

Journal of Globalization and Development

Volume 1, Issue 1

2010

Article 14

Latin America: The Structural Fiscal Balance Policy in Chile: A Move Toward Counter- Cyclical Macroeconomics

Ricardo Ffrench-Davis, *University of Chile*

Recommended Citation:

Ffrench-Davis, Ricardo (2010) "Latin America: The Structural Fiscal Balance Policy in Chile: A Move Toward Counter-Cyclical Macroeconomics," *Journal of Globalization and Development*: Vol. 1: Iss. 1, Article 14.

DOI: 10.2202/1948-1837.1051

Latin America: The Structural Fiscal Balance Policy in Chile: A Move Toward Counter-Cyclical Macroeconomics

Ricardo Ffrench-Davis

Abstract

This is one of the journal's symposia entitled "The Return of Counter-Cyclical Policies."

KEYWORDS: macroeconomic policy, Chile, Latin America, counter-cyclical policy, crisis

Author Notes: I appreciate the valuable contributions of Rodrigo Heresi and Heriberto Tapia. Ricardo Ffrench-Davis is Professor of Economics at the University of Chile and Chairperson of the Committee for Development Policy of the United Nations. He holds the Chilean National Prize for the Humanities and Social Sciences and has represented Presidents Ricardo Lagos and Michelle Bachelet in the International Initiative to Fight Hunger and Poverty. Professor Ffrench-Davis received a PhD degree in Economics from the University of Chicago. His previous positions include: Principal Regional Adviser of ECLAC; Director of Research and Chief Economist, Central Bank of Chile; Co-founder and Vice-President of the Center for Economic Research on Latin America (CIEPLAN). He has published 21 books and over 120 articles on international trade and finance, development strategies, and Latin American economies.

Introduction

The development of counter-cyclical fiscal mechanisms in emerging economies is especially relevant for three reasons. First, domestic markets in developing countries tend to be much more volatile than in developed countries. This implies that the effect of the business cycle on public accounts is stronger. Second, in developing economies the size of automatic stabilizers tends to be smaller than in developed economies. Third, on the external side, the capacity to manage deficits is more limited, given the pro-cyclical character of international capital markets and the insufficiency of compensatory financing from IFIs.

As a matter of fact, despite significant improvements in inflation control, Latin American Countries (LACs) have experienced repeated recessive situations, working more often than not significantly below their economic potential. Chile also experienced that situation in the 1970s, 1980s and in 1999-2003. That macroeconomic disequilibrium has been closely associated to the capital account and volatile flows.

How can these problems be dealt with? Although the origin of the major macroeconomic crises in LA has been associated with external shocks (financial flows and/or terms of trade), there is a role in the transmission channels through domestic policies. In particular, there is a significant role for fiscal policy, on which we will focus in this note. In fact, improving fiscal policy in the last 20 years, and also in the present global crisis, has helped to soften the domestic business cycle, but it is generally unable to fully counter strong/persistent/volatile financial flows, and more recently, terms of trade shocks. Recall that macroeconomic government absorption accounts only for 1/3-1/7 of total GDP in LACs, and in the particular case of Chile somewhat above one-fifth. Notwithstanding its limited size, it has been playing an equilibrating role vis-à-vis the destabilizing role of private expenditure (see Marfán, 2005 and Ffrench-Davis, 2008, table I.3).

Fiscal policy has been at the core of the debate on adjustment programs in emerging economies (EEs). Both in East Asia and Latin America the more conventional recipes recommended achieving current or annual fiscal balances, under recessionary situations that had depressed tax proceeds. The wrong recipes that the IMF tried to impose on Korea in 1998 are illustrative. That is typically pro-cyclical behavior. In recessions, usually fiscal policy has been directed towards keeping financial solvency under control, while during booms expenditure has frequently been expanded. This pro-cyclical stance tends to restrict the room for social programs and the scope of public investment during recessive periods and, in doing so, strengthens the negative effects of volatility on living standards and future economic growth, respectively. In addition, pro-

cyclical fiscal policy has exacerbated the boom and deepened the bust in the private sector, increasing macroeconomic instability and reducing the space for monetary and exchange rate policies.

Fiscal policy should look at macroeconomic instability in two senses. On the one hand, since public revenues and expenditures are sensitive to business cycles, it is crucial to ensure a path of public expenditure consistent with a sustainable fulfillment of the permanent development goals of the government (regular budget, including social policies and public investment). On the other hand, fiscal policy has also a macroeconomic role, in terms of the regulation of aggregate demand and contributing to “right” macro-prices such as the exchange rate.

