscal Rules and Institutions
Oaxaca, Mexico, February 2002

1. INTRODUCTION

The debate on fiscal policy in Europe² centers on how to facilitate the workings of automatic stabilizers while achieving fiscal consolidation. In particular, the discussion hinges on if the goal of “medium term” equilibrium established in the Stability and Growth Pact should be interpreted as a “cyclically adjusted structural balance,” as Eichengreen and Wyplosz (1998) and a recent IMF paper³ have argued, and on to what extent the Maastricht limit of 3% of GDP for eventual deficits⁴ (waived only under “exceptional circumstances,” such as a contraction of 2% or more of GDP) will be enough for countries affected by strong asymmetric shocks. In the recent past, fiscally responsible Scandinavian countries have run on occasion counter cyclical deficits as high as 8% of GDP. There is indeed significant agreement within the EU on the importance of using fiscal policy as a counter cyclical instrument, as monetary policy can no longer play this role.

¹ I thank the useful comments of Nick Stern, Luis Servén, Augusto de la Torre, Rodrigo Suescún, Mauricio Carrizosa, Sergio Schmukler and George Kopits to an earlier version of this draft.

² For several authors these rules, more than the currency union itself, have permitted to eliminate the “deficit bias” and improve the fiscal stance in some countries to such an extent that there was a significant reduction and convergence of interest rates before the start of the currency union. But, whatever the merits of these fiscal rules in reducing the deficit bias and facilitating the convergence of interest rates (as extensively discussed in the paper by Buti, M. and Giudice, G. (2002): “EMU’s Fiscal Rules: What Can and Cannot be Exported,” The European Commission, mimeo, February, at this Conference), there is still a debate about to what extent they will permit the operation of necessary counter cyclical fiscal policies. Many argue that the 3% deficit limit will prove to be too rigid, though the Commission can waive it under exceptional circumstances).

³ Eichengreen, B. and C. Wyplosz (1998): “Stability Pact. More than a Minor Nuisance,” *Economic Policy*, April, and Hagemann, R. (1999): “The Structural Budget Balance. The IMF’s Methodology,” IMF working paper, July.

⁴ Mercosur and Andean countries have recently vowed to adopt fiscal and debt convergence ceilings, following the example of the EU, though with no enforcement instruments (as mentioned in Buti and Giudice, op. cit.). The Andean Community agreement also alludes to an escape clause during recessions.

In contrast, most of the discussion on fiscal policy in LAC deals just about long term sustainability issues, largely ignoring the effects of the economic cycle⁵. This is rather surprising as LAC economies are much more volatile than their European counterparts and have been generally applying procyclical fiscal policies that exacerbate volatility. Some analysts and policymakers appear to think that counter cyclical fiscal policies are a luxury that only developed countries can indulge in or, at least, that LAC countries (with the exception of Chile that has successfully put in place a counter cyclical fiscal policy) need to deal first with pressing adjustment and solvency issues before they attempt to reduce the highly procyclical character of their fiscal policies.

In this paper I argue that this is a major mistake (in Section 2). First, because the costs of procyclical fiscal policies in LAC are huge in growth and welfare terms, specially for the poor. But, second, because procyclical policies and rules tend to develop a deficit bias and thus end up being non sustainable and non credible. I then examine, in Section 3, the causes of the procyclicality of fiscal policies in LAC. In Section 4 I discuss how well designed fiscal rules may help to deal with the political economy and credibility factors behind procyclicality of fiscal policies. Then, in Section 5, I examine conflicts between flexibility and credibility in rules, showing how a good design may facilitate the operation of automatic stabilizers, while at the same time supporting solvency goals and enhancing credibility. With these elements I survey in Section 6 the experience with different fiscal rules and institutions in LAC (Commodity Stabilization Funds, Fiscal Responsibility Laws, Stabilizing Transfers, the Chilean One percent Structural Surplus rule), analyzing to what extent they have helped or can help to achieve the twin goals of avoiding deficit and procyclical biases. Finally, I conclude in Section 7 with a policy proposal, which should be of interest both for policymakers, market participants and International Financial Institutions.

2. WHY CARE ABOUT FISCAL PROCYCLICALITY?

A. Excess macroeconomic volatility in LAC reduces growth and is specially harmful for the poor.

Volatility has been since long a trademark of LAC's economic performance. By whatever measure, LAC economies have been more volatile than those of most other developed regions (see Figure 1⁶), and though LAC's volatility decreased during the nineties (Figure 2), after significant increases in the seventies and eighties, it remains twice as volatile as OECD countries,

⁵ With the major exception of IADB-based research: Gavin and Perotti (1996): "Fiscal Policy in Latin America: Volatility, Cyclicity and Modes of Adjustment," OCE working paper, IADB; Gavin, M., R. Hausmann, R. Perotti and E. Talvi (1996): "Managing Fiscal Policy in Latin America and the Caribbean: Volatility, Procyclicality, and Limited Creditworthiness," OCE working paper, IADB.

⁶ Taken from "Securing Our Future in a Global Economy" by De Ferranti, D., G. Perry, I. Gill and L. Servén (2000), World Bank.

significantly more volatile than South Asia and slightly more volatile than East Asia in terms of volatility of real GDP growth. The picture is roughly the same when macroeconomic performance is measured by aggregate consumption or spending.

Economic instability can affect growth through different channels. Most of the existing empirical evidence shows that this impact is generally negative. Servén (1998) finds⁷ that all of his five alternative definitions of economic instability -measured by the volatility of innovations to macroeconomic variables such as inflation, terms of trade, real exchange rate, growth rate and price of capital goods- are strongly negatively correlated with investment ratios. High volatility also tend to skew investment towards short run gains in a non-optimal way. Destruction of firms and banks informational and organizational capital during deep recessions have long lasting effects, as Stiglitz has pointed out. There can also be irreversible human capital losses, as indicated in the last WB WDR⁸. This findings were corroborated for LAC by an IADB report⁹, which found not only statistical evidence of a significantly negative effect of macro volatility on long term growth in the region, but also of a perverse relation between volatility and poverty, education, income distribution and financial deepening.

High volatility is indeed specially harmful for the poor. The poor have less human capital to adapt to downturns in labor markets. They have less assets and access to credit to facilitate consumption smoothing. There may be irreversible losses in nutrition and educational levels if there are no appropriate safety nets, as is usually the case in LAC (see below). It should not come as a surprise, then, that we find an asymmetric behavior of poverty levels during deep cycles: poverty levels increase sharply in deep recessions and do not come back to previous levels as output recovers (WB WDR¹⁰).

