Plenty of Room? Fiscal Space in a Resource Abundant Economy

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It may seem odd to write a paper about fiscal space in an oil-abundant economy. It could certainly be agued that resource-rich economies have if anything an embarrassment of resources at their disposal to use in the fight to achieve poverty reduction. The typical problems faced by developing economies in financing the fight against poverty should, in the very least, be severely attenuated in mineral rich economies. The problem of these economies, a skeptic may dispute, is not finding more resources: it is using them more efficiently.

The Venezuelan case may seem an even odder place to start. This oil-rich South American nation is not exactly experiencing a shortfall of resource availability. Buoyed by the seven-fold increase in oil prices experienced since the late nineties, the Venezuelan government has currently embarked on a set of spending initiatives that have increased real per capita government spending by 84.7% since 1998. This has included an allotment of $4.1 billion (8.1 trillion Bs.) to the administration's hallmark social programs (the *Misiones*, or Missions)[2] and a pledge of at least $ 3.0 billion in 2005 to aid neighboring countries.[3] Venezuelan fiscal policy is not currently showing signs of operating under fiscal duress.

Despite these characteristics of oil abundant economies in general and of the present Venezuelan situation in particular, we believe that there is much to learn from analyzing the set of issues raised by the fiscal space debate in this economy. We will argue that oil abundant countries are not less prone than non-resource abundant economies to facing shortfalls of revenues to direct in the fight

[2] See República Bolivariana de Venezuela (2006).
[3] New York Times (2006)

against poverty. Indeed, they commonly experience high poverty rates despite their high levels of income. Many oil abundant economies have also had significant experiences of increases in their fiscal space that have not shown up in improvements in poverty or well-being. These examples can be used to understand what are the pitfalls and possible mistakes that countries can face when they attempt to direct increases in available resources towards poverty reduction.

We start by looking at the prevalence of fiscal difficulties in oil abundant countries. Figure 1 illustrates the relationship between budget surpluses and oil dependence for 112 countries as a function of their dependence on fuel exports. The figure displays a residual scatter plot of budget surpluses on a measure of oil export dependence (fuel exports as a percent of GDP) after controlling for initial level of income and a set of continent dummies. Both measures are taken from World Bank (2005) and correspond to 1990-2003 averages. As the figure shows, oil abundant countries are not likely to have higher budget surpluses. Indeed, a few highly resource dependent countries, such as Kuwait, Oman and the Republic of Congo have substantially higher deficits than would be expected given their level of income and their geographic location. Therefore, it is apparent that oil abundant countries on average face fiscal difficulties which are as significant as those faced by non-oil abundant economies.[4]

[4] This fact was originally pointed out by Tornell and Lane (1998), who showed that oil booms could generate a "voracity effect" whereby consumption increased more than revenues, generating increases in current account and budget deficits.

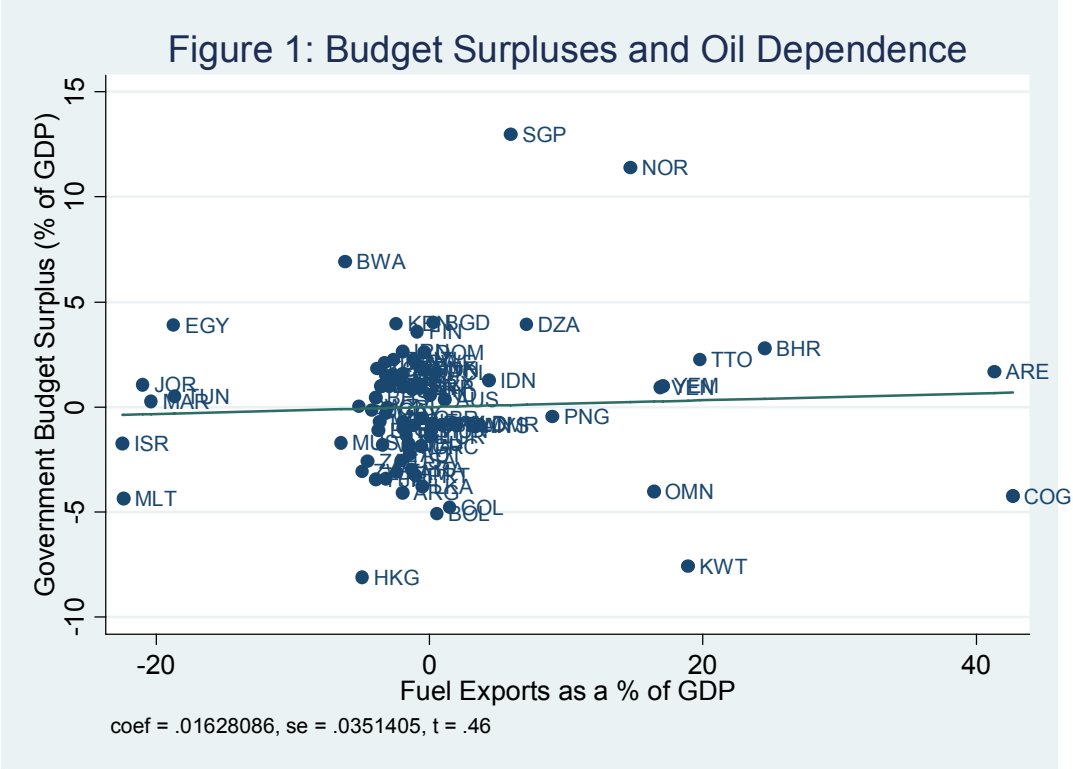
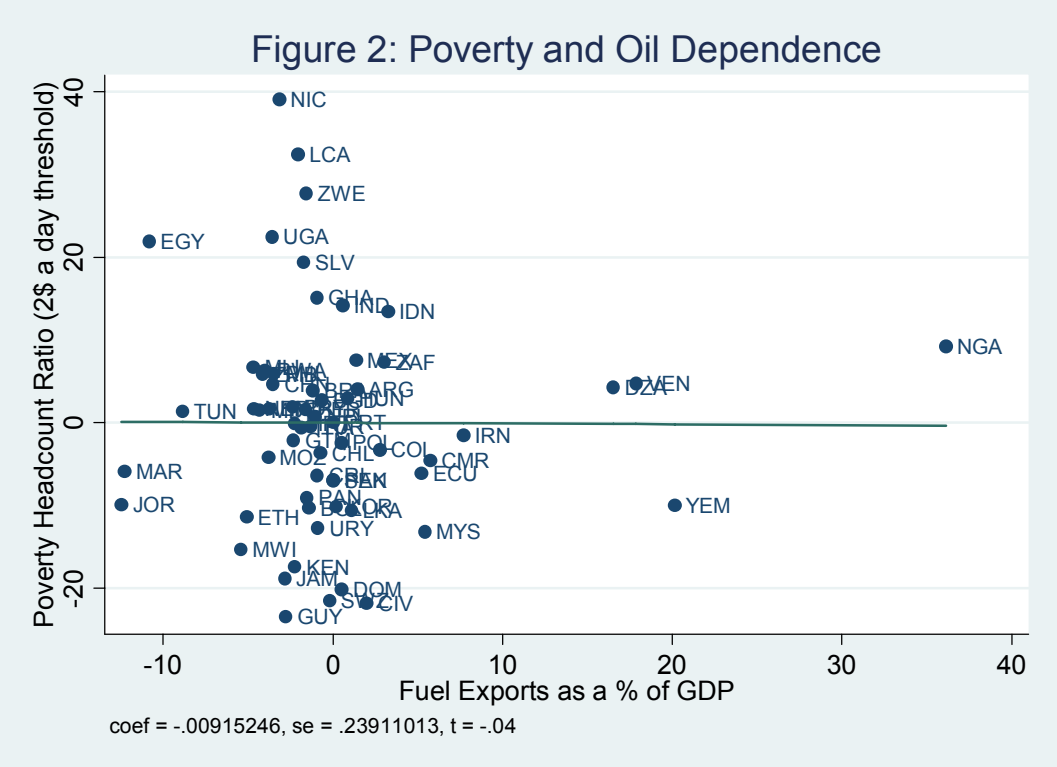
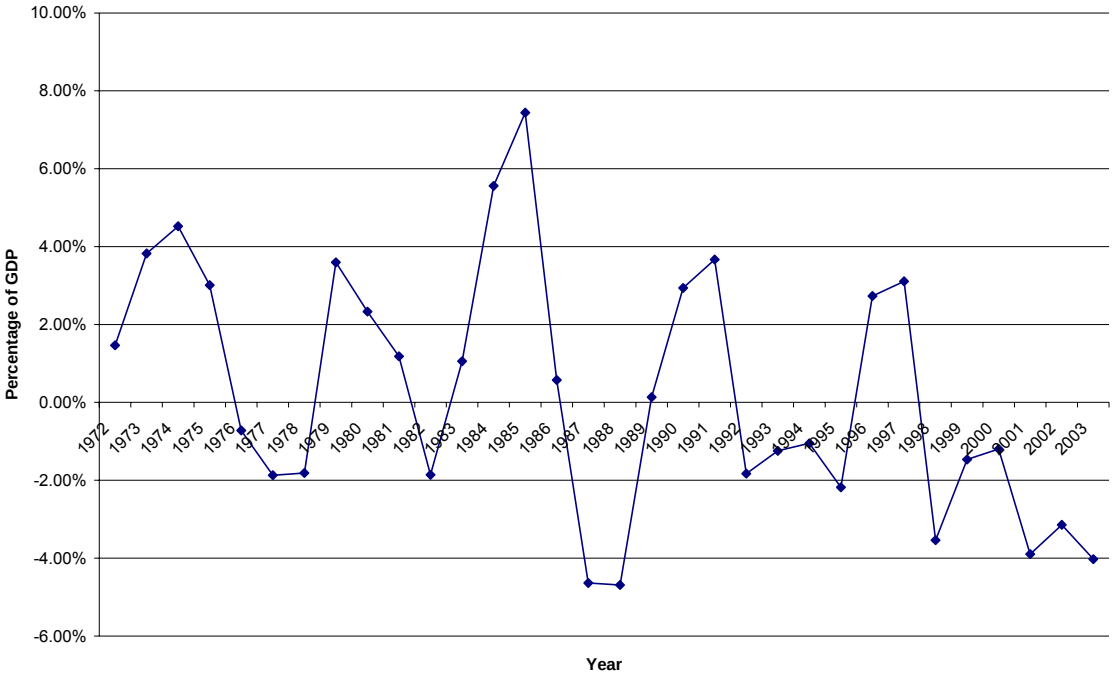