As part of a counter-cyclical policy package, the concept of *structural fiscal balance* (FSB) is an outstanding fiscal component. There are different varieties of FSB, but the essential component is the measurement of the balance across the business cycle, estimating at each point of time what would be the public income and spending in a framework of sustainable full employment of human and physical capital; that is, an economy making full use of potential GDP (GDP*). If the terms of trade fluctuations are relevant for fiscal proceeds –via profits of public companies or private exporters– the purchasing power of GDP* should be estimated at the trend terms of trade. Given a tax burden, those two trends must guide the evolution of public expenditure.

A word about the terms of trade and volatile export proceeds is necessary. Developing countries typically concentrate their international trade on a few commodity exports, which are subject to highly volatile market prices. Especially when a significant export –like copper in Chile and Peru, and oil in Colombia, Mexico, or Venezuela– is public property, the establishment of a stabilization fund can contribute to both fiscal and overall macroeconomic sustainability, particularly of the exchange rate.¹ Above the trend or “normal” public proceeds from that source are saved in these funds, in order to finance public expenditure when proceeds are below “normal”.

The aforementioned measures help to develop a cyclically-neutral fiscal policy, where current expenditure is stabilized by linking it to the structural level of fiscal income. The pro-cyclical stance is avoided and the efficiency of public expenditure enhanced: actually, the stop-and-go, associated to cyclical fluctuations implies significant inefficiency, for instance, in public works. However, we are still short of a counter-cyclical approach. In persistent recessive situations, governments may go beyond maintaining the level of expenditure. They may decide to carry out expansive shocks of (transitory) expenditure

¹ It is interesting that Colombia was a pioneer in Latin America with a coffee stabilization fund, in a market of private producers. This fund played a relevant stabilizing role in the macroeconomics of Colombia for several decades.

increases and/or tax reductions, thus running contemporaneous structural deficits, in order to stimulate domestic demand;² naturally, they would do the opposite during heating booms. During recession— defined here by a gap between actual GDP and GDP*, already corrected excessive external deficits and excessively appreciated exchange rates--an increase in aggregate demand is required. The gap implies underutilized labor and capital, providing space for increased public works, building and improving public schools, etc. Additionally, emergency public employment programs and incentives for hiring workers to the private sector contribute to a counter-cyclical softening of unemployment in recessive situations.

The fiscal instruments chosen to implement counter-cyclical policies must be pragmatically chosen (see Stiglitz, 2005). During booms, for example, a reduction in public expenditure will be probably insufficient to compensate for an excess of expenditure of the private sector led by capital inflows. An increase in taxes, instead, can directly affect the agents with a higher propensity to spend and spreads its effects across the different sectors of the economy. During an economic downturn, tax relief may be ineffective under a depressed macroeconomic environment and a private sector reluctant to consume and invest. Public expenditures in non-tradables can, in this latter case, be a more effective instrument.

Fiscal policy ought to be part of the flexible policy package. Given that EEs are especially vulnerable to global economic downturns, over reliance on monetary policy may bring poorer macro results, as compared to a more balanced framework of counter-cyclical fiscal, exchange rate, and monetary policy, as well as prudential regulation of capital flows. The use of counter-cyclical fiscal policy requires as a precondition to be on a path of solvent and sustainable fiscal accounts. Additionally, a more active role of counter-cyclical fiscal policy may emerge when transmission channels of monetary policy to the output gap are weak or show significant lags. Moreover, to spread the adjustment burden between fiscal, foreign exchange and monetary policies, may bring better macroeconomic results, with each macro-price (interest and exchange rates) closer to sustainable equilibriums and an actual GDP closer to its potential level.

² In 1998 Korea decided to abandon the orthodox road recommended by the IMF, adopting an active counter-cyclical policy. Actually, in 1998 the fiscal deficit reached 4.2% of GDP, due to expanded expenditure and selected reduction of taxes. When the economy recovered, the fiscal balance returned to a surplus (Mahani *et al.*, 2006).