B. Procyclical fiscal policies may exacerbate macro volatility in LAC

In our year 2000 Flagship publication at the Bank¹¹, we estimated the causes of excess volatility in LAC, taking volatility in OECD and East Asian countries as a benchmark. We found that nearly 1/3 was due to exogenous shocks (TOT are more volatile in LAC due to concentration in a few commodity exports; capital flows are also more volatile –though not as much as usually thought-); 1/3 to insufficient financial integration and development of domestic financial markets and 1/3 to volatility in macro policies (both fiscal and monetary). See figure 3. The importance of volatile monetary policies has been reduced overtime, but that is not the case with fiscal policies. Though the study does not identify the

⁷ Servén, L. (1998):“Macroeconomic Uncertainty and Private Investment in LDCs: An Empirical Investigation,” World Bank working paper, September.

⁸ World Bank (2000):“Attacking Poverty,” World Development Report 2000/2001.

⁹ “Hacia una Economía Menos Volátil (Apéndice técnico),” Progreso Económico y Social en América Latina, Informe 1995, Banco Interamericano de Desarrollo.

¹⁰ World Bank (2000) op. cit.

¹¹ De Ferranti et al. (2000) op. cit.

kind of policies explaining this result, one possible candidate are fiscal policies conducted in a procyclical manner.

They indeed remain highly procyclical, as found by Gavin, Hausmann, Perotti and Talvi (1996)¹², among others. These authors show that not only fiscal outcomes are procyclical but that fiscal responses have deepened the cycle particularly during recessions when they tend to generate upright surpluses (see Table 1), usually after major financing crisis leave no other choice. For example, their statistical results show that during recessions Latin American countries tend to generate a small surplus of 2.2 cents for every dollar of real output fall. In contrast, OECD countries tend to generate significant counter cyclical deficits of 61 cents.

Table 1

Response of Fiscal Balance to GDP Growth In Good Times and Bad

	High Growth Periods		Low Growth Periods	
	OECD	Latin America	OECD	Latin America
Total surplus	0.174	0.154	0.611	-0.022
Primary surplus	0.136	0.123	0.580	-0.049

Note: Number give the typical impact of a one percentage point increase in real GDP on the ratio of the surplus to GDP. A positive number for the surplus implies that it moves in a stabilizing direction.

Source: Gavin, et al. (1996)

C. Procyclical fiscal policies add policy risk to the income risk of the poor

Procyclical fiscal policies not only accentuate the cycle but are specially harmful for the poor. Indeed, we have found at the Bank¹³ that social expenditures are kept at best constant as a percentage of GDP during downturns, and the more targeted social expenditures tend to fall as a percentage of GDP, when they should expand as the number of poor increases. As a consequence, in a typical downturn social expenditures per poor are reduced by 2% for each 1% of reduction in output. By contrast, social expenditures usually grow as a percentage of GDP in upturns, when they are less needed. That is, the procyclicity of safety nets –as a consequence of the procyclicity of fiscal policies- adds substantial policy risk to

¹² Gavin et al. (1996) op. cit.

¹³ De Ferranti et al. (2000) op. cit.

the income risk for the poor. They thus suffer both from higher consumption losses and from higher cuts in social transfers during deep recessions.

D. Procyclical biases usually led to deficit biases in fiscal policies

Procyclical fiscal policies have been often found to produce a deficit bias. Indeed, whenever countries do not generate surpluses in booms, as they should, they will be forced by markets to compensate the workings of automatic stabilizers and reduce deficits by cutting expenditures during downturns (see below). However, there are political and legal limits to what they can do in such cases. Thus the procyclical character of fiscal policies ends up generating unsustainable fiscal results over the cycle – as proved to be the case in several countries in Europe (for example, Italy and Spain) before the EU fiscal consolidation arrangements- and/or major macroeconomic crisis. This has been the experience in many Latin American countries, most recently in Argentina, Ecuador and Colombia in the nineties, where expansionary fiscal policies during booms have been followed by a deep fiscal and macroeconomic crisis in downturns.

3. WHAT ARE THE CAUSES OF THE PROCYCLICAL “BIAS” OF FISCAL POLICIES IN LAC?

As mentioned before, it has been found that fiscal policies have been historically strongly procyclical in the region, in sharp contrast with what has happened in many (though not all) OECD countries (see Table 2). During the present downturn, only Chile –and Venezuela due to high oil prices- have been able to apply mild counter cyclical fiscal policies. All others have had to adopt a strong procyclical stance. The case of Argentina was the more dramatic example.

The reason for this behavior is a mutually reinforcing vicious circle conformed by the volatility of macroeconomic outcomes, the procyclicality of the fiscal response and the limited access to international financial markets. Procyclicality in fiscal policies can indeed be explained by the combination of faulty policies and weak budgetary institutions in LAC with asymmetric information problems in international financial markets.

First, there is a serious credibility problem for most LAC countries that attempt expansionary fiscal policies in a bust. It is not only that most of them arrive to the end of booms with fragile fiscal positions (high or moderate deficits and relatively high debt stocks). There is in addition an obvious time inconsistency problem. Governments may borrow today and choose not to pay back in good times; that is, they may continue to increase indebtedness in good times. Indeed, most of them have not reduced indebtedness in past booms, so there is no reason for a financier to expect that they would do so next time. Almost no country in LAC but Chile have been able to run surpluses in booms, and very few have reduced indebtedness indicators in such episodes. Recent

serious fiscal crises in both Colombia and Argentina can be traced to excessive expenditure increases during the booms –that is to the incapacity to achieve or maintain surpluses in good times. If that is the case, expansionary policies during bad times can be expected to lead to an intertemporally unsustainable outcome -a deficit bias- and can be rightly interpreted as leading to an increase in default risk.

Table 2
Cyclical Response of Fiscal Aggregates
Latin American and the OECD

	Impact of GDP Growth	
	OECD	Latin America
Total surplus (% of GDP)	0.25	0.08
Primary surplus (% of GDP)	0.22	0.05
Total Revenue (% change)	0.84	1.32
Total Expenditure (% change)	0.09	0.61

Note: Numbers give the typical impact of a one percentage point increase in real GDP on the budget category. A positive number for the surplus means that it moves in a stabilizing direction.