Figure 2 illustrates the fact that oil abundant countries do not do necessarily better in the fight against poverty than non-oil abundant countries. Similarly to the previous exercise, it displays the partial scatterplot of poverty against oil export dependence, after controlling for the log of per capita GDP and a set of continent dummies. Here again we see that oil exporting countries do not do a better job at fighting poverty than other economies. On average, more oil abundant countries have poverty headcount ratios which are as high as those of other countries, given their initial GDP and geographic location. Among these countries, it is interesting to see that Venezuela (along with Algeria and Nigeria) have positive residuals, indicating a lower than average efficiency at fighting poverty given their availability of oil resources.



Figures 3 and 4 explore these facts in greater detail in Venezuela. As Figure 3 shows, budget deficits are not a rare phenomenon in Venezuela. Despite deriving 85.9% of its merchandise export revenue from fuel exports during 1972-2003 and occupying the position of richest nation in the region for a good part of this period, Venezuela experienced fiscal deficits on sixteen of the 31 years covered by this period, including ten of the last twelve years. Indeed, according to the *IMF* statistics, as late as 2003 Venezuela did not show an improvement in its fiscal position derived from the recent upturn in oil prices. In Venezuela's case, an abundance of oil revenues has not led to erasing concerns over fiscal sustainability.

Figure 3: Consolidated Central Government Surplus as a % of GDP, Venezuela, 1972-2003

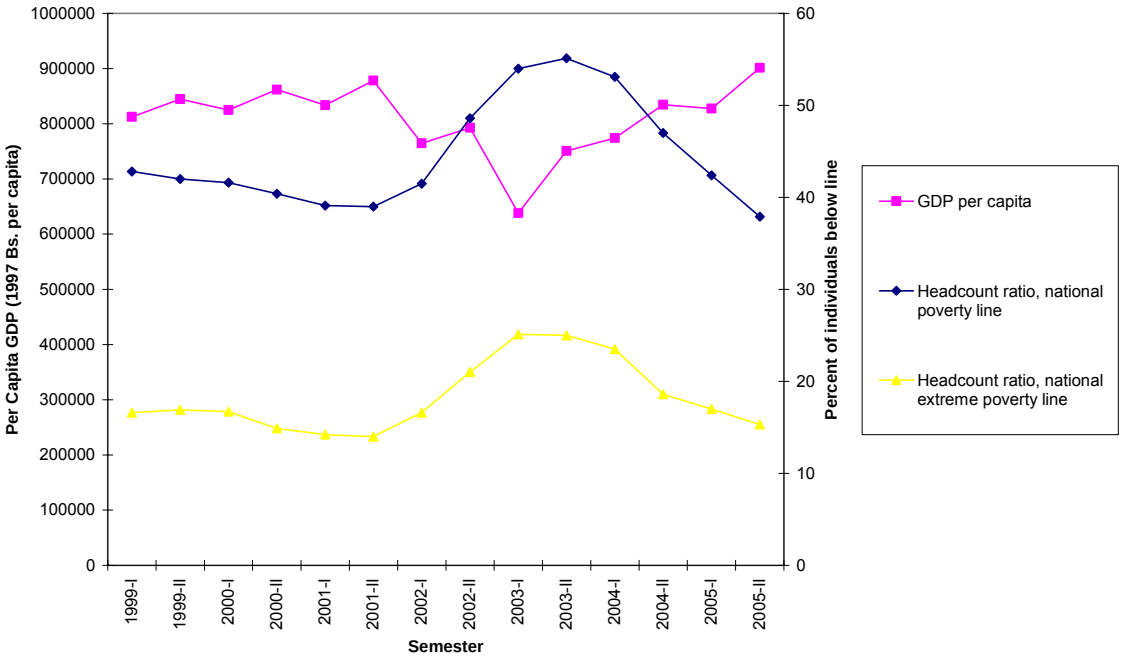


Source, IMF (2006a,2006b), World Bank (2005) and own calculations

Figure 4 displays the recent evolution of poverty in Venezuela, measured as the proportion of persons below the national poverty and extreme poverty lines. Table 1 presents a set of alternative poverty measures, based on the 1 and 2 PPP-adjusted dollar a day World Bank thresholds. As these numbers show, there is little signal of a substantial improvement of poverty trends of the magnitude that would be necessary for meeting the millennium development goal of reducing extreme poverty to one-half of its 1990 level. Although the period is marked by a huge increase in 2002 – associated with the February 2002 devaluation and the April 2002 and December 2002 general strikes – and a subsequent decline, there is no evident long-term trend. There has been some decrease in the total incidence of poverty between 1999 and 2005, from 42.8 to

37.9 for total poverty, and from 16.6 to 15.3 for extreme poverty. This is indeed what one might expect given that per capita income increased by 10.9% over the period covered by the Figure. The income elasticities implicit in these reductions (1.05 and 0.71, respectively) are not remarkably high. What is surprising about this behavior is that it has occurred during a period of growing oil revenues: as Figure 5 shows, fiscal oil revenues per capita multiplied four-fold between 1998 and 2005. The lack of significant response of the poverty rate to this huge increase in oil revenues underlines the need for systematic thinking about the mechanisms and strategies that must be implemented to ensure that greater oil wealth reaches the poor.

Figure 4: Poverty and per capita GDP, Official Estimates, Venezuela, 1999-2005



Source: INE(2006), BCV(2006) and own calculations

Whether Venezuela is likely to achieve the first Millennium Development Goal (MDG) of reducing extreme poverty to ½ of its 1990 value is a matter of

dispute, in part because there is little certainty as to what the 1990 poverty level was. It was only in 1994 that the Venezuelan Households Survey started collecting data on all components of income, so that a precise estimate of poverty incidence in 1990 is hard to obtain. The data reported by World Bank (2005), based on labor income, show substantial increases in all poverty rates between 1989 and 1995, suggesting that the first MDG would be extremely difficult to attain given the post-1995 evolution observed in Figure 4. Similar calculations have been recently used by ECLA (2005), who report Venezuela and Argentina as the only two countries that have lost ground in the fight against extreme poverty. According to ECLA's estimates, the 1990 poverty rate was 14.6%, making the MDG 7.3%, while Venezuelan extreme poverty in 2004 stood at 22.7%. The Venezuelan National Institute of Statistics (henceforth *INE* according to its Spanish acronym) has claimed that the 1990 poverty rate was 24%, making the goal of halving it to 12% attainable, but the source if this estimate is unclear.[5] A more sensible approach may be to take 50% of the 1995 value as a reasonable approximation of the objective, given that it is unlikely that 1995 poverty was significantly lower than that of 1990 and that we can adequately compare post-1994 series.[6] As shown in the last column of Table 1, barring exceptional progress in the next decade, Venezuela seems unlikely to reach this target,

In sum, studying fiscal space in a resource-abundant economy like Venezuela is useful for two reasons. In the first place, it allows us to understand the

[5] Agencia Bolivariana de Noticias (2005).
[6] Per capita GDP was 3.8% higher in 1995 than in 1990.

mechanisms through which even governments that have the economic possibilities for devoting substantial resources to poverty reduction fail to do so. In the second place, it allows us to identify specific reforms that can help reallocate resources towards the fight against poverty in this type of economies. For these reasons, the focus will be not just on understanding Venezuela *per se*, but rather on drawing lessons that can be relevant for other economies, both resource-abundant and non resource abundant.

