FISCAL POLICY RULES: EVIDENCE FROM CHILEAN ECONOMY

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ABSTRACT

This paper analyzes, structural budget surplus (SBS) rule evidence for the Chilean economy. We examine its effect on macroeconomic variables, such as credit worthiness, output volatility, policy effectiveness ,and welfare level gains over time due to economic growth. Thus, SBS becomes a public good with undeniable positive externalities which government authorities are called to provide. Moreover, countries depending upon commodities exports, must deal with the implications of associated prices increases and impact on expectations about spending; the risk of inflationary pressures; internal and external imbalances . Fiscal rules instead, provide a safety net for public income fluctuations, keeping stable cyclical adjusted spending , and saving the surplus due to higher public incomes.

JEL: H5, E62

KEYWORDS: Rules, Budget Surplus, Policy Coordination

INTRODUCTION

Fiscal Policy in Latin America has traditionally focused on distribution and taxes, but has also been a source of conflicts and unstable volatile growth (Lozano, 2008). For most of the twentieth century, its outcome as a macroeconomic tool, has been neither better income distribution nor efficient spending. The fiscal policy scope did not usually go beyond government priorities. The majority focused only on the short run. The fiscal deficit in many countries reached such a level that it became a real threat for democracy and its values (Lozano, 2008).

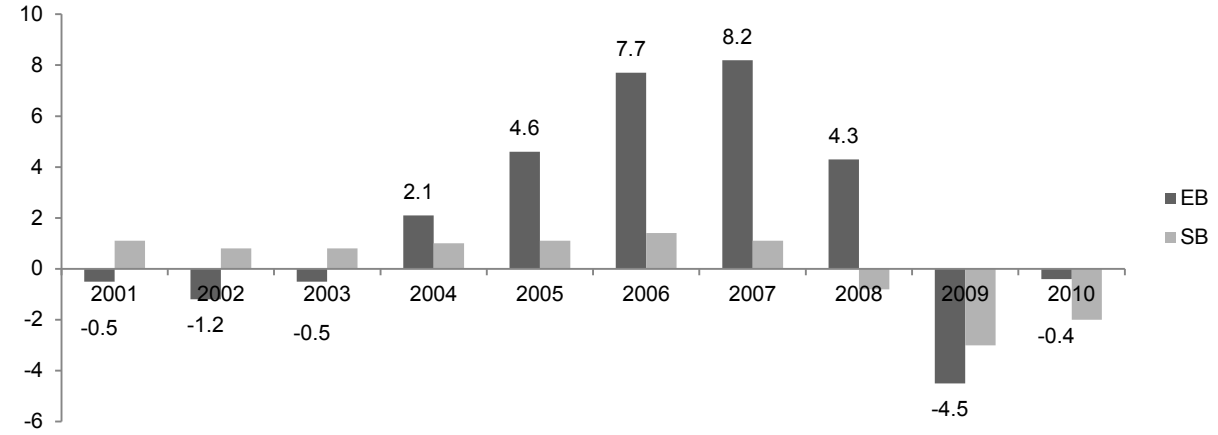
The implications were not just inefficiency, volatility, instability, and short run political setting. Fiscal policy became the missing policy for macroeconomic targets, such as better income distribution, higher levels of employment ,foreign investment, and credit worthiness. It failed to what Mundell(2008) called the main target of fiscal policy: Internal stability.

Fiscal Policy based on surplus is a new option for Latin American economies. Its implications and consequences are the subject of this paper. Budget surpluses arises in a country when total revenue is higher than public expenditures in a particular fiscal year. Budget surpluses are important because they cover budget deficits thereby keeping the net public debt under control. The surplus policy, allows without additional debt; higher spending as a countercyclical resource. It follows that fiscal policy becomes a complement for monetary policy decisions. Administrators have at their disposal effective policies.

Normally, it is not essential for Governments to maintain a budget surplus, especially when there are social demands, inequality, or because of policy decision such as the European Union case and its 3% deficit rule. Chilean economy authorities have designed and applied a fiscal policy, after learning from past experiences. These experiences concern the implications of overspending. After twenty years of fiscal responsibility, public authorities and politicians were well aware at the beginning of the decade, about the cost of deviating from it. Thus, the scenario was sufficiently mature to go further with the next step in the year 2001. The objective was to implement a structural budget surplus (SBS). Figures 1 and 2

show a summary of the impact of such a policy for the Chilean economy. It became a public surplus country, and net creditor.