Source: Gavin, et al. (1996)

In these conditions the proper response of responsible creditors is not to finance an increased deficit during busts, or to do it at significantly higher spreads. In summary, the core of the problem would thus appear to be the incapacity to maintain surpluses in good times. As Gavin et al. put it: **“It is during booms that the seeds of crisis often are sown, although the crisis becomes evident only when the boom subsides.”**

But why is fiscal policy procyclical in booms? The main reasons lie in the political economy of fiscal policy and the lack of strong budgetary institutions. It is hard enough for a responsible Minister of Finance to avoid a deficit -specially in periods in which financing is readily available, as is usually the case in booms. It is much harder to maintain a too visible surplus through discretionary budgetary decisions. As Allen Schick’s paper¹⁴ in this Conference shows, there are strong pressures in any normal discretionary budget process to increase expenditures. Political incentives are aligned with spending out any potential surplus in a boom.

Such political pressures may also inhibit a responsible Minister of Finance to indulge in an explicit discretionary counter cyclical policy (or just to permit automatic stabilizers to operate) during downturns, as once the Pandora box (of a

¹⁴ Schick, A. (2002):“Budget rules vs. Political Will,” Brookins Institution, mimeo.

deliberate increase in expenditures or an increase in the deficit) is opened it may not be easy to close: the political pressures may take you too far. And besides, as already explained, markets will punish any such move as they can not distinguish easily between a responsible counter cyclical policy and outright fiscal laxity.

Financial markets failures do indeed also contribute to fiscal procyclicality. Markets often finance outright deficits in booms that exacerbate the trend towards deficit biases. Spreads are found to be procyclical. Such behavior may be explained by underlying problems of asymmetric information, but this is not our focus here.

4. WHY FISCAL RULES MAY HELP

For all these reasons authorities may well want to tie their hands and resort to automatic rules that may allow at least the automatic stabilizers to work during the cycle, and eventually to go farther into a regulated, rules-based counter cyclical fiscal policy.

Such rules would help to keep any surplus in good times out of sight and specially out of reach from the political process in normal discretionary budgetary decisions. But, why would they work? Why would policymakers stand by the rule when it bites and forces tough decisions that they are not able to take on their own “free will”? Wouldn’t they resort to ignore and change the rule or at least be tempted to “cheat” by “creative accounting”? More precisely and to our point, are rules capable to change the incentives to spend out potential surpluses in good times?

They may do that if they impose high enough exit costs, that compensate the perverse incentives to spend coming out of the normal budgetary political process. How can they impose high exit costs? Executive authorities will have strong incentives to comply with the rule if there are enforceable penalties (as with the Brazilian Fiscal Crimes Law) and if the rule is clear and simple enough that it does not leave much room for cheating. More important, “breaking” an explicit rule may indeed be more costly than just indulging in silent discretionary expansionary policies when there are no rules, due to the visibility of such a decision. This is particularly true if breaking the rule requires changing the Law and specially if it is a Constitutional law that requires a qualified majority. Opposition parties and the press will find in such cases a golden political opportunity to criticize the lack of responsibility of the governing political coalitions. For a responsible Finance Minister such a rule is just a gift of heaven, as it will facilitate to resist the pressures for excessive spending in booms from peers and politicians and to shift to them the political cost of an explicit break of the rule. The experience in Chile at the beginning of the democratic period during a major boom in copper prices, show clearly the usefulness of a tight legal rule for responsible economic authorities.

So much for booms. In downturns, a well designed rule may facilitate the operation of automatic stabilizers and enhance credibility to a well limited counter cyclical fiscal policy. This will be the case specially when the rule indeed permitted to obtain a surplus in the previous boom. If such surpluses were saved in a Stabilization Fund for bad times, the Government will have resources at its disposal to fully or partially finance the deficit in bad times, reducing the need to resort to market finance in a difficult period. The fact that the deficit in the downturn is predictable and limited by the rule –and that the same rule will credibly limit spending in future booms- will give a clear signal that the Government is not indulging in unsustainable lax policies, but just following an established sustainable rule, and may help convince markets to cover any remaining financing requirement. In other words, financiers will face clear signals that distinguish a responsible and sustainable (limited and predictable) counter cyclical rules based fiscal policy from outright indulgence in intertemporally unsustainable policies. A good rule may thus help reduce problems associated with asymmetric information and facilitate financing of deficits in bad times.

In addition, such a rule will also be very helpful for a responsible Minister of Finance to avoid expenditure pressures to run wild and thus to go too far in the expansionary policy in downturns.

5. CONFLICTS BETWEEN FLEXIBILITY AND CREDIBILITY: TOWARDS FISCAL RULES THAT HELP REDUCE BOTH THE PROCYCLICAL AND THE DEFICIT BIAS.

Any rule may entail a dilemma between flexibility and credibility. Too rigid a rule in the pursuit of credibility may lead to high costs in forgone flexibility. Even more, an excessively rigid rule may become altogether non viable. If this is the case economic actors may anticipate the non sustainability of the rule and it will not lead to more credibility. In other words, an excessively rigid rule may limit flexibility and not enhance credibility; it may entail only costs and few benefits if at all. It would just be a bad rule.

I would propose that this is the case with most rigid fiscal rules that attempt to reduce the deficit bias and thus to enhance solvency without correcting for the potential effects of shocks and the economic cycle, as has happened with some of the Fiscal Responsibility and Stabilizing Transfers Laws recently enacted in LAC –see below-. In such cases, if there is a positive shock (an increase in the price of oil for an oil exporting country) and/or a boom in economic activity, the rule will not be binding: it will be too easy to comply with, it will not help to improve the true underlying fiscal position and will permit a procyclical fiscal stance to accentuate the boom. On the other hand, if there is a negative shock and/or a downturn in economic activity the rule will become excessively tight and would exacerbate the downturn; it may thus turn out to be too difficult to comply with and abandoned altogether (as happened in both Argentina and Peru with the recently enacted FRL's). In other words, such rigid rules may not help avoid a

deficit bias precisely because they accentuate the procyclicality of fiscal policies. They are just not good and useful rules.

On the other hand, a rule that attempts to support counter cyclical fiscal policies but is not designed to achieve long term debt sustainability will also be unsustainable and non credible. It would not serve in the end any purpose.