1. A Conceptual framework

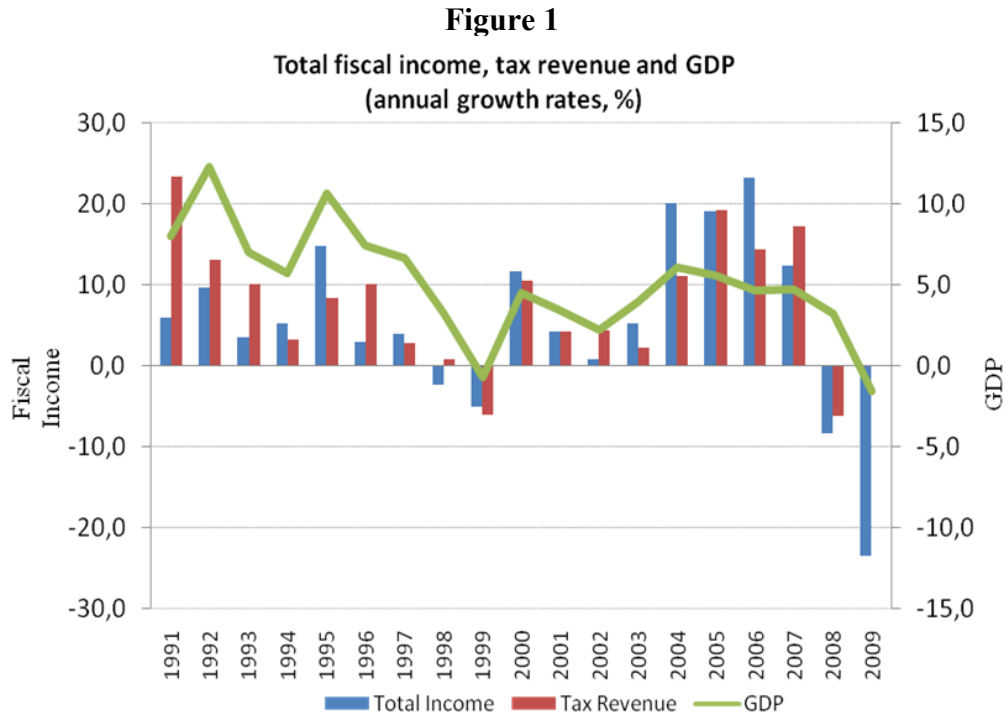
a) Methodology

Conceptually, Chile's structural balance methodology isolates the impact of the business cycle on public finances, providing a long-term picture of the fiscal situation in terms of both income and spending. It consists of maintaining in each annual budget a level of fiscal expenditure consistent with revenues collected as if the economy were fully using the productive capacity (potential GDP) and as if the copper price was at its long-term level.³

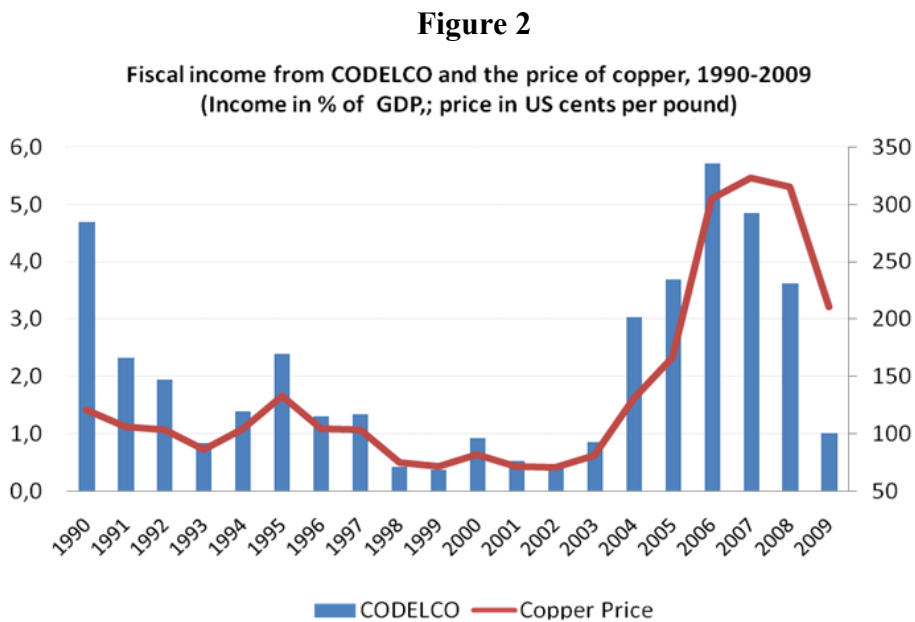
Therefore, when the economy is overheated, the government naturally collects larger than "normal" (to be defined below) tax revenue, but it does not increase expenditure, thus accumulating savings; and in the bust, the government uses those savings (or borrows) to cover depressed tax revenue associated to the slower economic activity, thus maintaining the trend of expenditure. This rule implies a relevant conceptual progress on fiscal and macroeconomic management, with respect to the standard policy-recipe in which expenditure follows economic cycles; given the strong volatility of international trade and financial markets, the standard neo-liberal recipe is highly pro-cyclical.