Figure1: Chile Efective and Structural Balance 2001-2010



Source: Chilean Budget Office, Ministry of Finance

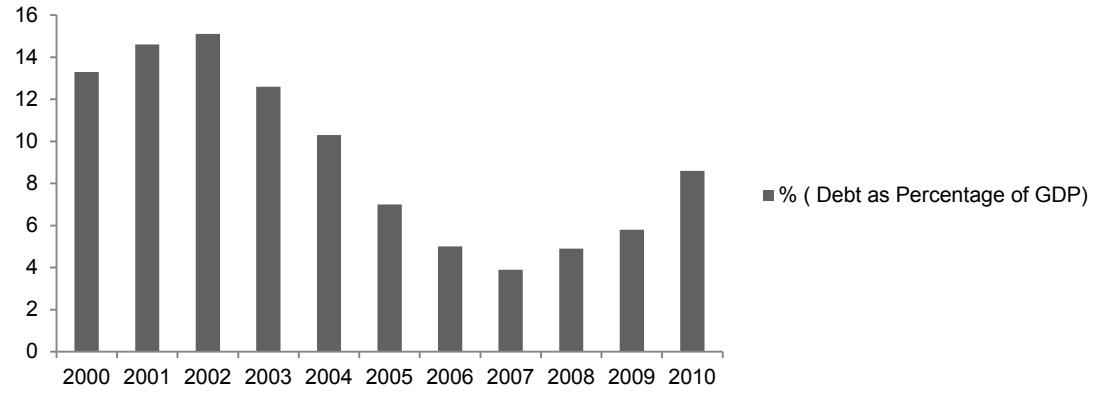
When government debts increase, interest payments goes up as a proportion of the country's Gross Domestic Products (GDP). Moreover, the interest payment, imposes an additional burden on the country's risk level, fiscal balances and constraint monetary policy decisions when it needs to use the interest rate as a tool for stabilization purposes. A rise in the interest load indicates that a higher proportion of government revenues cover financial costs rather than being used for the country's social and investment needs. The consequence, is a reduction in economic growth potential.

These issues are widely analyzed in the literature, which can be segmented in three areas; Theory and analysis (Mundell, 2008, Gordon, 1983, Mitchell, 2012), Learning from past experiences: (Lozano, 2008, Frankel, 2011, Engel, 2007, Arellano, 2005) SBS outcomes and implications, (Marcel,2001, Larraín, 2011, Schmidt-Hebbel, 2012) . These three categories, do not intend to constraint the discussion about fiscal policy as a whole, but are useful as a means to organize the analysis, the justification, characteristics, outcomes and implications of applying SBS in the Chilean economy in particular.

The literature is quite clear about the impact of better coordinated and consistent macroeconomic policies, on output volatility (Larrain and Parro, 2006), inefficiencies and welfare losses (Kumhof and Laxton, 2009), interest rate (Rodriguez, 2006), and exchange rate volatility (Velasco, 2010). The literature allows us to set as a starting point, that fiscal policy rules indeed, have a positive effect related to the effectiveness of the institutional framework for macroeconomic policy design and growth expectations. This paper is focused on the evidence of implementing structural budget rules in the Chilean economy. It does not address the implications of improving the institutional framework after the rule is imposed.

The paper is organized as follow. Section I, includes a literature review to focus attention on key issues concerning the role of fiscal policy, beyond distributive issues, its stand for economic growth, and the implications of following fiscal rules. Section 2, reviews the Chilean economy evidence concerning structural budget surplus rule, supporting factors, positive externalities associated with the SBS, implications for macroeconomic policies aimed at economic growth, and the effect of countercyclical fiscal policy on key policy issues such the Impossibility triangle, and sudden stops cases. Section 3 provides suggest a path for the future and concluding remarks.

Figure 2: Debt as Percentage of GDP



Source: Budget Office Chilean Government, Ministry of Finance

LITERATURE REVIEW

Following Frankel (2011), the importance of Institution actions such as Fiscal Policy has been widely examined by different authors such as: Alesina y Perotti (1995,1996), Poterba(1997), Poterba and Von Hagen (1999), Persson y Tabellini (2004), Wyplostz (2005), Calderon y Schmidt-Hebbel (2008), Calderon, Duncan, and Schmitt-Hebbel (2010). Authors examining fiscal institutions for commodities exporters are Davis (2001, 2003), Alesina (1999), Perry (2003), and Schmidt-Hebbel(2012). Pro cyclical fiscal policy is the main characteristic of less developed countries. More so in those cases which have strong dependence from commodity price fluctuations.