A well designed rule must, as a consequence, attempt both to facilitate the operation of automatic stabilizers (or even permit a limited active counter cyclical fiscal policy) and avoid a deficit bias. This will by necessity make the rule somewhat more complex, but realistic and eventually useful.

In what follows I will review some LAC attempts with fiscal rules that have tried either to cope with pro cyclicality or with the deficit bias or both, and attempt to draw some practical conclusions.

6. THE EXPERIENCE WITH FISCAL RULES IN LAC

A. The Experience with COMMODITY STABILIZATION FUNDS

The Annex to this paper presents an analysis of the Chilean Copper Stabilization Fund, the Colombian Coffee and Oil Stabilization Funds and the proposed Oil Savings and Stabilization Funds in Ecuador. From this review we can draw some general conclusions.

Stabilization Funds are easier to institute “before” the fact (when prices are low or before expected increases in quantities take place) and, in the case of shared revenues, when they treat all beneficiaries (central/federal governments and subnationals) in a symmetric way. This is highlighted by the experience of the Colombian Oil Stabilization Fund and was a major political consideration in the design of the Ecuadorian Oil Savings and Stabilization Funds.

They may indeed play a useful role to insure some savings from fiscal revenues associated with commodity export booms, specially where there are automatic saving rules and the accumulated net surplus remains “out of sight and out of reach” of the normal discretionary budget process. This is clear in both the cases of the Chilean Copper Stabilization Fund and the Colombian Coffee Fund and Oil Stabilization Fund.

However, in so far as they operate over a limited portion of current revenues, they cannot by themselves assure aggregate expenditure restraint during booms in economic activity (as happened in Colombia during the 90s or recently in Venezuela with the Fund for Macroeconomic Stabilization –FAEP-). In such cases one may end with some savings in the Funds but at the same time with an unsustainable deterioration of the “non-oil” budget. To avoid such a problem one would need a complementary rule to require that “non-oil” deficits be limited to

the interest yield of the Oil Fund (as in Norway) or that otherwise restrict overall expenditures.

Even when effective in helping to keep overall expenditure restraint in the booms (as in the case of Chile), if Commodity Stabilization Funds do not include an automatic rule for divestitures, they may play a too limited role in helping to execute counter cyclical policies in downturns (as happened in 1999), as there is no way for markets to distinguish between a responsible counter cyclical policy and just the beginning of fiscal laxness.

All these facts conform with our previous conceptual discussion, and have led these and other countries in the region to adopt or to plan to adopt additional rules with broader scopes and more automatic overall expenditure rules.

As a technical footnote, some of these attempts have eventually dealt with the difficult issue of distinguishing between temporary and permanent shocks in commodity prices by adopting as a reference price a moving average of past prices that help both smoothing out the effect of cycles and adapting gradually the level of expenditures to permanent shocks (which are welfare enhancing due to the inefficiencies associated with sharp increases or cuts in expenditures). For the same reason, some (as the Colombian and Ecuadorian Oil Stabilization Funds) have attempted to smooth out (or gradually adapt to a new level of) total revenues from oil exports, using a moving average of past dollar revenues as a benchmark. In both cases there was an explicit objective to adapt expenditures gradually to a sharp expected increase in the volume of exports.

But these moving average rules might be problematic when, as shown in the empirical evidence (see Cashin, Liang and McDermott (2000) and Cuddington¹⁵), commodity prices do not tend to revert towards a constant mean, but rather tend to experience random shocks of long durations. This means that when the shocks bring the prices down, an expenditure rule based on a moving average might lead to the exhaustion of the accumulated resources in the fund. If the shocks to the prices are positive and long-lasting, the fund might tend to accumulate large savings and thus produce costs in terms of forgone investment. Nevertheless, even a moving average rule might be better than no rule, given that political pressures tend to lead to the deficit bias and the quality of public investments tend to deteriorate remarkably during times of increases in the prices of commodities (or other types of booms). Moreover, these risks can be ameliorated by establishing rules that set ceilings and floors on the total savings of the fund. More generally, fiscal rules should aim to smooth overall government expenditures and eliminate the deficit bias, rather than just stabilize the portion

¹⁵ Cashin, P., H. Liang and J. McDermott (2000): "How Persistent are Shocks to World Commodity Prices?," IMF Staff papers, vol. 47, #2. Cuddington, J. (1992): "Long-run Trends in 26 Commodity Prices: A Disaggregated Look at the Prebisch-Singer Hypothesis," Journal of Development Economics, vol. 39, #2.

related to commodity exports. There are other ways to accomplish this, as I discuss below.

B. The Experience with FISCAL RESPONSIBILITY AND STABILIZING TRANSFERS laws.

Recently adopted Fiscal Responsibility Laws in Brazil, Argentina and Peru and projected ones in Colombia, Ecuador and other countries, have had as their main objective to help avoid deficit bias and thus achieve and maintain fiscal solvency. I will not discuss here in detail their potential virtues with respect to these objectives, but just to note that in contrast to the evident failure in the Argentinean and Peruvian case, the Brazilian law seems to offer more potential as it was a product of a broad political consensus and has been accompanied by a Law of fiscal crimes that could effectively punish deviations from the Law.

I will refer here more to the potential effects of these laws on the procyclical stance of fiscal policy. To the extent that they just set rigid specific targets for deficits or debt levels, they may turn out to reinforce the procyclical character of fiscal policy or become non viable. If the country in question faces an unexpected negative shock to its public finances -a fall in a major revenue source or a sharp downturn in activity- adherence to the rule may force authorities to cut public spending impeding the operation of “automatic stabilizers” and deepening the downturn. Or else, authorities may end up not being able to comply and the rule will be superseded, as happened in Argentina and Peru. A rule that does not take into account such possibilities may end up trading long term solvency benefits for short term costs, but it also may become non sustainable in the long term and thus non credible.

Some of these rules and similar legislation (specially in Argentina and Colombia) have, however, included provisions intended to achieve some stabilization of expenditures by States or Provinces during the cycle, as analyzed by the papers by González, Rosenblatt and Webb and by Braun and Tommasi¹⁶ in this Conference. Unfortunately more often than not they have just offered a guarantee of minimum transfers that end up creating a serious fiscal contingency for the Federal (central) Government. This led to the incapacity to observe the commitment in the case of Argentina in 2001 and may well lead to a problematic outcome during the excessively long transition period established in the recent Constitutional reform in Colombia. These laws have however also contained some more promising norms that would limit transfers (or expenditures) to a moving average of past transfers or expenditures) after the “transition” periods.