The cyclical impact of GDP growth on fiscal income is shown in Figure 1. It is evident the strong correlation between total income –and particularly tax revenue– and economic activity measured by GDP annual growth rates. However, the gap between actual and trend GDP is not the only source of cyclical dependence in Chilean fiscal income. Copper normally accounts for around 15% of fiscal income, including both taxes and all profits from CODELCO, and taxation of private mining companies (see Figure 2).

3 In Marcel *et al.* (2001) the basic features of the rule are exposed. Tapia (2003) develops an analysis of the macroeconomic implications and proposes a series of adjustments to improve its effective counter-cyclicity. Recent important adjustments are exposed in DIPRES (2007).



Source: Author's calculations based on Budget Office and Central Bank figures.

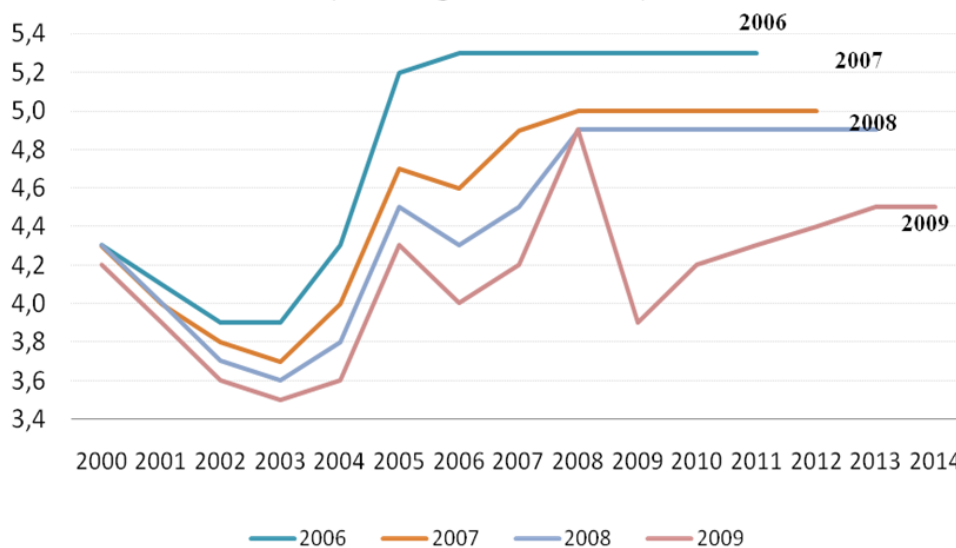


Source: based on Budget Office and Central Bank figures.

The use of this fiscal framework requires the estimation of several key structural (non-observable) parameters: a) the trend GDP growth rate and b) the long-term price of copper. The estimation of both parameters is made with inputs provided by two independent committees of experts on an annual basis. The definitions of the key parameters and assumptions have been made increasingly transparent, the disclosure of information to the public has been improved, and the methodology has been refined. Figures 3 and 4 show how the structural parameters have evolved over the last few years.

Figure 3

Trend GDP: annual review by Committee of Experts,
2006-2009
(annual growth rate, %)

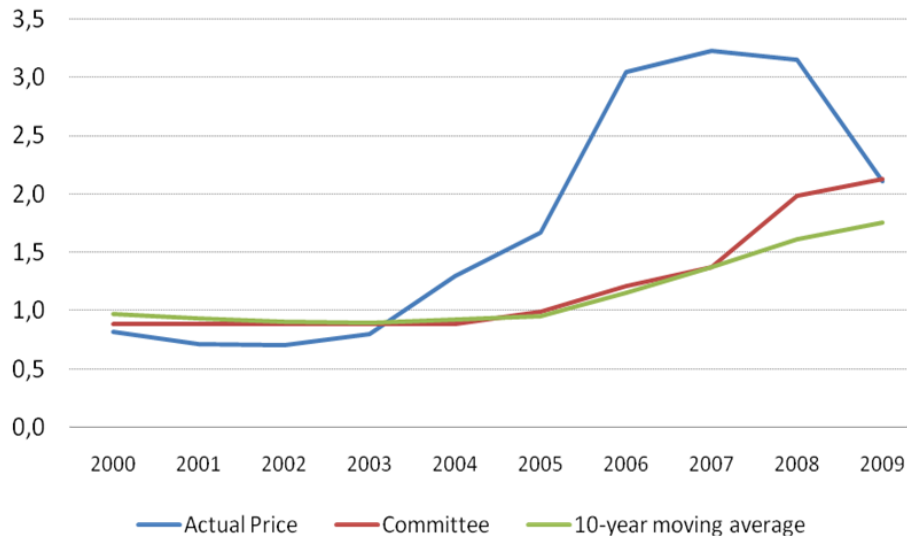


Source: Ministry of Finance.