The SBS supports both economic recovery and smoothing of the business cycle. When the economy is in recession tax income drops, therefore the fiscal deficit increases as long as the pace of expenditure do not change. When economic growth gets back to its potential, tax revenues adjust to its previous level, closing the gap with fiscal expenditures (Gordon 1983).

The issue with public saving (SBS) arise, because both public revenues and expenditures do not have the same elasticity pattern. While tax revenues follows the output trend (tax revenues output elasticity is around 1), public expenditure elasticity is lower. It follows, that it takes more time to adjust expenditures down after a recession is over. Therefore, a deficit situation may last longer than expected with social cost crowding out effect, efficiency losses because of resource misallocation, productivity and competitiveness losses.

In the current integrated world, these costs are not trivial. It is better to be well aware of its consequences (capital outflow, inflationary expectations, increasing debt, higher country risk level, and uncertainty). Thus, while fiscal policy may help economic recovery , it may become a constraint for keeping a sustainable economic growth pattern when deficits are usual (Pastén and Cover 2010). Besides, there are lags in fiscal policy reactions arising from both lack of information and legislature procedures, all of which makes complications harder to handle.

Fiscal policy rule, like structural budget surplus (SBS), is based on the political commitment to control the fiscal situation and its exposure to short run political pressures. However, this does not imply creating a structural budget surplus as a fixed target.

The Chilean experience worked the structural budget surplus out in two phases. The first (2001-2008) with a 1% structural surplus, and the second (2009-2010) with a 0.5- 0.0% structural fiscal surplus. This signals the relevance of flexibility to adapt the rule to differing conditions concerning either economic

growth prospect. The proposed objectives or institutional framework surrounding its implementation may differ (Vergara ,2002; Rodriguez, 2007; Frankel, 2011; Larraín, 2011; Schmidt-Hebbel, 2012).

When the economy falters, governments often use stimulus spending projects as a way to recover the economy and get people back to work. Countries which have budget surpluses in good times, have a better chance to stimulate spending in bad times. If the country has a budget surplus in place, it can spend part of that surplus to stimulate the economy reducing the recession duration. Fiscal policy becomes counter cyclical. But when the country goes into recession without surplus, it has fewer options to stimulate the economy implying higher deficits or higher debt. Fiscal policy becomes pro cyclical. Moreover, debt accumulation is finite in capacity because at some point the susceptibility of the balance sheet to cyclical movements rise, and the risk of default increases (Mitchell, 2012).

In the Chilean case, the gross debt/GDP ratio, decreased from 23% (1990-2000) to 9% (2001-2011). Before the fiscal policy rule was applied, Chile was a net debtor to the equivalent of 9% of GDP. With the fiscal policy rule in place, it became a net creditor to the equivalent of 4% of GDP. A responsible fiscal policy demonstrated a public commitment to stability. That reputation for responsible fiscal policies translated into the ability to borrow money at favorable (lower) rates. Lenders look at the overall health of the economy and its ability to manage its resources wisely as a proxy for lower risk level (Frankel ,2011). In Chile, between 1999-2011 borrowing costs went down from 7% (1999), to 3.35% (2011) (Larrain, 2011).

On the other hand, in the period 1999-2005 with the budget surplus rule in place, output volatility in the Chilean economy decreased by 32-33%. Coupled with other policy decisions (such as changing the exchange rate regime from a crawling peg to a flexible exchange in the year 2000) made the impact of the fiscal rule stronger pushing down volatility even further by 25-27% .

Budget surplus also contributes to the efficiency and effectiveness of macro-economic policy as a whole. (Larraín and Parro, 2006; Kumhof and Laxton, 2010). It has been argued that free capital flows, exchange rate regime (fixed or flexible) ,and autonomous independent monetary policy, do not fit well along the economic cycle. In fact those targets cannot be achieved simultaneously. Sooner or later, one of those variables has to be modified for keeping monetary policy effective enough to keep aggregate economic activity stable. If the interest rate has to be raised, there is no way to do so without capital controls. This is the impossibility triangle, which make fiscal policy fully effective with fixed exchange rates, and monetary policy fully effective with flexible exchange rates, ruling out the chance of coordination to make the triangle work. If a country wants to achieve an autonomous interest rate policy, and stabilize the exchange rate at the same time, it has to introduce capital controls Mundell (1963).