Figure 5: Real per Capita Fiscal Oil Revenues, 1998-2005

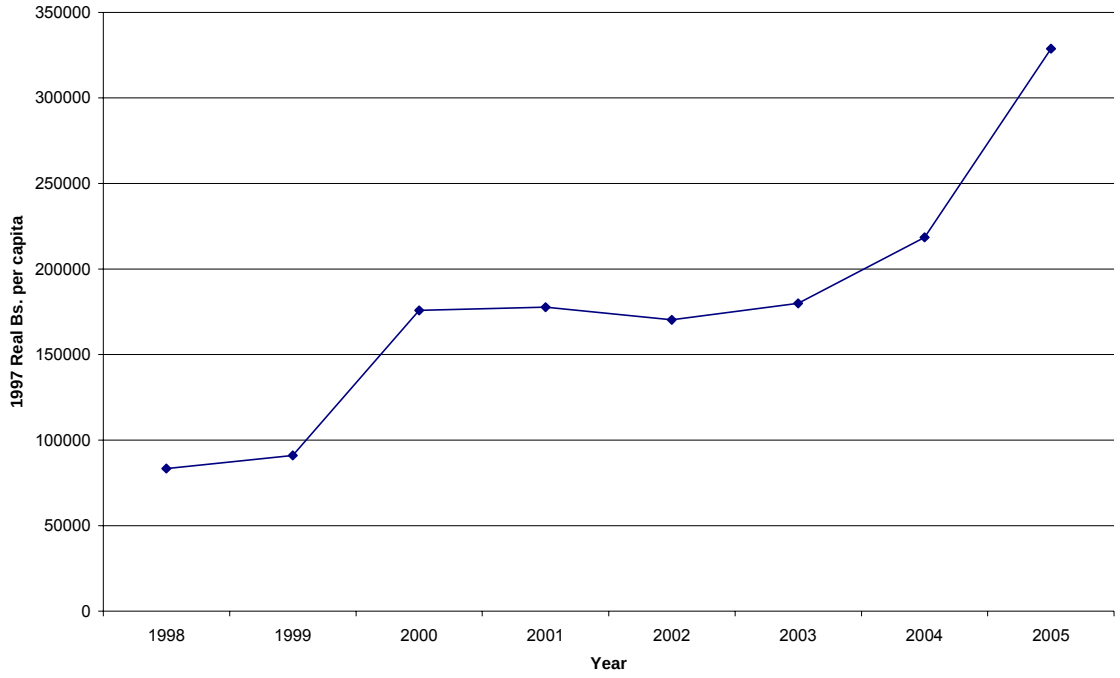


Table 1: 1$ a day and 2$ a day Poverty Indicators, 1995-2004, CPI Based

	1995-I	1995-II	1996-I	1996-II	1997-I	1997-II	1998-I	1998-II	1999-I	1999-II	2000-I	2000-II	2001-I	2001-II	2002-I	2002-II	2003-I	2003-II	2004-I	2004-II	2005-I	2005-II	50% of 1995 Rate
Households																							
2$ a day threshold																							
Headcount	0.3486	0.3549	0.4445	0.4781	0.4143	0.3537	0.3721	0.3259	0.3603	0.3832	0.4038	0.3889	0.3639	0.3478	0.3764	0.4149	0.4869	0.4640	0.4531	0.3975	0.3726	0.3237	0.1759
Poverty Gap	0.1412	0.1474	0.1964	0.2094	0.1815	0.1431	0.1567	0.1355	0.1447	0.1635	0.1789	0.1571	0.1481	0.1431	0.1610	0.1858	0.2271	0.2139	0.1995	0.1677	0.1648	0.1493	0.0721
Poverty Severity	0.0794	0.0820	0.1159	0.1261	0.1061	0.0804	0.0893	0.0771	0.0821	0.0959	0.1079	0.0896	0.0837	0.0806	0.0943	0.1105	0.1387	0.1283	0.1182	0.0965	0.1003	0.0942	0.0403
1$ a day threshold																							
Headcount	0.1212	0.1253	0.1808	0.2116	0.1684	0.1261	0.1369	0.1160	0.1321	0.1454	0.1638	0.1390	0.1283	0.1211	0.1485	0.1665	0.2200	0.1956	0.1868	0.1491	0.1486	0.1324	0.0616
Poverty Gap	0.0464	0.0463	0.0731	0.0822	0.0660	0.0470	0.0529	0.0461	0.0487	0.0601	0.0700	0.0536	0.0495	0.0472	0.0585	0.0700	0.0910	0.0816	0.0746	0.0587	0.0661	0.0661	0.0232
Poverty Severity	0.0270	0.0252	0.0428	0.0476	0.0377	0.0266	0.0310	0.0273	0.0291	0.0365	0.0447	0.0319	0.0286	0.0276	0.0355	0.0422	0.0547	0.0482	0.0441	0.0346	0.0441	0.0451	0.0131
Individuals																							
2$ a day threshold																							
Headcount	0.4051	0.4138	0.5029	0.5284	0.4662	0.4076	0.4260	0.3795	0.4196	0.4433	0.4679	0.4457	0.4214	0.4067	0.4364	0.4794	0.5548	0.5328	0.5198	0.4619	0.4303	0.3754	0.2047
Poverty Gap	0.1678	0.1728	0.2274	0.2380	0.2076	0.1694	0.1806	0.1586	0.1695	0.1911	0.2072	0.1848	0.1747	0.1684	0.1897	0.2178	0.2658	0.2509	0.2360	0.1992	0.1907	0.1712	0.0852
Poverty Severity	0.0943	0.0958	0.1347	0.1440	0.1215	0.0961	0.1021	0.0897	0.0951	0.1111	0.1237	0.1053	0.0987	0.0944	0.1107	0.1296	0.1639	0.1513	0.1408	0.1149	0.1138	0.1061	0.0475
1$ a day threshold																							
Headcount	0.1485	0.1511	0.2168	0.2408	0.1965	0.1546	0.1607	0.1382	0.1570	0.1722	0.1918	0.1680	0.1563	0.1469	0.1789	0.2008	0.2652	0.2386	0.2269	0.1823	0.1750	0.1519	0.0749
Poverty Gap	0.0545	0.0535	0.0850	0.0944	0.0752	0.0564	0.0592	0.0525	0.0552	0.0680	0.0789	0.0623	0.0579	0.0544	0.0676	0.0819	0.1087	0.0970	0.0894	0.0696	0.0723	0.0723	0.0270
Poverty Severity	0.0302	0.0280	0.0481	0.0536	0.0418	0.0312	0.0331	0.0299	0.0309	0.0399	0.0485	0.0354	0.0320	0.0303	0.0391	0.0476	0.0638	0.0555	0.0512	0.0392	0.0448	0.0477	0.0145

The source of Venezuela's failure to devote resources to poverty reduction, we will argue, is deeply rooted in its economic history. As oil revenues grew during the 20th century, Venezuela developed an inherently weak state with restricted capacity to tax the internal economy. Our starting point will thus be a brief history of the development of Venezuelan taxation institutions, which we will undertake in Section 2. Section 3 will comparatively analyze the characteristics of the Venezuelan tax system and indicate the possible reforms that could allow resource mobilization for pro-poor policies. In sections 4 we will discuss the political economy of the Venezuelan budget process and its interaction with existing fiscal rules. As we will argue, this interaction leads to weak incentives for coherent intertemporal planning and substantially affects the quality of public resource allocation, suggesting avenues for reform of the budget planning process that could lead to freeing up resources to devote to MDG achievement. Section 5 will discuss a glaring inefficiency of the Venezuelan fiscal system: the fact that, despite the Venezuelan state's net creditor position vis-à-vis the financial sector, its poor deposit and credit management policies lead to transfer more than 2% of GDP in net interest payments to private banks. Sections 6 and 7 will turn to the analysis of the expenditure side. Section 6 will discuss Venezuela's systematic policy of cutting back infrastructure investments to pay for fiscal adjustments since the mid-80s. Section 7 will deal with recent attempts to devote more resources to the fight against poverty through the government's landmark *Misiones* social programs and discuss their effectiveness. Section 8 will provide some tentative concluding comments.

2. A short history of Venezuelan fiscal policy, or how not to build a tax system.

> *We are a budgetivorous people. And how not to be so if the only economically sound foundation that we have is the budget? The budget determines among us political booms and crises...meanwhile, our economy becomes deformed and every day more subordinate to the contingent solution of oil. Oil inflates the budget, is what the body is to the shadow. We live leaning on a shadow.*
>
> Valmore Rodríguez, *Panorama*, 24 de junio de 1940[7]

Venezuela's 19th century was remarkably unstable, even by Latin American standards.[8] One observer chronicled 39 national revolutions and 127 uprisings of different sorts between independence in 1830 and 1903; another one calculated that Venezuela enjoyed barely 16 years of peace while suffering 66 years of civil war and insurrection since Independence.[9] This situation would begin to be reversed through a gradual process of centralization of economic and political power starting during the regime of Antonio Guzmán Blanco (1870-1888) and continuing through the Andean Hegemony period (1899-1908). Understanding

[7] Cited by Sosa Abascal (1995), p. 17.
[8] The discusión of the Guzmán and Andean hegemony reforms in this section borrow heavily from Rodríguez and Gomolin (2006).
[9] Caballero (1993), p. 34-35

this centralization is key to gaining a comprehension of how Venezuela developed its present day budgetary institutions.