¹⁶ González, Rosenblatt and Webb (2002): “Stabilizing Intergovernmental Transfers in Latin America: A Complement to National/Subnational Fiscal Rules,” mimeo and Braun., M. and M. Tommasi (2002): “Fiscal Rules for Subnational Governments. Some Organizing Principles and Some Latin American Experiences,” mimeo.

Such a provision, applied both to National and subnational expenditures, could go a long way to help avoid the procyclicality of fiscal policies and facilitate at least the operation of built-in stabilizers, while at the same time helping to obtain solvency goals by avoiding a deficit bias. Even better, the goals established in such laws might be coined in terms of “structural” balances, taking explicit account of cycle and primary commodity price effects, as discussed below.

C. THE CHILEAN STRUCTURAL BALANCE RULE

Chile recently adopted a more ambitious rule designed to facilitate credible counter cyclical policies and enhance fiscal solvency. It is elegant and simple: an explicit commitment to keep a 1% structural surplus each year. The structural balance is estimated by removing the effects of variations in copper prices (by using a panel of experts to estimate the long term price trend) and the economic cycle on revenues (by using revenue elasticity estimates and a measure of potential GDP).

This rule will force the government to high surpluses during booms and high copper prices and will allow to run moderate deficits during downturns and low copper prices. For example, the estimated budget deficits for 2001 and 2002 are consistent with the structural surplus required by the rule.

The fact that both the size of the surplus in good times or the deficit in bad times are constrained and predictable, will facilitate to curb political pressures to either use the surpluses or enlarge the deficits (as it would imply the breaching of the 1% surplus rule). It will also enhance the credibility of fiscal policy vis a vis the markets -provided, of course, that results are close enough to the rule-, as the deficits in bad times can be clearly anticipated and will not signal a relaxation of the fiscal stance.

The use of this rule is helping Chile to conduct a credible counter cyclical fiscal policy at present. As Anne Krueger praised recently in Santiago, Chile is using “virtue with a purpose” as, in her words, fiscal conservatism is not a purpose on itself but a means to keep good access to markets, low interest rates and the capacity to conduct expansionary policies in bad times.

Credibility gains from this new rule have largely been immediate, given the track record of Chile and the fact that authorities are using credible measures and projections of potential output (which have been used for long for the conduct of monetary policy) and revenue elasticities¹⁷. Other countries willing to follow

¹⁷ Technical problems are however non negligible. Simulations exercises indicate that (by just using present output gap models and revenue elasticity estimates) the potential for counter cyclical smoothing of the present rule would be fairly limited, as effects of the estimated cyclical adjustment would be just a small fraction of expected corrections related to the volatility in copper prices. In other words, as presently applied the rule would not do much more than what was accomplished by the Copper Stabilization Fund.

this example would probably have to establish first a sound analytical/statistical basis (to be able to credibly predict or assess potential output, and to include a correction on interest payments –which may be the most procyclical component of the fiscal balance, a problem that Chile does not face- or define the structural balance in *primary* terms –altogether excluding interest payments¹⁸).

They should also probably adopt such a rule in good times, so as to build some track record before the bad times come, and establish it with force of law and adequate enforcing (penalty for noncompliance) measures. Chile may also find useful to “institutionalize” more the rule, as at present it is just the expression of the policy of the present government (see figures 4 and 5).

7. CONCLUSIONS AND A POLICY PROPOSAL. TOWARDS SUSTAINABLE COUNTER CYCLICAL FISCAL POLICIES

The above discussion highlights several facts. First, that it is as important to try to reduce procyclical bias as it is to eliminate the deficit bias in Latin American fiscal policies. The procyclical bias accentuates macroeconomic volatility, with harmful effects on growth, and hurt specially the poor, by forcing sharp reductions in social expenditures per poor person precisely at the time when they are most needed, thus adding unnecessary “policy risk” to the income risk of the poor.

Second, that fiscal policies or rules must attempt to deal with both problems at the same time. Obviously, counter cyclical policies that contribute to a deficit bias will not be sustainable. But also, policies or rules that attempt to reduce the deficit bias and achieve fiscal solvency while increasing procyclicality, are likely to prove non sustainable over the medium run.

Properly designed fiscal rules may indeed help to cope with the political economy and credibility problems that are behind the operation of procyclical fiscal policies (and deficit biases). They may help to contain political pressures to spend away potential surpluses in good times by tying the hands of authorities and keeping “surpluses” out of reach of the political process associated with normal discretionary budgetary practices, **as long as they are successful in imposing high exit costs from the rule.** They can give credibility to the sustainability of deficits in downturns if in fact they have resulted in surpluses in upturns, and because such deficits will be entirely predictable and limited by the rule, thus increasing the likelihood that they will be financeable (they would be partly or wholly financed by the savings achieved in good times). The fact that deficits will be limited by the rule, may also help to keep pressures for excessive deficits at bay during bad times.

¹⁸ Hausmann’s paper in this Conference: “Unrewarded Good Fiscal Behavior: The role of Debt Structure,” show that interest payments have been the more volatile component of public expenditures in LAC.

Of the different rules examined, the most convenient seems to be a goal of structural balance, or modest structural surplus, such as the one recently adopted by Chile. Such a rule would permit full operation of automatic stabilizers during the economic cycle and avoid sharp changes in public expenditures associated with changes in fiscal revenues from commodity exports receipts.

Other countries in the region would benefit from adopting a similar structural balance framework for the presentation and discussion of their fiscal policy, even if they do not adopt a structural balance rule. To do so, in addition to continue improving their fiscal accounting, they will need to have reliable estimates of potential output and revenue elasticities. They would also have to develop ways to adjust for the cyclical components in interest rates or, alternatively, to base their policy goals on adjusted primary balances. IMF assistance could be of great help as it has developed a well tested methodology that it regularly applies to analyze and discuss the fiscal stance of OECD countries. The IMF might also consider requiring a structural balance framework as part of the Code of Good Practices on Fiscal Transparency.