But what a difference does the SBS rule make?. Capital flows have an impact on exchange rates in smaller economies. Exchange rates fluctuations depend on whether there are capital inflows (appreciation) ,or outflows (depreciation). These exchange rate variations are not neutral. Leaving aside distributive effects, these variations have an impact on both banks with heavy foreign currency debt after the depreciation, (financial side), and the competitiveness of the export sector due to appreciation (real side).

Given exchange rate fluctuations, monetary policy should change the interest rate to cope with its implications. But, as long as it lacks complementary fiscal policy, it has to deal with key constraints which affect its independence and effectiveness.

Whether the options are increasing interest rates (exchange rates depreciation) or reducing interest rates (exchange rates appreciation), it needs capital controls, and along with it the risk of aggregate demand contraction in the former case (increasing interest rates), or an overexpansion of aggregate demand in the

latter case (reducing interest rates). Thus, monetary policy is constrained in its ability to correct distortions arising from exchange rates fluctuations.

However, in the case contractive monetary policy (higher interest rate) is applied, a fiscal policy rule (budget surplus rule) can mitigate the impact on economic activity. It allows self-stabilizing factors to take place. Previous public savings are available for counter cyclical spending, reducing the impact of higher interest rates on the economy and the along with it a better control of the chance of a recession. In the case of lower interest rates, the rule of saving excess of income over the cyclical adjusted expenditures, compensates the expansionary pressures in aggregate demand, allowing fiscal policy to keep internal stability (Mundell 1968).

Therefore, with this fiscal policy rule, monetary policy has a back up for more flexibility and independence to manage the effect of capital flows fluctuations. The argument can go even further with the "sudden stop" scenario Calvo (2003). The expected reaction of monetary policy in such a case, can be complemented in the midterm with the SBS rule, softening the impact on growth.

The Chilean evidence, support that fiscal policy became less correlated with the economic cycle after the structural budget surplus was applied, decreasing from 0.77 (1990-2000) to 0.57 (2001-2011). Therefore, a countercyclical fiscal policy complements monetary policy in such a way that output volatility decreases (Larraín, 2011). Furthermore, it makes the three variables of the triangle: exchange rate regime, capital flow and the independent monetary policy, work together in such a way that it ends up reducing the welfare loses arising from capital flow fluctuations.

Mundell(1968) demonstrated that in countries where employment and balance of payment policies, are restricted to fiscal and monetary instruments, monetary policy should be reserved for external balances, and fiscal policy for preserving internal stability. This is related to what it is called the Principle of effective market Classification. Policies should be paired with the objectives on which they have the most influence. Fiscal policy can contribute in a more efficient way to internal stability, with a countercyclical stand. If interest rates must be raised, the current budget surplus can be reduced, compensating the impact on aggregated demand. It follows that budget surplus allows monetary policy more independence and effectiveness to cope with external imbalances.

On the other side, Mitchell (2012) examine the implications of different options with budget surplus. In case there is an external surplus, (the case of high commodity prices), which would add to aggregate demand, and the private sector is spending more than what it is earning, the government would have to ensure a budget surplus of sufficient size to make sure the economy does not overheat and exhaust its productive capacity.

EVIDENCE FROM CHILE

Starting in the year 2001,the fiscal policy in Chile was based on a structural surplus rule. The introduction of this rule intensified Chile's commitment to fiscal responsibility implemented since the mid-1980s, by introducing a more explicit medium-term orientation guide (Marcel 2001; Arellano, 2005). The rule was initially not regulated by law. However, this changed with the 2006 Fiscal Responsibility Law which also introduced new rules about the investment of accumulating assets. The structural surplus rule, only covers the central government and deals only with income, keeping expenditure on its mid-term cyclical trend.

It also assumes the tax structure is neutral concerning its distributive effects, assuming an output tax elasticity of 1.0. An alternative case would be to have a progressive tax rate, in such a case this elasticity would be higher (1.5 – 2.0). In the Chilean case, elasticity ranges from 1.0 - 2.4 depending the tax source, although for the structural budget proposal, it was considered close to 1 (1.05). The implications of this

progressiveness is a higher impact on government revenues when output increase (steeper budget surplus line). This makes the structural budget surplus more cautious in the growth path, and more countercyclical in recessions, which seems to suggest the impact of structural budget surplus is also related with the tax structure (Gordon 1983; Taylor 1993).