Antonio Guzmán Blanco was the first Venezuelan president to considerably curtail and subordinate the interests of regional caudillos to those of the central government. He was able to do this by constructing a complex alliance between business groups and loyal caudillos that worked because it was able to generate a marked increase in tariff revenues (which accounted for more than 90% of government fiscal revenues at the time). Guzmán's ingenious plan for coalition building started with the virtual privatization of customs collection. Shortly after taking power in April 1870, Guzmán created the *Compañía de Crédito*, a privately owned firm with minority government participation whose main purpose was to pay off outstanding government debts. The control of the *Compañía de Crédito* was firmly in the hands of representatives of established trading houses. The revenues of the Company, in turn, came from its entitlement to directly receive 85% of customs revenues. This system could work well because the Venezuelan government's main source of credit came from these same trading houses.[10]

In order to convince local caudillos to buy into the deal, Guzmán had to ensure that they could receive a continuous stream of rents once they had given up control of customs houses. In order to do so, Guzmán created a set of singular institutions. Perhaps the most important one—which survives to this day—was the *Situado Constitucional*, a rule for the allocation of a fixed fraction of government revenues among regional governments. Guzmán also started a

[10] For an in-depth discusión of the *Compañía de Crédito*, see Floyd (1988)

massive public works program directed through the *Juntas de Fomento*, boards that directly administered public investment projects and in which local caudillos and financiers were given seats (Pino Iturrieta, 1997).

Guzmán's reforms were just the first step in the construction of the centralized state apparatus that would characterize Venezuela during the 20th century. In order for economic centralization to become an effective counterweight to the anarchic forces of the *caudillos*, it would have to be accompanied by an effective process of political consolidation. This would take place with the creation of a professionalized armed forces, buttressed by a patronage-based system for the satisfaction of individual demands by the political apparatus of the State. Such a process would occur during the dictatorship of Juan Vicente Gómez (1908-1935). By the time of his death in 1935, Venezuela had solidly established a politically centralized state, reinforced by an armed forces whose institutional design was particularly propitious for stability, and with abundant economic resources that could be directed toward sustaining power.

Such a state was a formidable opponent for the dictatorship's adversaries in their attempts to promote the adoption of democratic institutions. The innovation of the emerging political leaders was the creation of political parties with broad memberships that could defeat the patronage-based structure of the state by reproducing it. The success of Acción Democrática and COPEI, the two dominant political parties in post-1958 twentieth century, came from being able to substitute the patronage-based web constructed and strengthened by the

governments of the Andean hegemony by an eerily similar system of loyalties and favors articulated through populist political discourse and practices.

Unlike many other populist parties in the region (the Peruvian APRA, the Argentinian Justicialistas or the Brazilian Workers' Party), Acción Democrática and COPEI became the dominant institutionalized actors within a stable political system. They arrived in government with a broad membership base that was ready for the occupation of the positions of power that had been left in place by the post-gomecista system, taking middle and lower positions in public administration which formed the basis of the system of rewards of the post-gomecista political structure. According to Venezuelan historian Germán Carrera Damas, when modern political parties like Acción Democrática and COPEI emerge:

> "they do it in an atmosphere not at all propitious for the adoption of clearly institutionalized forms. One could not expect less than their mediation by practices traditionally rooted in Venezuelan society. And perhaps when we speak of the parties of the 1940s, we should think fundamentally of a civil *caudillo* surrounded by a group of close collaborators who attempt to counteract the inheritance of social atomization, the inheritance of basic patronage obligations."[11]

[11] Carrera Damas (1975)

The control of the Venezuelan political process by populist parties with broad memberships and internal patronage networks was obviously possible to a great extent by the huge amount of oil resources that the Venezuelan economy has at its disposal starting in the 1920s. Just the value added of the petroleum industry by 1948 is 2.37 times as large as 1920 GDP, and 1.73 times as large as what GDP would have been if Venezuela had grown at the same rates as the rest of Latin America. By the early 50s, more than a third of GDP came directly from oil production, and much of the rest was generated or made possible by the existence of large oil-derived foreign exchange earnings. In this phenomenon resides the main reason why AD and COPEI were to attain the level of dominance that similar populist parties in the region were unable to: Venezuela had the resources to pay for a huge expansion of public employment that enabled these parties to reward their members and set the basis for a stable governance system.

The mechanisms through which the Venezuelan political system consolidated its institutional stability and the form in which these mechanisms depended on the use of fiscal recourses has been studied in depth by various Venezuelan political scientists, among them Rey (1987), Urbaneja (1992) and Stambouli (2002). As these authors emphasize, Venezuelan politics would be considerably affected by two formative experiences for the main political parties: (i) the short period in power of Acción Democrática from 1945-48 (the *Trienio*), where the inability to forge alliances with opponents led to a military coup followed by a 10-year dictatorship, and (ii) the need to fight against a Cuban-financed guerrilla movement as well as various threats of right-wing coups in the

early 60s. The principal political actors after 1958 directed their energies towards one fundamental objective: preserving the stability of the regime.[12]

The emphasis on regime preservation would engineer the two basic principles that would orient public decisions during the democratic era: an obsession with consensus and an aversion of conflict.[13] The first principle embodies continuous attempts to ensure that no sector of society feel its interests repeatedly and enduringly ignored; the second implied a willingness to pay high costs to avoid relevant sectors of society from becoming adversaries of the system. What emerged is what Venezuelan political scientists have called the Social System of Negotiation, the key function of which was to channel the distinct social demands and interests, following "the golden rule of political stability: to avoid too many people getting angry on the same day."[14]

By the mid 20th century, Venezuela had a state that reflected the historical influences just described. It displayed three vital characteristics that would have a profound effect on its capacity to manage public finances. In the first place, it was a highly centralized state in which state and municipal governments played a minor and even decorative role. Second, state expenditures were significantly biased towards public employment and away from public investment. Third, the state was highly dependent on oil revenues and had failed to impose significant tax rates on domestic firms or individuals, effectively redistributing oil rents towards the private sector in the form of lower tax rates.

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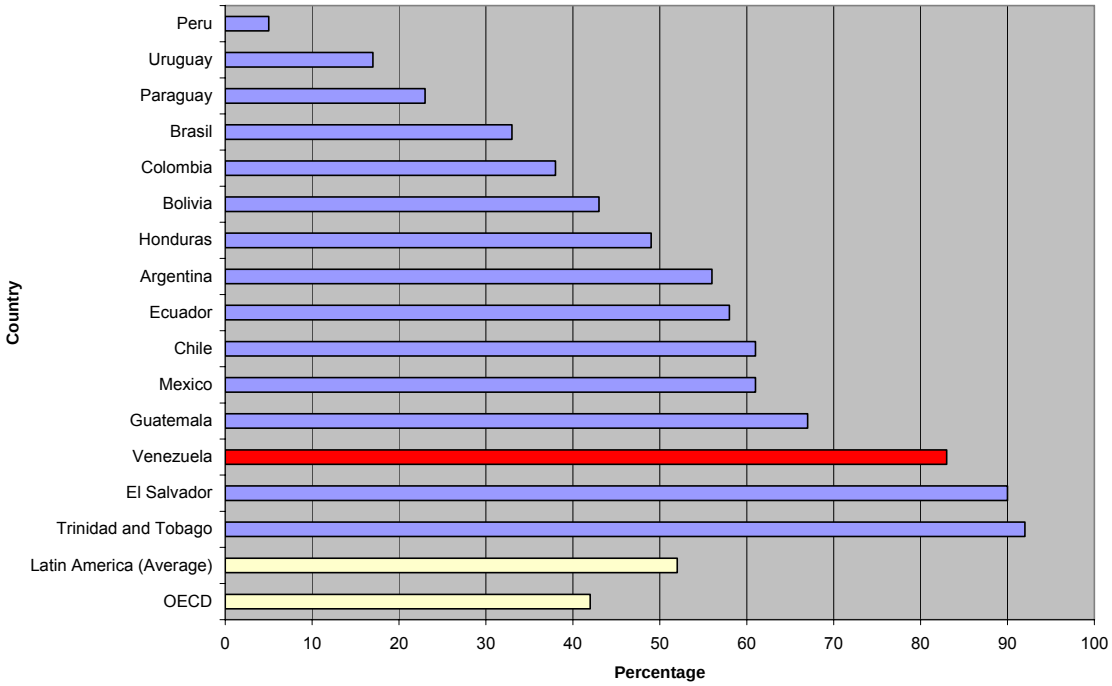
[12] Rey, 1987, p. 200.
[13] Urbaneja, 1992 p. 207.
[14] Urbaneja, 1992, p. 228.

The acute centralization of the Venezuelan state can be observed in the high degree of vertical fiscal imbalances between the central government and subnational governments. As shown in Figure 6, Venezuelan states receive 83% of their revenues from the central government, the third highest level in the region and considerably higher than both the Latin American and OECD means (52% and 42%, respectively). Table 2 shows that this phenomenon is particularly acute for Venezuelan states (*Entidades Federales*) which commonly receive up to 98% of their revenues from government transfers. Table 2 also illustrates the historical permanence of the *Situado*, which up until 1989 supplied almost the totality of the *Entidades*' revenues, and still supplies approximately two thirds of it. Guzmán Blanco's invention may well turn out to have been the longest lasting fiscal institution of Venezuelan history.