Note: Each year the Ministry estimates the trend GDP growth rate for the next 5 years with inputs provided by the committee of experts; also re-estimates the figures for past years. Each curve represents the trend growth path (past and future) estimated at the respective year.

Figure 4

**Actual and long-term nominal copper price, 2002-2009
(US cents per pound)**

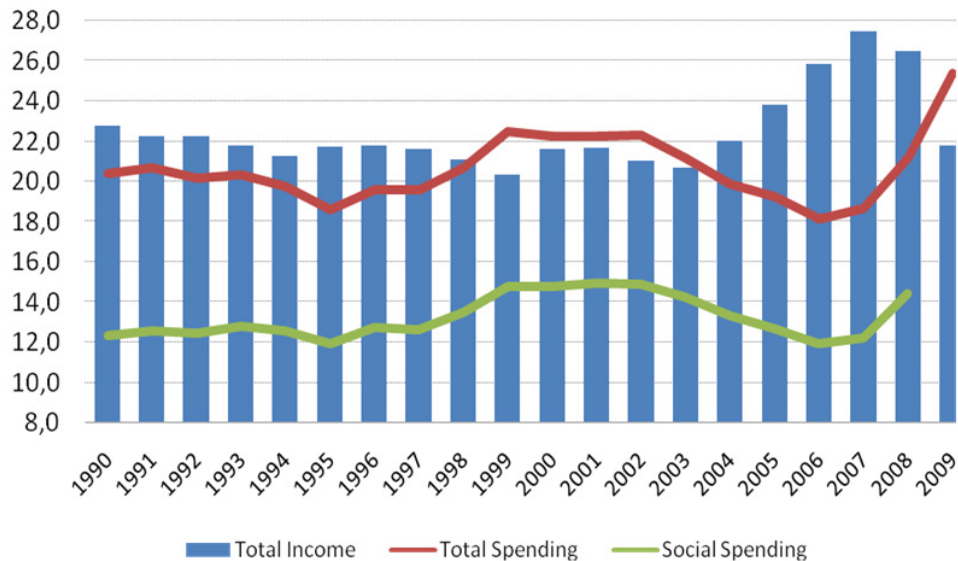


Source: Author's calculations based on Ministry of Finance and Central Bank figures.

Evidently, fiscal responsibility was not a novelty in Chile when this framework was started in 2001. The nearly 2% average surplus in the 1990s, since the return to democracy in 1990, testify to that fact (see Figure 5). The concept of trend copper price was also already in command, with a copper stabilization fund at work for over a decade, and a significant precedent established successfully in the 1960s though dismissed since the 1970s. But, in this case, the formal launching of the stabilization approach was quite useful, including interesting features adopted such as the creation of committees of independent experts for estimating trend price of copper and inputs for trend GDP, when Chile was facing a recessive gap since 1999.

Figure 5

**Central Government: Income and Spending, 1990-2009
(% of GDP)**



Source: Based on Budget Office figures

In fact, the formal adoption of the structural balance took place in a context of a depressed economy, the macroeconomic need of an actual fiscal deficit, and the assumption of a new president from a leftist party. The formal, and well advertised launching, was an opportune and efficient step from an economic and political perspective.

In August 2006, the structural rule and fiscal policy that previously depended exclusively on administrative decisions and political will were institutionalized. The Fiscal Responsibility Law reinforced both credibility and transparency of fiscal policy.

b) The 1% Surplus Target

This positive fiscal rule was accompanied by certain features that are not intrinsic to it, but options in its implementation. A key feature was the level at which the structural balance is targeted. During the first years, a structural surplus target equivalent to 1% of GDP was set with the aim of ensuring the accumulation of assets with which to reduce the liabilities inherited from the debt crisis in the 1980s, and meet future public sector commitments, including particularly the contingent liabilities generated by the guaranteed minimum pension and old-age

benefit. In addition, another argument for maintaining a structural surplus was the structural operating deficit of the Central Bank of Chile, as a result of losses arising from the bailout of the private banking system during the 1980s.