The existence of additional conditions, both institutional and economic, were relevant to the implementation of this rule and its target (Marcel, 2001; Arellano, 2005). In the Chilean case these were: The Independent Central Bank, which set an inflation targeted monetary policy at an annual level of 3%. Global economy fluctuations, require economic policy tools to be able to deal properly with external shocks (Elbadawi, 2011; Schmidt- Hebbel 2012). The structural surplus rule implies a counter-cyclical behavior of fiscal policy, which became necessarily due to expected higher copper prices. The rule stated the central government's overall structural balance should in every year be equal a surplus of 1% (0.5% , from 2008) of actual GDP. The structural balance equals structural revenues plus interest on net government assets (which are positive in Chile), minus actual expenditures on goods and services.

Structural revenue is determined by two independent panels of experts, and reflects what tax revenue would have been if the economy had operated at potential rather than actual output, and what copper revenue and other derivatives would have been at a long-term reference of world copper prices, rather than the actual price. The resulting counter-cyclicality of government deficits isolates government expenditures on goods and services from the cycle, and keeps them growing following the output trend. No distinction is made between government consumption and investment expenditures because this is difficult to do in practice. The main organisms of the public sector left outside for this rule are: the central bank, public non-financial enterprises, the defense sector and municipalities (local government).

This positive fiscal rule was supported by certain features that are not core to it, but they are optional for its implementation. A key feature, was the level which the structural balance was targeted. During the first years, a structural surplus target equivalent to 1% of GDP was aimed at ensuring the accumulation of assets to reduce liabilities inherited from the debt crisis in the 1980´s, and to meet future public sector commitments, such as contingent liabilities generated by the guaranteed minimum retirement payment, and older-age beneficiaries arising from reforms implemented in 1980. Another argument for maintaining a structural surplus, was the structural deficit of the Central Bank of Chile, as a result of losses arising from the bailout of the private banking system during the 1982 economic crisis.

The 2006 Fiscal Responsibility Law, formalized this by establishing rules for investment of those surpluses. These rules envision investment in a government pension fund, central bank recapitalization, a Fund for Economic and Social Stabilization (FESS) and a Retirement Reserve Fund with resources equivalent to a minimum of 0.2% and up to a maximum of 0.5% of GDP. These funds will be ready for spending following 10 years of interest gains accumulation. In May 2007, it was announced that based on an expert panel recommendation, a reduction in the surplus target from 1% to 0.5%, would be applied, starting in the fiscal 2008 year.

There were important reasons for changing the target down to 0.5% structural surplus: the initial target of 1% implied that government asset accumulation over time (2007-2016), was on average 10% of GDP , which is hard to justify when it comes to meeting social demands arising from growth (Engel, Marcel, and Meller , 2007). Besides, there was evidence that welfare gains from following this rule as a fixed percentage, are lower (18%) than those obtainable by implementing fiscal policy rules with a flexible clause to break the transitory rule down (Engel, Neilson and Valdes, 2011).

Most initial justifications for such a target were fulfilled a few years before 2008. In 2005 the Central Bank operational deficit was equivalent to 0.005% of the Chilean economy GDP, down from 1% at the end of the nineties. After years of fiscal saving , the National Treasury became a net creditor to the rest

of the world. By late 2008, the Economic and Social Stabilization Fund and the Retirement Reserve Fund had accumulated the equivalent of 18% of GDP, while fiscal liabilities were negligible after significant amortizations were made with the previous accumulated surpluses in the fiscal balance.

The spillover effects of the global financial crisis (2008), led in 2009 to further reduction of the structural balance to 0% . Moreover, the earthquake of 2010 , moved the target further into negative territory to an structural deficit of -1%. In 2010, a pannel of experts was set to propose recommendations to improve the quality of the rule to make it more credible. Among the recomendations were to establish a fiscal policy council to advise the Ministry of Finance. (See Schmidt-Hebbel, 2012).

A PATH FOR THE FUTURE

Since the nineties, a growing number of countries have implemented different fiscal policy rules, starting with 10 countries in 1990 up to 51 in 2011. However, only 10 countries have rules aimed at stabilizing cyclically adjusted balances, for implementing counter cyclical fiscal policy, or at least avoiding pro-cyclical fiscal policy bias, (IMF 2009). Fiscal rules implemented by the EU (A deficit limit of 3% of GDP), have a key weakness: when the economy goes into recession, there is no way to keep the rule in place Frankel (2011).