Structural balance rules should form the basis of future attempts to establish Fiscal Responsibility Laws and Stabilizing Transfers for subnationals. Most recent designs of FRL, while already adopted or at a discussion state, rely excessively on rigid quantitative ceilings that do not take into account the effects of shocks or the economic cycle. They are thus likely to accentuate procyclicality of fiscal policies and to prove non sustainable in the end, as happened in Argentina and Peru. Such a limitation may reduce ex-ante their credibility, severely reducing their usefulness. The same can be said of recent attempts to adopt rules for stabilizing transfers to subnationals in Argentina and Colombia: by instituting a long transition period of rigid quantitative targets, they can become minimum guarantees that add to Federal or Central Government fiscal risks.

Those countries that are not yet in the capacity of adopting credible structural balance frameworks and rules, may benefit from considering more simple rules that would limit (real) expenditure growth to a moving average of past (real) revenue increases. Such a simple rule (that was included for the “steady state” in the Colombian OSF, in the Argentine FRL and the Colombian and Argentine stabilizing transfers provisions, though in some cases with excessively short periods for estimating averages) would significantly reduce procyclicality of fiscal policies and avoid a deficit bias.

Structural goals would be set according to fiscal consolidation needs. Thus, a country that starts below a sustainable structural balance should set goals that permit a gradual approximation to the required level. Alternatively, it would limit the expansion of expenditures to an increasing percentage (with a ceiling of 100%) of a moving average of real revenue increases. Thus, there is no need to wait until fiscal consolidation is obtained to introduce rules that make compatible the achievement of such goals with removing the procyclicality of fiscal policies.

Most importantly, it would be extremely useful if the IMF (and MDB and analysts in the private sector) decide to use systematically a structural balance framework when examining and discussing the fiscal stance of all countries (as the IMF already do for OECD countries) and set the goals of programs accordingly. After all, there is no good reason not to extend best practice already applied to the first world to the analysis and design of policies in the third world. It was most unfortunate that not only local authorities and analysts, but the IFIs and international markets indulged in accepting and praising highly expansionary procyclical fiscal policies in many Latin American countries (most notably in Argentina) during the good times in the early nineties, which turned out to plant the seeds of major fiscal crisis or at least significant fiscal stress during the bad times after 1998. We should not repeat these mistakes in the future.

ANNEX

THE EXPERIENCE WITH COMMODITY STABILIZATION FUNDS

A. The Colombian Coffee Fund

The Colombian Coffee Fund was instituted with the objective of permitting some stabilization in the incomes of coffee growers along the cycle of international prices, as well as to enforce commitments under the International Coffee Quota arrangements. But it also had, as a side effect, significant fiscal stabilization properties that became a major objective of government policy in the eighties and early nineties. In fact, given the importance of coffee in the Colombian economy, booms and busts were closely associated with cycles in international coffee prices. Taxes on coffee exports were indeed increased in booms and reduced in busts and there were attempts to avoid procyclical “fiscal” expenditures executed by the Fund (infrastructure and social expenditures in coffee producer areas).

As a para-fiscal institution, the Coffee Fund was not included in the Budget and was kept out of the normal fiscal political process, so their surpluses were kept from political eyes. In 1994/95 there was a short-lived attempt to adopt automatic rules for setting the “internal or domestic” price of the commodity (which determines the amount of export taxes) according to a mechanic rule. Otherwise, this was a joint decision of the Government and the Coffee Growers Association through the National Coffee Committee, which was headed by the Minister of Finance, who had veto power on this and on expenditure matters.

The Fund lost fiscal importance during the nineties, as coffee became less important from a BOP and fiscal point of view, and oil took largely its place, so the attention changed towards the establishment of an Oil Stabilization Fund. See below.

B. The Chilean Copper Fund

The Chilean Copper Stabilization Fund was created in 1985 to help stabilize fiscal revenues from the volatility of copper receipts. The fund was instrumental in facilitating fiscal surplus, for example, during the second half of the 1980s when copper prices were high. Accumulated deposits into the fund peaked in 1997 reaching a level of US\$ 3.9 billion.

It specially helped contain pressures for increased public spending at the beginning of the new Democratic period, during a cycle of high copper prices, by keeping the surplus out of reach of the political pressures inherent in the normal budgetary process, tying the hands of the Executive and raising the cost of appropriating it for additional expenditures (which would have required a change

in the Law). Thanks to the fund government expenditures have not closely tracked revenue availability.

The fund's saving rules were automatic, based on a moving average reference copper price. Unfortunately, the divestiture rules were not automatic. Authorities found in the downturn of 1998 and 1999 that previous surpluses and the savings in the CSF were not enough to facilitate a counter cyclical fiscal policy. This experience led the new government to search for new rules as we will see below

C. The Colombian Oil Stabilization Fund

The Colombian OSF instituted in 1995 uses automatic rules for both savings and retirements: it requires saving excess revenues over past moving averages, and permits retirements up to the shortfalls of actual revenues from such previous averages. Savings are kept abroad and administered by the central bank. In this saving scheme are forced to participate the National government, the Colombian Petroleum Company and subnational governments located in oil producing areas and hence with royalty rights.

It was designed to tie the hand of authorities and "hide" from political view the expected surpluses during the impending increase in oil production and revenues from new discoveries, as excess revenues to be deposited in the Fund are not included in the budget.

Two features facilitated political consensus.

1. Discussion and enactment well before the increase in revenues began to flow in: it is much easier to tie your hands before the fact.
2. The adoption of symmetrical rules for National and subnational governments, which were seen as "fair" by Congress.

The OSF did accumulate significant amounts. By the end of 2000 accumulated savings reached US\$1.3 billion. During this year –a year of high prices-, US\$695 million (0.80% of GDP) out of US\$1800 million in oil-related revenues were channeled through this saving scheme by participating agents.

However, it turned out to be less important than expected and did not avoid increased overall public expenditures during the boom in non-oil tax revenues (1991/96), which led to a significant increase in the deficit in the downturn (96/99). Hence the present search for new rules that would cover all revenues and expenditures.

D. The Ecuadorian proposal

Since Ecuador adopted full dollarization to stop a run on the currency and the banks and a hyperinflationary burst in early 2000, many of us have been concerned that the economy may be left to the mercy of the cycle of oil prices, experiencing strong booms and deep recessions. Recent high prices have indeed led to a boom (the fastest growing economy in LAC last year) and the construction of a new pipeline will permit almost doubling oil exports.