After some years of strong fiscal saving owing to the persistent boom in commodity prices, the Treasury became a net creditor of the rest of the world, and counted with growing stabilization funds. By late 2008, the Economic and Social Stabilization Fund (the follower of the Copper Buffer Fund) and the Pension Reserve Fund had accumulated the equivalent of 18% of GDP, while fiscal liabilities were negligible, after the significant amortizations made with the previous surpluses of the fiscal balance. The socially profitable allocation for that 1% of GDP was to finance social investments and productive development; such as better quality of education, labor and small entrepreneurs training, innovation support, regional infrastructure, and incentives for long-term financing of SMEs and new entrepreneurs—all items in short supply for securing faster development convergence with rich nations.

At a certain point, it did not make sense anymore to continue accumulating money year after year in a country with still high social needs. Consistently, the structural surplus target for 2008 was reduced to 0.5% of GDP. The contagion of the global crisis led to a further reduction of the balance to 0% in 2009. In parallel, Chile moved sharply from the rather cyclically neutral approach to a strong countercyclical one. In 2009, it is expected to reach a 0.4% structural fiscal deficit and to a 4% measured deficit, with a 15% rise in fiscal public investment.

2. Benefits and Challenges

a) Challenge: From a pro-cyclical to a counter-cyclical spending

The structural rule allowed the maintenance of a level of expenditure consistent with medium term trends (estimated or rather, as will be shown, underestimated) of GDP. This was very positive in the context of the recessive gap in 2001-03 and in 2009, under depressed fiscal revenue. A structural surplus was consistent with an actual deficit in those years. In contrast to the neo-liberal recipe, it implied sustaining fiscal expenditure in spite of a decreasing GDP, but it did not justify increasing expenditure to offset recession. Consequently, it implies a fiscal policy rather neutral with respect to the economic cycle, but falls short of being properly counter-cyclical.

Nonetheless, some countercyclical spending was carried out in the form of emergency employment programs and the unemployment insurance. Additionally, the Anti-unemployment Contingency Programme, which previously required annual approval under the budget law, became permanent with the Fiscal Responsibility Law establishing its objective, conditions and financing. The instrument is available at national, regional or local level. In practice, the program

can be activated whenever the conditions established by the law are met: in this case, when the national three-month rolling average unemployment rate, measured by the National Statistics Institute (INE), exceeds its average for the previous five months, or when it reaches at least 10% of the labor force (DIPRES, 2007).

In order to progress toward a more efficient macroeconomic policy, it is required to go beyond neutrality. It is necessary to advance decidedly toward a counter-cyclical approach, which has been done in 2009 under the challenge of the current global crisis (in fact, the projected structural balance for 2009 is a deficit of 0.4% of GDP).

An effective counter-cyclical fiscal approach would involve anticipating public expenses in recessive situations, like in 1999-2003, and to temporarily reduce some taxes like the VAT or social security contributions. The reverse policies would be appropriate in overheated situations like in 1989. This would imply a move toward effectively counter-cyclical taxes and expenditure. The doses of each component should be associated to the expectations about effectiveness of tax changes vis-à-vis expenditure changes and of perceived shortages or excesses in each of them. Given the low tax burden in Chile (18% of GDP) and the insufficiency of investment in public works, education and innovation, an asymmetrical treatment is recommended: increase public investment in recessions and raise taxes in booms.

b) The definition of trend or potential GDP

The definition of the concept of “potential GDP” is essential for implementing an approach of structural fiscal balance. It can be defined as a production frontier (GDP*) or as a trend GDP (GDP^T). On the one hand, GDP* is defined as the maximum sustainable level of production by the economy; in volatile economies it implies a significant average gap between GDP* and actual GDP, where the latter is usually below GDP*. In fact, in unstable economies, actual GDP can be sharply below GDP*, while only exceptionally can be above it; it is a quite relevant asymmetry for macroeconomic policies. On the other hand, GDP^T can be defined as the level of production consistent with a “normal” use (in statistical terms) of productive inputs; that is the trend value component of actual GDP, which implies equivalent of symmetrical positive and negative gaps.⁴

The central question, then, is to ascertain the relevant concept to calculate the structural fiscal accounts: maximum attainable or trend output? The methodology of the Ministry of Finance makes an explicit option in favor of trend GDP concept (Marcel *et al*, 2001). The arguments are, first, that trend GDP is the most standard methodology used by “the profession”, and, second, that the feature