Figure 6: Transfers as a Percentage of Subnational Government Revenues



Source: IADB (1997)

Table 2: Sources of revenues for Venezuelan *Entidades Federales* (States)

Year	Constitutional *Situado*	Intergovernmental Decentralization Fund (FIDES)	Law of Special Economic Assignments	Assignments to Cover Transfered Responsibilities	Total Transfers	Own Incomes	Other sources
1989	98	0	0	0	98	1	1
1990	96.3	0	0	0	96.3	0.5	3.2
1991	94.7	0	0	0	94.7	4.3	1
1992	94.8	0	0	0	94.8	3	2.2
1993	92.8 .		0	0 .		4.8 .	
1994	81.6 .		0	1.6 .		9.1 .	
1995	83.9 .		0	6.9 .		3.2 .	
1996	71.8	4.6	0	9.1	85.5	1.3	13.2
1997	58.6	5.8	2.3	11.3	78	1.5	20.5
1998	52.7	8.5	8.8	11.5	81.5	0.7	17.8
1999	65.3	9.1	11.5	11.9	97.8	1.2	1
Average 1989-1999	80.95	3.50	2.05	4.75	90.83	2.78	7.49

Source: Barrios (2000), ONAPRE and own calculations. Between 1993 and 1995, the Venezuelan government did not separately report FIDES allocations.

The flip side of these significant vertical imbalances is a political equilibrium in which subnational governments depend on and continuously lobby the central government for increases in transfers and the central government has no interest in giving up the power it gains from this dependence. The one attempt to modify this equilibrium, the set of political decentralization reforms initiated in 1989 by the Carlos Andrés Pérez (1989-1992) administration, appears to have led to a significant collapse of the power base of traditional parties (Penfold-Becerra, 1999). It is not then surprising that the current administration has blocked decentralization project approved by the National Assembly in 2001 which attempted to devolve greater taxation capacity to subnational governments.[15] While this political equilibrium persists, regional governments have little interest in strengthening tax collection. We return to this point below.

The bias towards public employment is illustrated in Figure 7, which shows that Venezuela has the third largest share of public employment in the

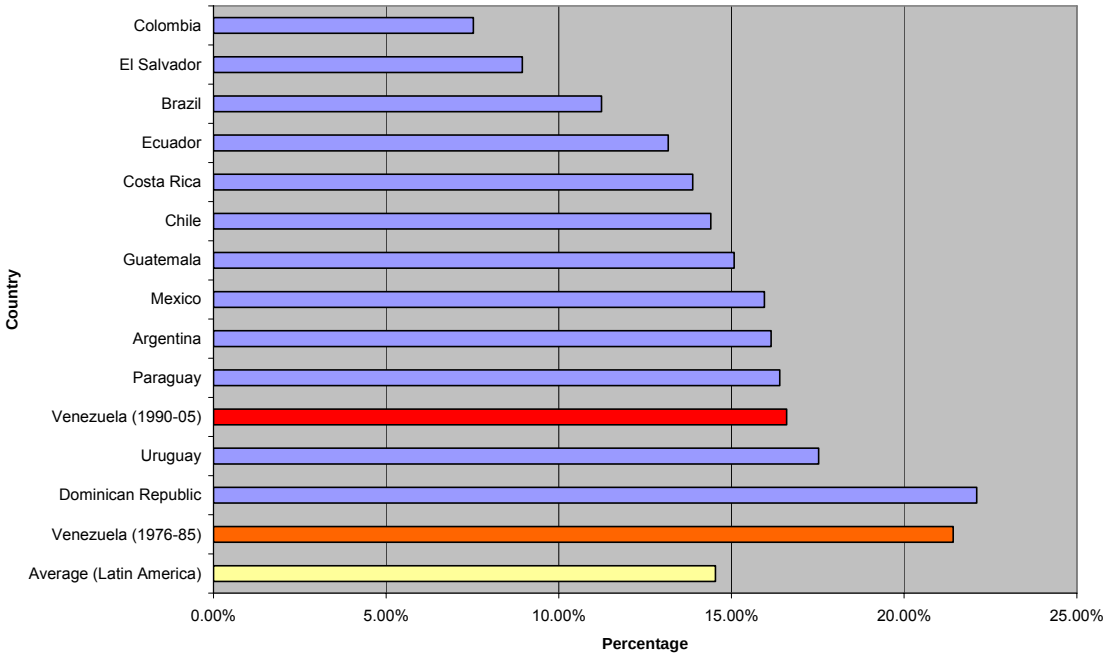
[15] See OAEF (2001). An initial project was approved in first discussion by the National Assembly in 2001 but the Commission studying it was disbanded the following year. A second project was approved in 2002 but was vetoed by the President.

region. This is despite a significant decline in the public employment share from the eighties, when it reached highs above 22%.[16] According to Census figures, Venezuelan employment growth was precipitous, with the public sector's share of employment going from 3.37% in 1941 to 18.69% in 1971 and to 25.77% by 1981 (BCV, 1989). These trends were also reflected in other state action such as the creation of decentralized quasi-autonomous entities within the public sector. Between 1916 and 1957, 31 of these institutes were created, or roughly under one a year. From 1957 to 1970, 102 new institutes were created, at a rate of almost 8 yearly. Between 1970 and 1980, the number would go up to 240, or 24 yearly, with a staggering 90 new institutes created just in 1980[17].

[16] Figure 7 also displays the 1976-85 public employment share for Venezuela, which we have calculated directly from the household surveys. Regrettably, we have been unable to find comparable data for the same time period for other Latin American countries. Nevertheless, the comparison is suggestive, as it shows that public employment in Venezuela was considerably higher than that of any other country in the region today with the exception of the Dominican Republic.

[17] Kornblith and Maignon (1985).

Figure 7: Fraction of Employees in Public Sector, Latin America, 1990-2005



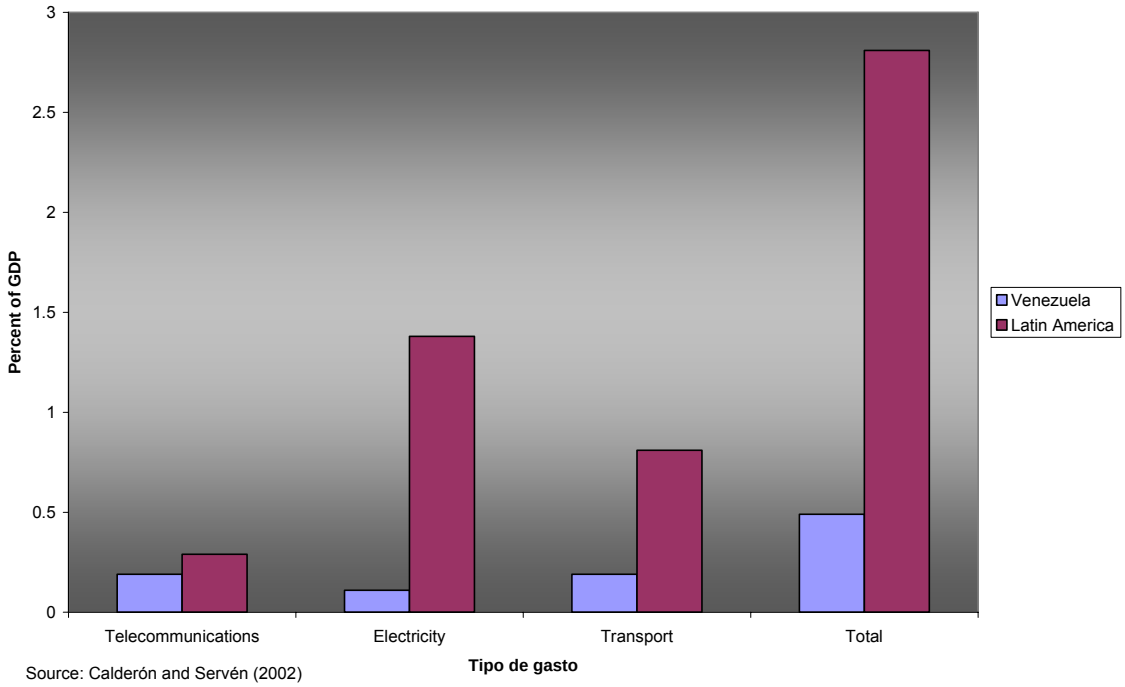
Source: ILO(2006), INE(2006) and own calculations. Comparison covers Latin American countries with population greater than 3 million.

This bias is not only reflected in the aggregate employment figures. Venezuelan public employment legislation also became heavily slanted towards the protection of employment. The 1975 Law of Administrative Career guaranteed job stability to all public employees except in the case of gross and repeated violations of codes of conduct and prohibited any type of wage cuts except those implemented by consensus between the employer and employee. The end result was a remarkable downward rigidity in public employment and wages that would make future fiscal adjustments rely on cutbacks in the provision of non-labor intensive public goods.