The previous Finance Minister proposed to Congress the adoption of strict rules to manage the additional oil revenues. If approved all new revenues will go either to a savings or to a stabilization fund. Retirements for the budget from the first one will be limited to interest receipts and from the second to the fall in oil revenues from a moving average. The Funds would avoid an excessively rapid build up of expenditures when the new pipeline start production, and would improve significantly the resilience of the economy vis a vis revenue changes in the future, in spite of the fact that the use of present revenues is not affected. This last feature may facilitate a political consensus, though it limits significantly the counter cyclical potential of the Fund. (Based on the Colombian experience, the authorities want to reinforced this saving scheme with a fiscal rule devoted to control overall expenditures).

Figure 1
Long-term Volatility of Real GDP Growth

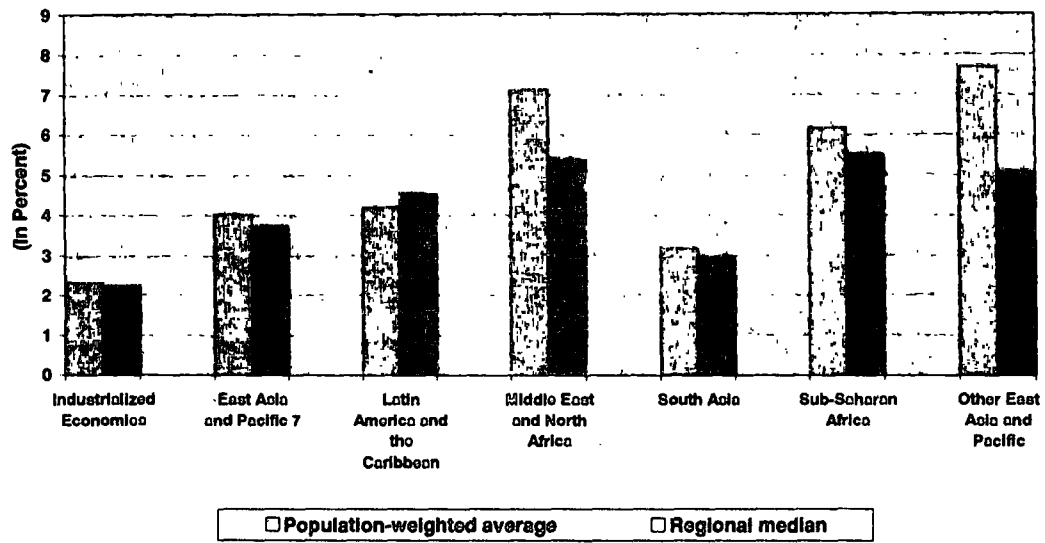


Figure 2
Volatility of real GDP growth by decade
(Regional Medians)

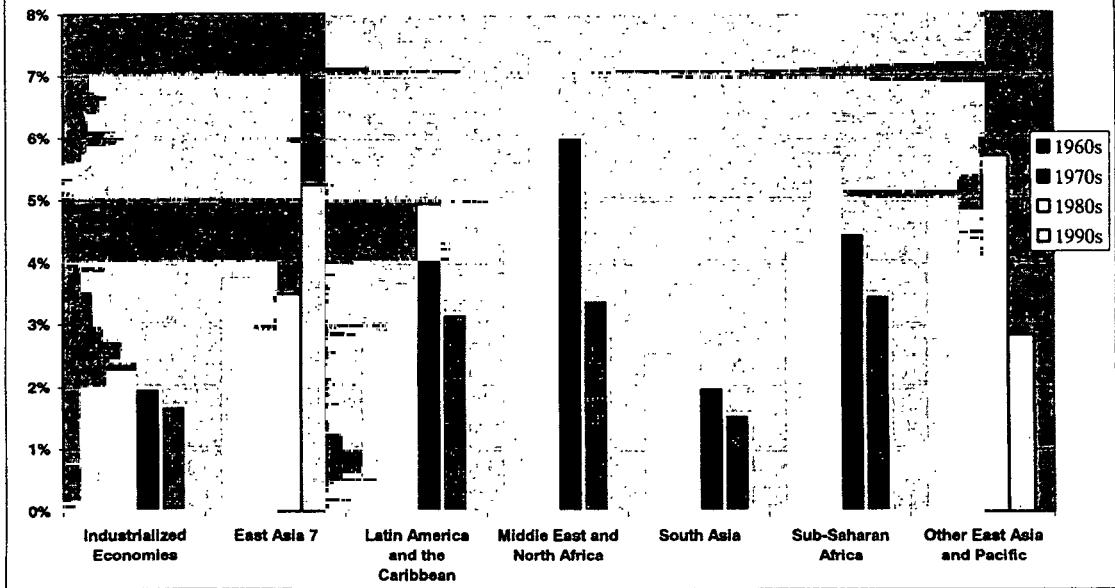


Figure 3
Causes of Latin America's "excess volatility" over
OECD and East Asian countries (1975-99)