Past experience and learning concerning fiscal policy, has allowed evolution concerning its focus, consistency, transparency and role for macroeconomic coordination, and growth, within an institutional framework designed to improve the quality of signals for investment and growth, reducing the sources of instability and uncertainty. As the concept of the structural budget has improved its credibility, it has been easier to introduce corrections and discretionary windows in emergency cases (external shocks). For example allowing an unprecedented expansive expenditure reaction to the 2008 financial crisis, to reducing the GDP losses. The Chilean evidence shows the importance of both the introduction of structural budget rules as a principle, and the value of learning about macroeconomic policy coordination in policy making for small economies as a practical guidance. It reinforced the role of fiscal policy as a key engine for growth, which departs from its conventional focus on distribution and taxes.

Better coordinated and consistent macroeconomic policies, mean less output volatility (Larrain and Parro, 2006), less inefficiencies and welfare losses (Kumhof and Laxton, 2009), less interest rate volatility (Rodriguez, 2006), and less exchange rate volatility (Velasco, 2010) thereby increasing effectiveness of the institutional framework for economic policy design and economic growth expectations. The demands for keeping economic growth, makes all of these externalities key arguments for pursuing further this kind of policy approach.

Asmall economy, highly integrated to the global economy gains benefits from these positive externalities as long as it reduces the financing cost of new investment projects. In fact, Chile has become a low risk country ,which allows it to secure better financial arrangements. As foreign direct investment receivers in 2012, it placed 11th among world economies (Ministry of Economy 2012). Key challenges for the future, are a better understanding these guiding principles for the macroeconomic effect of fiscal policy on economic activity, prices and exchange rate determination, along with its stabilizing and complementary role of monetary policy, and its stand for economic growth other than just distribution.

Progress in fiscal policy management has contributed to improvement in counter-cyclical capacity for controlling both aggregate demand and exchange rate fluctuations. This is not a minor issue. In the 1990s, even though Chile had a successful experience with counter-cyclical regulation of financial inflows and achievement of comprehensive real macroeconomic balances, some flaws in its fiscal policy design did not allow full avoidance of external shocks (sudden stop in financial flows and drop in export), arising from the Asian economic crisis (1997-1998).

As long as the global economy is risk averse , policy rules help implement a more consistent and efficient policy framework to mitigating uncertainty. Productive resources need to know the rules. The 'no rules' alternative, means speculative forces flourish, and economic agents make their bets for what comes next within the uncertainty scenario, deteriorating the productive investment prospect and resources allocation (Taylor ,1993). Thus, the global economy needs not only better policy, but also better rules (coordination) for policy implementation reducing volatility, uncertainty and welfare losses.

CONCLUSION

The goal of this paper was to analyze Fiscal policy rules, and how it matters for better effectiveness of macroeconomic policies, in small economies integrated into the global economy. Fiscal policy becomes a useful tool for economic growth, because of its complementary stand for other policies decisions (monetary policy). Moreover, its conventional focus only on distributive issues sets a limit to what a powerful fiscal policy may achieve as its best outcome. It is meaningful to have fiscal policy rules, aimed at improving the effectiveness of macroeconomic policies as a whole, and the stability of growth in particular. A combination of political, economic and institutional settings helped the implementation of the fiscal policy rule in Chile.

The literature review provides evidence from positive externalities linked to fiscal policy rules, which reinforce a virtuous circle of growth, as long as volatility decrease and welfare levels may improve steadily. Furthermore, fiscal policy rules reduce the country risk level which is a key factor for attracting additional foreign investment flows.

Because of its scope and purpose, this paper does not use statistical analysis. It deals with analyzing facts about a fiscal policy prescriptions successfully applied in Chile. Looking beyond the scope of this paper, it is clear that Government accountability, and modern public policy institutions, should be aimed at fitting the conditions for steady output growth in the global economy. Fiscal policy, should not be restricted to a distributive focus because it may be a useful player for policies decisions dealing with external shocks. However, although there have been an increasing number of countries which apply fiscal rules, just a few of them follow a structural budget surplus rule as a fiscal policy approach. This is especially worrisome for countries which are exposed to commodity prices changes. The expected downward adjustment in those prices, make it more relevant to keep a structural budget surplus.

Some limitations of this research, deal with leaving tax policies as a secondary issue. A further area of research might focus on the relevance of tax progressiveness. Somehow the need for public saving (budget surplus rules), may be both influenced and complemented by the proper (progressive) tax policies such that the percentage of budget surplus. The budget surplus does not need to be substantial, under more progressive tax systems. A second limitation, arises from conditions which prevail in the Chilean economy for implementing this policy, which are not widely experienced in the majority of Latin America economies. Thus, no matter the advantages of such a fiscal policy rule, the superlative conditions required for its successful implementation make it more difficult to be applied everywhere.

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