Just how lopsided the composition of public expenditures became is perhaps best exemplified by Venezuela's low levels of public infrastructure investment, shown in Figure 8. We have used data for the 1981-85 period, the

earliest available, in order to avoid distorting the comparison by the effect of fiscal adjustments in Venezuela and the region during the late eighties and nineties. What the figure shows is striking: Despite an overabundance of oil revenues, Venezuela was significantly underinvesting in public infrastructure in the early eighties, at the same time at which it was experiencing a vertiginous increment in public employment.

Figure 8: Public Infrastructure Investment in Venezuela and Latin America, 1981-85

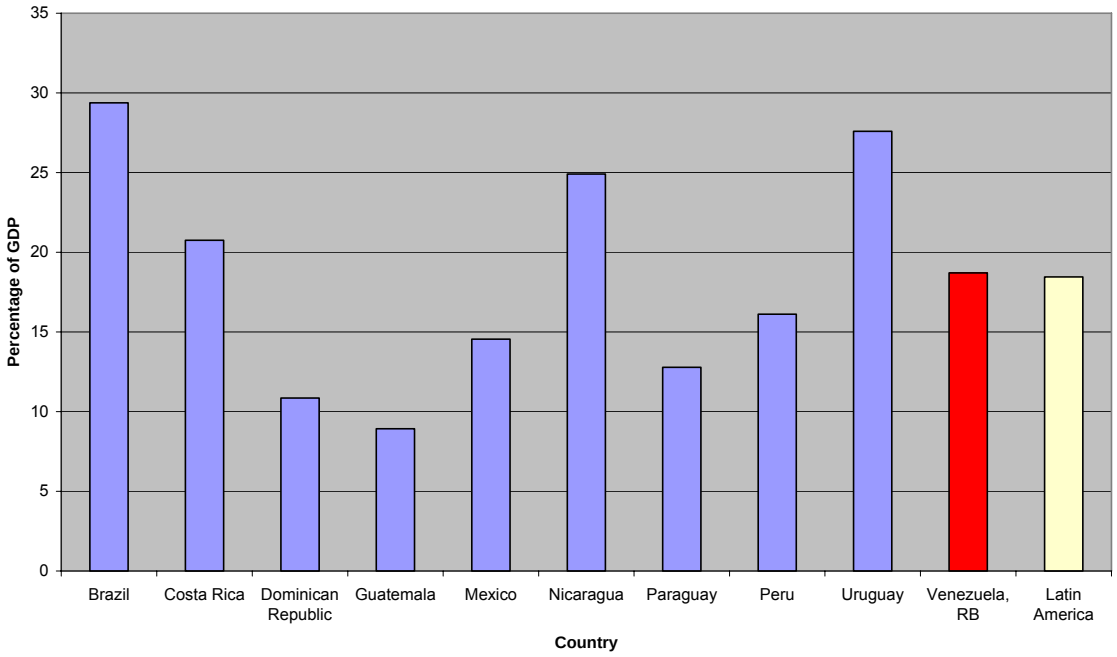


Source: Calderón and Servén (2002)

Figure 9 illustrates one consequence of oil dependence. At first sight, this figure – which represents Central Government expenditures as a percentage of GDP – appears unremarkable. Venezuela's average expenditure share for the nineties of 18.5% is nearly identical to the region average of 18.7% (which

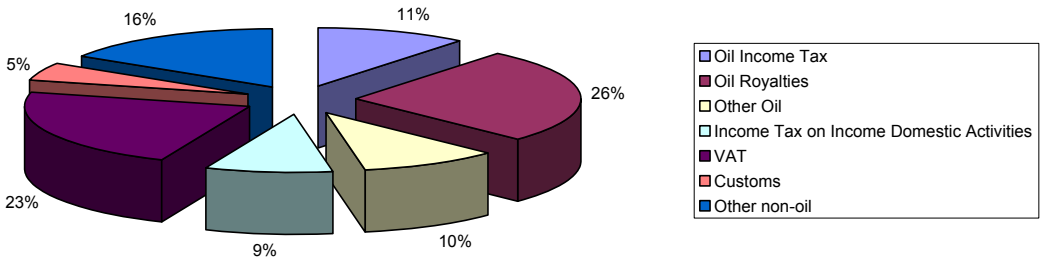
is low in comparison to the rest of the world). The comparison starts to become interesting once we realize that approximately half of those expenditures are paid for by the profits of the state owned oil company (Figure 10). In other words, Venezuela appears to have chosen to spend all of its oil revenues in sustaining lower average levels of internal taxation than those of other Latin American countries, instead of devoting it to higher levels of spending.

Figure 9: Central Government Expenditures as a percent of GDP, 1990-1999



Source: WDI(2006). Comparison includes only countries with more than 3 million inhabitants

Figure 10: Compsition of Central Government Revenue, 1996-2004



How did this striking policy choice come about? In his 1957 book *Venezuela, Politics and Oil*, Rómulo Betancourt, the founding leader of Acción Democrática who would occupy the presidency during the 1945-48 and 1959-64 periods, sets out to explain the 1945 decision to reduce taxes on the domestic economy as a response to the greater availability of oil revenues:

> This fiscal policy responded to a well-defined orientation and was the necessary touchstone to demonstrate how we wanted to realize social justice and increase national capitalization at the same time. If the taxes imposed on the most profitable economic activities [oil] could cover a large percentage of public

> expenditures, it was of national convenience that direct taxes on the wages of employees, of small and medium businesses, of the most humble members, in sum, of Venezuelan economy—be reduced. This measure was complemented by the elimination of an appreciable number of indirect taxes.[18]

This way of thinking about domestic taxation was not confined to tax policies during the Betancourt years. According to López Obregón and Rodríguez (2001), the design is visible from the nation's first introduction of an income tax law in 1942. According to these authors, the design of the 1942 law was predominantly oriented toward the taxation of oil rents, with all other sources of income playing a secondary role. The share of oil revenues in income tax collection hovered around 70% from the law's inception in 1943 until the 1970s.[19] The 1942 law was characterized by a large number of exemptions, deductions and exonerations. An important characteristic of these is that contributors could benefit from them cumulatively, and losses from one type of activity could be deduced from owed taxes on other activities. This provision was typically regressive, favoring agents involved in more than one economic activity. The 1942 law contemplated exemptions for non-profit activities, savings accounts, labor indemnities, and donations. The first reform to the law added an exemption on dividends. It also established the right of the Executive to concede exonerations "when it is judged

[18] Betancourt (1957), p. 261-262.
[19] Vallenilla, 1973, p. 145.

convenient for the development of the nation." Armed with this power, the Executive approved exonerations on mortgage interest, the profits of agricultural and livestock concerns, as well as those of industries which produced articles of primary necessity or transformed nationally produced primary. Rents on new urban constructions for the first five years as well as profits of savings and credit institutions and cooperatives were also added to the list of exonerated activities.

The bias against taxation of domestic activities did not just make itself felt in the initial design of the tax code. According to López Obregón and Rodríguez (2000), Venezuelan tax laws were routinely made more flexible with positive petroleum shocks. The earliest example of this can be found in the 1945 reforms described by Betancourt, which accompanied the extraordinary tax on "excess profits" of the oil companies. The tendency reached its peak during the oil booms of the seventies. Using the power granted to it by a special enabling law[20], the first Carlos Andrés Pérez administration (1973-1979) expanded exemptions to include the construction industry (Decree 346), tourism (Decree 377), exports (Decree 378), and bank loans destined to expand productive activities (Decree 343). It also granted additional rebates of 20% or investment (Decree 330), electricity and transport (Decree 379), and agriculture, livestock and fishing (Decree 377).

Another manner in which Venezuela weakened its capacity for the generation of internal incomes was through the decision to maintain low prices on fuel and derivatives sold in the domestic market. Barely a month and half

[20] Venezuelan enabling laws allow direct legislation by the Executive with special authorization by Congress, which is typically granted for the space of a year.

after assuming power, the 1945 Acción Democrática government drastically reduced the price of gasoline and other products and sub-products of petroleum. Once again, the clearest statement of the motivation for this policy can be found in Betancourt's work:

> We had been interpreters of the demand for a national re-vindication when we sustained over our years in the opposition the need of drastically reducing the sale price of petroleum derivatives. It was outrageous that the first petroleum exporting nation of the world imposed such high prices on gasoline and other mineral oil derivatives." (Betancourt, 1957, p. 293)

Armed with this justification, the 1945 government virtually eliminated the gasoline tax, and lowered the sales price to 11.30 cents (of a US$) a liter, less than half of the United States price.[21] This measure led the government to sacrifice revenues equivalent to 4% of the national budget, which were more than compensated by higher taxes on oil company profits. According to a communiqué published by Creole Petroleum that year, as a consequence of these measures, "Venezuela sells gasoline at the lowest price in the world."[22] This statement is still true to this day (see Table 9 below).