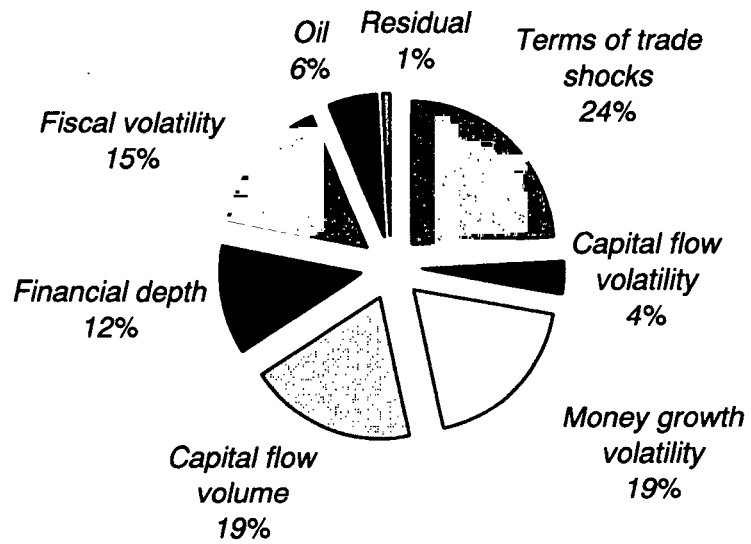


Figure 4
Structural Balances in Argentina

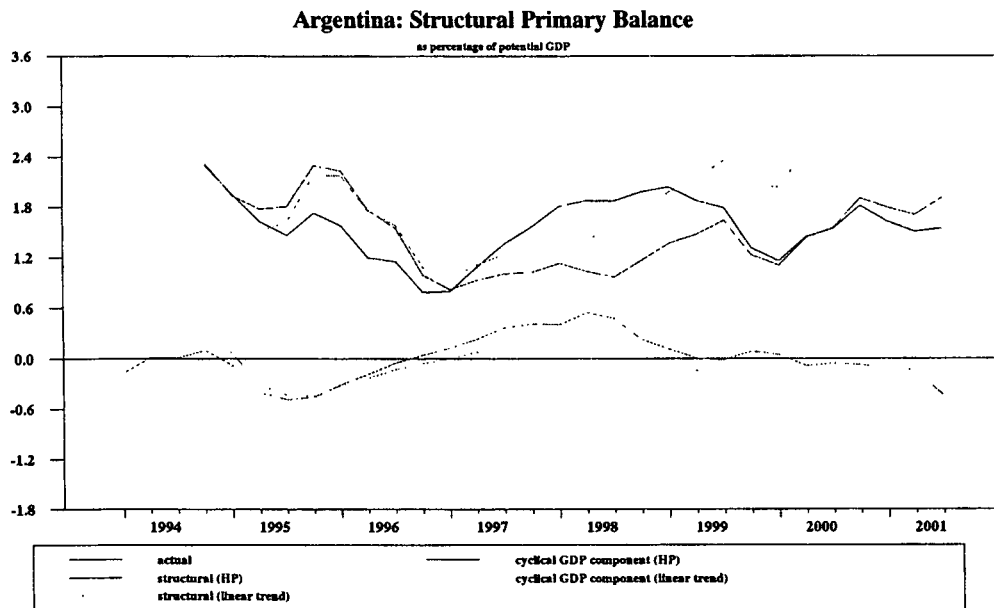
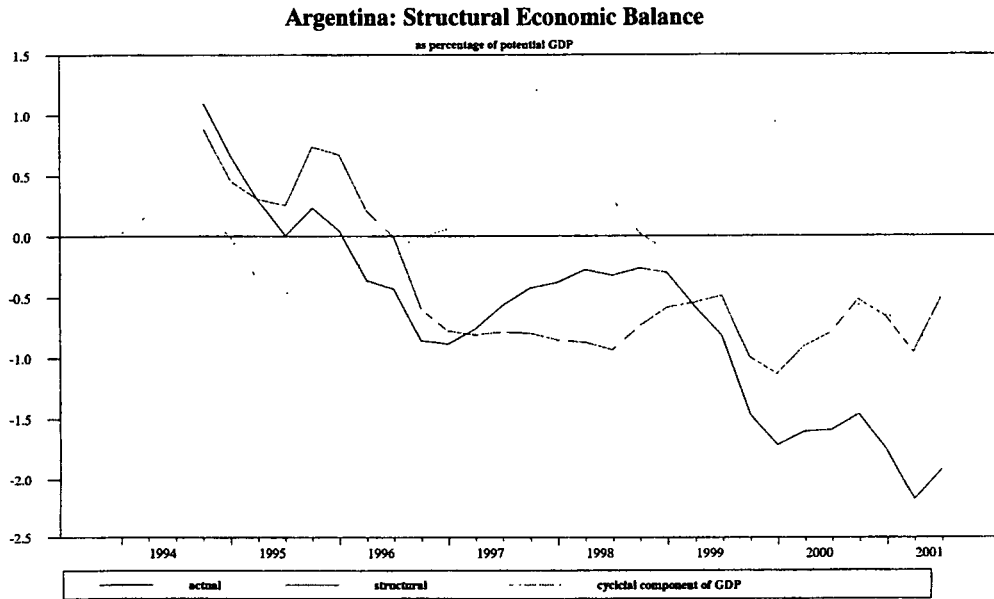
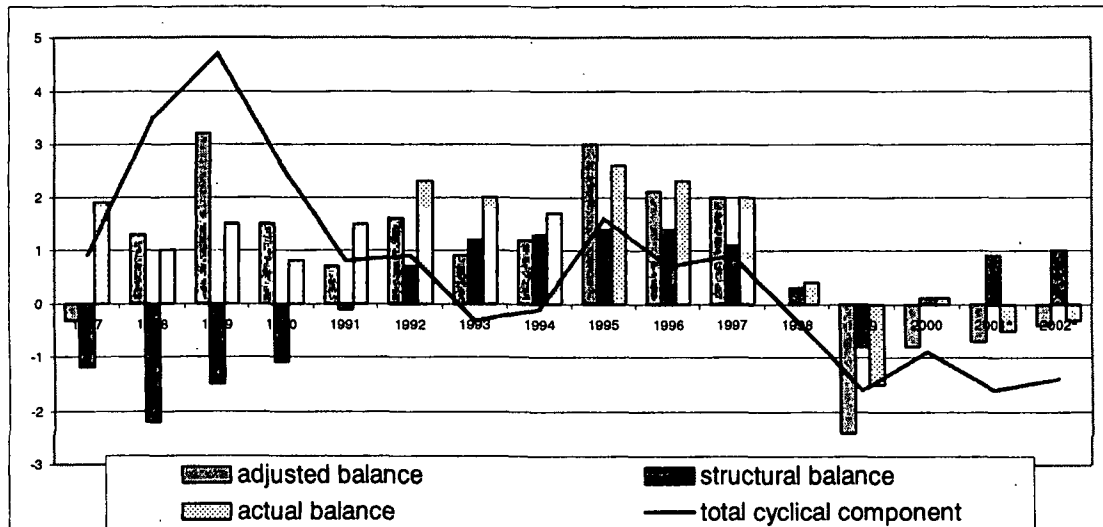


Figure 5
CHILE: Actual, Adjusted, Structural Balance and Total Cyclical Budget Components

(% of GDP -values for 2001 and 2002 are estimates-)



Note: the structural balance is derived not from the actual fiscal balance, but from the adjusted fiscal balance. The adjustments made to the actual balance are guided by the objective to better capture the net-worth of the central government¹⁹.

¹⁹ On the revenue side, privatization receipts and other flows related to purchases and sales are subtracted, while deposits to the copper fund are added. On the expenditure side, adjustments are made to ensure accrual-based treatment of Pension Recognition Bonds.

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