⁴ In Ffrench-Davis (2008) a further analysis is made and two alternative estimates are made of potential GDP for Chile.

of symmetry between positive and negative gaps maximize transparency and diminish risks of lack of credibility.⁵

The main disadvantage of using the trend measure is the weakening of counter-cyclical policies. In practice, economic cycles are not symmetrical from the point of view of the duration and intensity of the booms and busts. Further, although statistically, a trend of recent history can be obtained, this one frequently (as it happens with averages) does not reflect a state of “normality”. Thus, if, for instance, actual GDP exceeds the (estimated) trend level of output, but that is much below the productive frontier, the authority would be induced to undertake contractive macroeconomic policies which would tend to slow down or prevent economic recovery and future growth. On the other hand, if the economy falls below the estimated trend by a relatively long period, the trend growth rate itself would tend to fall further, implying a spurious reduction in the output gap (a “lowering the bar” effect), and therefore, a weakening of overall counter-cyclical policies.

Thus, guiding monetary and fiscal policies according to GDP^T instead of GDP^* results in a "self-fulfilled prophecy" that depresses the future productive frontier; figure 3, above, shows clearly the downward adjustment in the trend GDP growth rate made by the committee, even before the current global crisis; in fact, if macroeconomic active policy stops when reaching GDP^T , involves maintaining an output gap with respect to GDP^* that discourages capital formation. But, naturally, it contributes to controlling inflation with greater force. Those policies should be reformed, in order to be able to place economic activity closer to the level of potential GDP.

As a small-open economy, Chile is exposed to sporadic and often unpredictable events that affect its economic performance. Historically, exogenous shocks have affected economic activity because the country, in general, and the government, in particular, has had to adjust the level and composition of spending pro-cyclically. Since the structural balance policy was introduced, traumatic economic adjustments have not been required. In this framework, greater sustainability of public spending is a direct consequence of tying it to structural rather than actual income.

The main advantage of using the productive frontier definition is that it better serves the objective of maintaining real macroeconomic balances. In fact, several problems associated to the use of trend GDP in terms of their weak counter-cyclical effect can be solved by using the correct potential level of output.

⁵ It is interesting that modal methodologies, with standard filters, like that of Hodrick-Prescott, add estimates of several future years in order to avoid the bias introduced by the “final years”. Naturally, the future years are not responding to “purely objective” estimates.

There are two disadvantages to using the productive frontier concept of potential GDP. One is the greater difficulty of estimating its level. The other is that if a government is not in a solid financial situation at the time of an intense recessive period, liquidity constraints can take place, even in a structural balance setting, which can bring secondary costs in terms of expensive indebtedness, and possibly, an abandonment of the rule seeking a the short term balance. For that reason the soundness of the fiscal accounts and a context of credibility are essential conditions for the application of this option.

3. Fiscal policy facing the international crisis: Fiscal rule plus discretionality

The fiscal policy carried out by the authority has incorporated a set of instruments with the aim of moderating the downturn in economic activity and domestic demand. The strong resource accumulation in the recent years of high copper prices allowed designing a counter-cyclical fiscal budget for 2009, with a 14.5% real growth in public spending, in spite of the 23.4% fall in fiscal revenue with respect to 2008.

As a result, a fiscal deficit of 4% of GDP is projected for 2009, a figure that represents a small share of the fiscal surpluses accumulated between 2004 and 2008, equivalent to 28.5% of GDP, in a context of low gross national debt and a treasury that is a net creditor for the first time in its history. This actual fiscal deficit is the outcome of the Chilean fiscal rule, whose design is to incur in deficits in recessive years and to accumulate surpluses in boom years. Additionally, the government introduced a dose of discretionality in order to pull the economy out of the present recessive gap.

Most of the fiscal stimulus is being financed with money from the FEES. The funds saved abroad have been converted to Chilean pesos by the Central Bank under competitive auctions in the domestic financial market at the rate of US\$40 million a day, from July 1 of this year. Unfortunately, the corresponding increase in the supply in the domestic foreign currency market has been appreciating the exchange rate.

The main state-owned mining company CODELCO is capitalized with US\$1.000 million to finance relevant investment projects to maintain the competitiveness of the company in the future. Other operations under the line are the capitalization of the main state-owned bank BancoEstado, the main state productive fostering corporation (CORFO) and the Guarantee Fund for SMEs (FOGAPE).