In sum, this historical evolution led Venezuelan fiscal institutions to develop built in biases that tend to hinder attempts to mobilize greater resources

[21] In a way so as to not modify the law which established taxes, the tax on gasoline was lowered by executive decree at least one cent of a Bolívar per liter. (Betancourt, 1957, p. 293)
[22] Betancourt, 1957, p. 294.

towards the fight against poverty. Despite having at its disposal oil profits which account for more than 10% of GDP, the Venezuelan state does not devote more resources to expenditures than the average Latin American country. Indeed, as we will show below, in some key categories, it spends considerably less. Mobilizing resources for additional expenditures would thus seem to imply greater domestic tax collection. But while this requirement is easy to identify, it can be hard to implement. Venezuela has a deeply centralized state structure, in which subnational governments have little interest in collaborating in raising tax collection (and the national government has little interest in making them less dependent on transfers). It also has a highly distorted allocation of expenditures that is severely biased against public investment and towards pubic employment. Reforming these state structures, which have deep historical and institutional roots, is a formidable task.

In what follows we will attempt to pinpoint towards specific reforms that can serve to enhance fiscal space within the context of high oil dependence and a centralized and distorted system of expenditure allocation. We first turn to an analysis of the overall features of the tax system in order to attempt to identify the classes of revenues that could be increased by legislative and policy reforms. In later sections we will look at the budget planning and execution stages, as well as at the composition of expenditures.

3. The Venezuelan Tax System: A Closer Look

We now take a closer look at the Venezuelan tax system, with a view to identifying possible sources of fiscal space that could be targeted in reform efforts. Our data will cover statistics for the Central Government (CG) from 1962 to 2004 and for the Consolidated Public Sector (CPS) from 1970 to 2003. Unless otherwise stated, data has been obtained directly from the Ministry of Finance; international comparisons are based on the March 2006 edition of *Government Finance Statistics Database* (IMF (2006a)). We start out by providing an overall evaluation of Venezuelan public finances as well as their interrelationship with oil revenues. We then turn to studying the main components of domestic taxation, focusing on the largest sources of revenues. We close by discussing the financing of Social Security and the fiscal relationship with states and municipalities.

3.1 Venezuela's Public Finances: An Overview

3.1.1. The Real Fiscal Stance

Evaluating fiscal sustainability in the Venezuelan case is a complex issue. The high dependence of fiscal revenues on the price of oil means that different assumptions about the long-term trend of oil prices will have significant implications for the long-run perspective of public finances. The jury is still out on whether oil prices are stationary or non-stationary, although there appears to be agreement on the fact that a random walk provides a reasonable

approximation to their behavior over the short and medium term (Chinn, LeBlanc and Coibion, 2001, Hamilton, 2006). Furthermore, any evaluation of fiscal sustainability requires an assumption about future per capita growth, and it is unclear what a reasonable approximation of that would be for Venezuela, given that over the past 25 years it has experienced significant negative growth in per capita GDP (Hausmann and Rodríguez, 2006).

Despite these complexities, it is clear that Venezuela's fiscal performance has not been a good one. Figure 11 shows the fiscal deficit for the CG and CPS[23] since 1962. Both the CG and CPS tend to display deficits consistently since the 1970s. In contrast to the CG, the CPS position has tended to improve over the last fifteen years. Indeed, CPS deficits were higher than those of the CG before 1989, but after that year have become consistently lower. To a great extent this has been a result of the privatization of three key state owned enterprises: CANTV (the national telephone company) and VIASA (the national airline) in 1991, and SIDOR (steel producing company) in 1997. As Figure 12 shows, transfers to public enterprises are currently negligible; making it doubtful that additional fiscal space can be obtained through further privatizations.

[23] As defined by the Central Bank of Venezuela (CBV), the CPS includes the Central Government (CG), a sample of 30 non-financial public enterprises, Social Security institutions, some Funds (Investment, Deposit Insurance and others) and the Venezuelan Petroleum Company (PDVSA) – plus sub-national governments.

Figure 11: CG and CPS Debt, Exchange Gains and Public Debt, 1962-2004

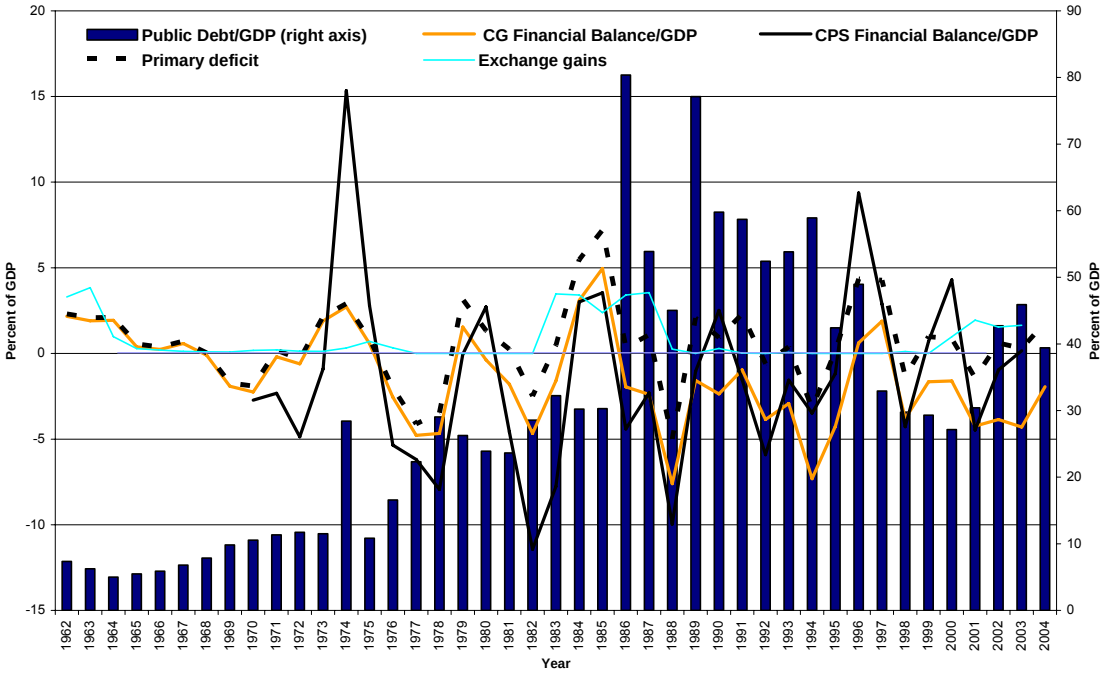


Table 3: Indicators of Fiscal Performance

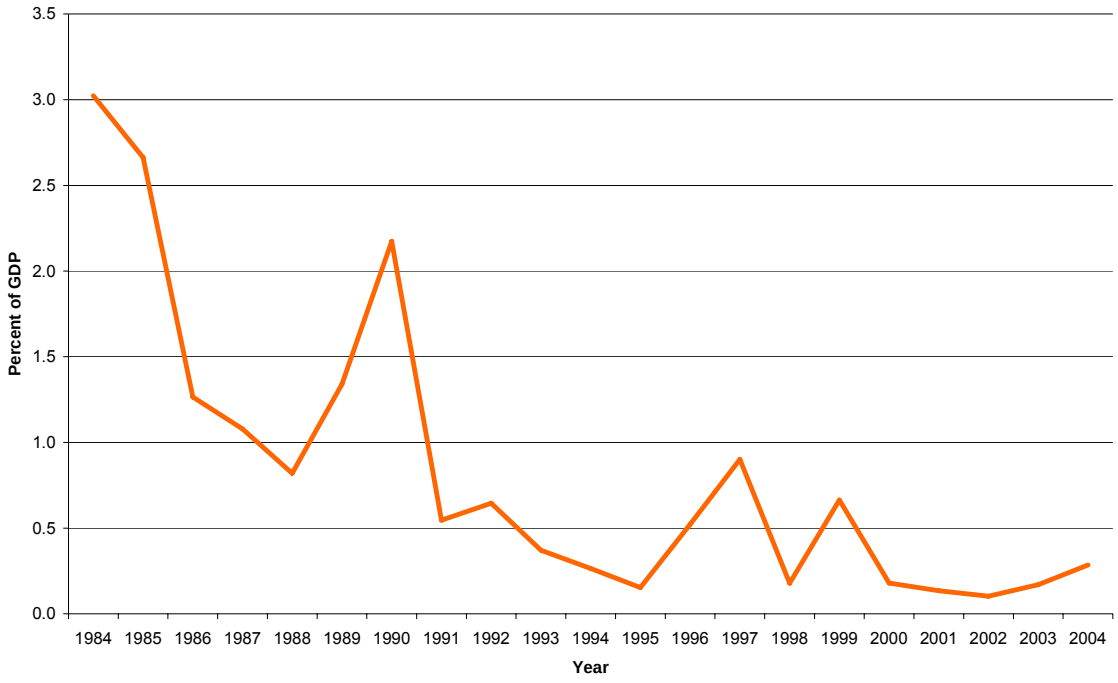
%	1962-1973	1974-1982	1983-1988	1989-1998	1999-2004
CG Financial Balance/GDP	0.3	-1.6	-0.9	-2.5	-3.1
CG Primary Balance/GDP	0.5	-0.4	1.6	0.9	0.3
CPS Financial Balance/GDP	-2.7	-1.6	-3.0	-0.4	-0.1
CPS Primary Balance/GDP	-2.2	0.6	1.7	4.0	3.9
Public Debt/GDP (right axis)	8.3	23.3	45.3	51.5	35.1
Growth Rate	5.8	2.5	1.9	1.9	-3.1
Non-Oil Growth Rate	8.8	7.0	2.6	0.9	-2.3
Primary deficit/GDP	0.5	-0.4	1.6	0.9	0.3
Exchange gains/GDP	0.8	0.2	2.7	0.0	1.2

Source: Central Bank of Venezuela and Ministry of Finance

There are a set of methodological differences between the Ministry of Finance (MF) numbers and the IMF numbers shown in Figure 3 in Section 1 above. One of them is the fact that MF figures report exchange gains as revenues while the IMF does not. As Table 3 shows, exchange gains are significant sources

of revenue for almost every period (except 1989-98). After netting out these gains, the primary surplus of the CG disappears, though not that of the CPS. The existence of a primary surplus in the CPS has led policymakers to attempt to raise taxes on the state-owned oil company. We discuss this strategy below. For now, it is relevant to note that the high weight of debt service implies that significant CPS primary surpluses are necessary for debt not to spiral out of control.