A key mitigating policy of the fiscal plan is the delivery of two direct transfers of CH\$40 thousand (around US\$80) to each family dependent in low-income brackets; this measure benefits nearly 4 million people, focusing in the poorer income quintiles of population.

On the other hand, strong efforts have been carried out to extend the pension system through the already operating Pension Reform started in 2008. Since July 2008, the government started to pay Solidarity Basic Pensions (benefiting all Chileans who are 65 or more years old, who do not have another pension and who belong to the 2 first quintiles of the population). As of September 2009, in the heat of the international crisis, the coverage of solidarity pensions reached 50% of the poorer population. In addition, the government will provide a decreasing subsidy according to the level of private pensions, covering all pensions under a certain threshold (around US\$240 monthly). This way, 200 thousand additional people will be benefitted.

With respect to labor markets, incentives to hire low-income youngsters are set. The young beneficiaries will receive a subsidy equivalent to 20% of their wage and the employer an equivalent to 10%. This measure seeks to foster hiring and to diminish firing on a highly vulnerable group in periods of crisis.

Other counter-cyclical instruments that are being implemented during the recessive period include transitory tax reductions, temporary incentives for labor retention and training, support to female head of households and protection of household income in case of unemployment, and deepening of the counter-cyclical impact of the unemployment insurance benefits. With respect to social housing, the amount of the residential subsidy was increased transitorily, and its coverage was expanded to medium-income brackets.

4. Concluding Remarks

The Chilean fiscal policy has evolved in the last two decades combining discipline, transparency and macroeconomic management. Since 2001 there is a rule that, in spite of several shortcomings (such as the insufficient intensity of counter-cyclical effects) has served to avoid pro-cyclical bias and to give stability to public expenditure. As the concept of structural budget has gained credibility, it has been easier to introduce improvements and windows of discretion, for example, allowing for an unprecedented expansive reaction to the 2009 crisis in a context of fiscal sustainability.

Overall the Chilean experience shows the importance of both the introduction of structural budgeting as a principle and the value of learning in policy making, paying attention to the local structural specificities. Key challenges for the future are a greater understanding and guiding principles to deal with the macroeconomic effect of fiscal policy on economic activity, prices and the exchange rate determination. In particular, how to achieve a management of public savings that efficiently serves both to short term macroeconomic policy and to long term economic development.

Progress in fiscal policy must be matched by enhanced counter-cyclical capacity in the management of aggregate demand and the exchange rate, which in recent years have become quite unstable in response to pro-cyclical capital flows. Chile had, in the 1990s, an outstanding and successful experience with counter-cyclical regulation of financial inflows and the achievement of comprehensive real macroeconomic balances. It is time to consider its re-installment for the sake of stronger sustained growth-with-equity.

References

- DIPRES (2007), “Antecedentes para el Comité de Expertos”, Ministerio de Hacienda, June.
- Ffrench-Davis, R. (2006), *Reforms for Latin America’s Economies after Market Fundamentalism*, Palgrave Macmillan, London and New York..
- Ffrench-Davis, R. (2008), *Chile entre el neoliberalismo y el crecimiento con equidad: reformas y políticas desde 1973*, J.C. Sáez Editor, cuarta edición, Santiago; English edition forthcoming with Palgrave in 2010.
- Mahani, Z.A., K. Shin and Y. Wang (2006), “Macroeconomic adjustments and the real economy in Korea and Malaysia since 1997”, in R. Ffrench-Davis (ed.), *Seeking Growth under Financial Volatility*, Palgrave Macmillan/CEPAL, New York.
- Marcel, M., M. Tokman, R. Valdés and P. Benavides (2001), “Balance estructural del Gobierno Central, metodología y estimaciones para Chile: 1987-2000”, in *Estudios de Finanzas Públicas* N°1, September.
- Marfán, M. (2005), “La eficacia de la política fiscal y los déficit privados: un enfoque macroeconómico”, in J.A. Ocampo (ed.), *Más allá de las reformas: dinámica estructural y vulnerabilidad macroeconómica*, CEPAL/Alfaomega, Bogotá.
- Stiglitz, J. (2005), “Responding to economic crises: policy alternatives for equitable recovery and development”, *Working Paper*, IPD at Columbia University, Macroeconomics Task Force.
- Tapia, H. (2003), “Balance estructural del Gobierno central de Chile: Análisis y propuestas”, in *Serie Macroeconomía del Desarrollo*, N°25, CEPAL, August.