Figure 12: Transfers to Public Enterprises, 1984-2004



3.1.2 Overall Public Revenues

The annual average of CPS revenues as a fraction of GDP averaged 30.9% in Venezuela from 1970 to 2003 (Table 4). Almost 60% of them (18.6% of GDP) came from oil sources that include exchange gains, 15.9% from domestic taxes (15.9% of GDP), 3.2% (1% of GDP) from social security contributions, 3.8% (1.2% of GDP) from net surpluses of non-financial public enterprises (NFPE), 2% from resources collected by sub-national governments (0.6% of GDP), and the rest from other revenues (fees, interest and dividends, exploitation of mines, among others). The share of CPS in GDP looks large in comparison to other Latin American countries because of the large weight of the oil company, but the CG share does not (Figure 9). However, if CG revenues are expressed as a share of non-oil GDP, the share increases to 32.9%, which is large by Latin American standards. From the point of view of assessing the relevance of government in the economy, the former may be the more relevant comparison: if one believes that public goods are normal goods, their provision should naturally go up with increases of income, whether they come from oil or from any other source.

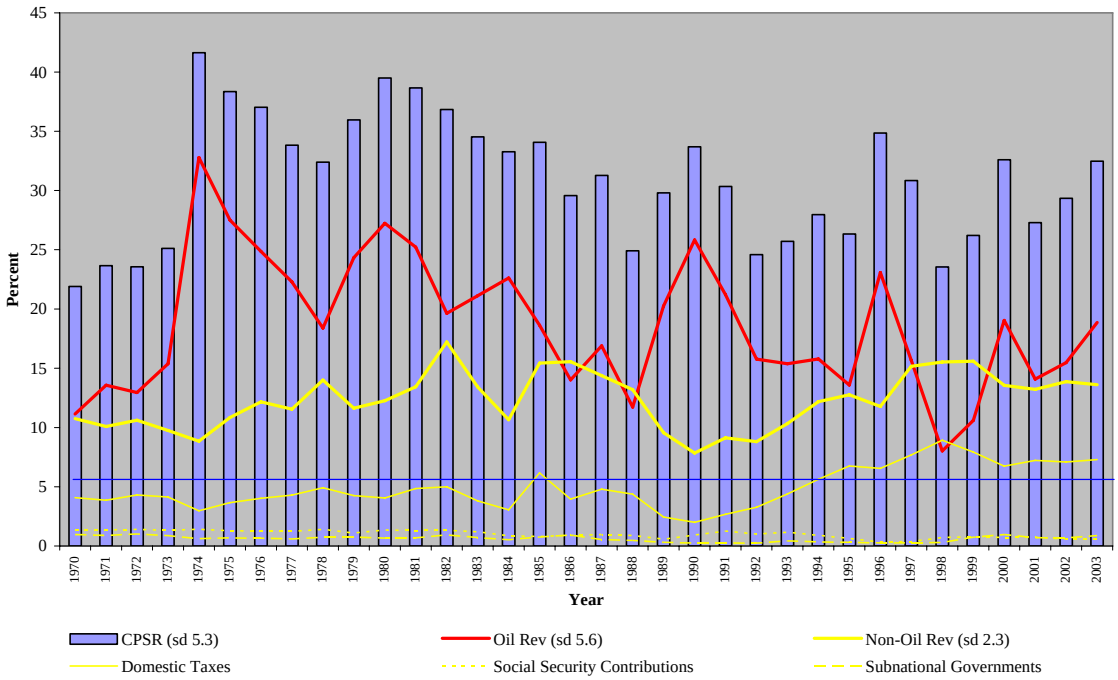
Table 4: Composition of CPS and CG Pubic Revenues
1970-2003

	% of GDP		% of total	% of Non-Oil GDP		% of total
	average	standard deviation		average	standard deviation	
Consolidated Public Sector	30.9	5.3	100.0	44.6	13.3	100.0
Oil Revenues	18.6	5.6	60.2	27.3	12.1	61.1
Taxes	13.6	6.3	43.8	20.2	12.9	45.4
Dividends of PDVSA	0.5	1.1	1.7	0.7	1.4	1.6
Exchange Gains	0.7	1.2	2.4	1.0	1.5	2.2
Other PDVSA (Net)	3.8	3.0	12.3	5.4	4.5	12.0
Non-Oil Revenues	12.3	2.3	39.8	17.3	3.3	38.9
Domestic Taxes	4.9	1.7	15.9	6.9	2.2	15.4
Social Security Contributions	1.0	0.3	3.2	1.4	0.6	3.2
Net Results NFPE	1.2	0.9	3.8	1.6	1.1	3.6
Subnational Governments	0.6	0.2	2.0	0.9	0.4	2.0
Others	4.6	1.5	14.8	0.0	0.0	0.0
Central Government	22.6	5.1	100.0	32.9	12.5	100.0
Oil Revenues	14.6	5.9	64.8	21.7	12.3	65.9
Non-Oil Revenues	8.0	2.1	35.2	11.2	2.8	34.1

Note: Petróleos de Venezuela S.A. (PDVSA) started operations in 1976 and began paying dividends in 1996
Oil Revenues include exchange gains
Source: Central Bank of Venezuela and Ministry of Finance

The evolution of total public revenues is clearly associated to that of oil income (Figure 13); in fact, the correlation between the shares in GDP of total and oil revenues is 0.9 (Table 5). Cycles of falls and recoveries characterize them, but a declining trend since the seventies is clear. Non-oil revenues have increased during times of falling oil revenues, but the rise has not been enough so as to counteract the decline off oil revenues; although negative, the correlation between both variables is low (-0.36).

Figure 13: Revenue Composition and CPSR Results (% of GDP)



Source: Central Bank of Venezuela and Ministry of Finance

Table 5: Cross Correlations

	CPSR	NONOIL	OIL
CPSR	1.000	0.057	0.911
NONOIL	0.057	1.000	-0.361
OIL	0.911	-0.361	1.000

CPSR = Consolidated Public Sector Revenues

OIL = Oil Revenues

NONOIL = Non-Oil Revenues

The volatility of total public revenues is also remarkably high, as their standard deviation - 5.3% of GDP – shows. That volatility and the low negative correlation between oil and non-oil revenues implies that total public sector revenues also exhibit a high amount of volatility (also 5.3% of GDP). Oil revenues are generally the dominant force, as is revealed by the fact that only in 4 out of the 33 years covered in Figure 13 have domestic revenues exceeded oil revenues.

3.2 Oil revenues: important, but volatile

It is true that the share of CG revenues to GDP in Venezuela is similar to that of other countries. But few countries have as important a comparable source of state finance in the region. As Table 6 shows, non-oil revenues are extremely low in comparison to GDP. One way to understand the contribution of oil to Venezuelan public finances is to separate the fiscal accounts into an oil and a non-oil balance. If we carry out that calculation (Table 7), we find that the non-oil fiscal gap is on average equivalent to nearly half the annual average of the Central Government Budget (Table 6).[24]

[24] The period grouping of data obeys to the classification of oil periods used in this work for analytical purposes.

Table 6: Central Government Revenues, 1990-2003

	% of GDP
Venezuela	20.2
Oil	10.8
Non-Oil	9.4
Argentina	13.7
Bolivia	19.0
Brazil	23.8
Chile	21.2
Colombia	18.0
Mexico	14.7
Paraguay	14.9
Peru	15.9
Uruguay	27.6
Latin America	18.8
OECD	34.4

Source: IMF

Table 7: Central Government Financial Results (% of GDP)

	1962-1970	1971-1981	1982-1986	1987-1998	1999-2004
Oil Balance	13.0	19.3	15.7	9.4	8.5
Non-oil Balance	-12.7	-20.0	-15.7	-12.3	-11.5
Budget	20.8	28.9	26.3	23.0	28.3

Source: CBV, MF and own calculations

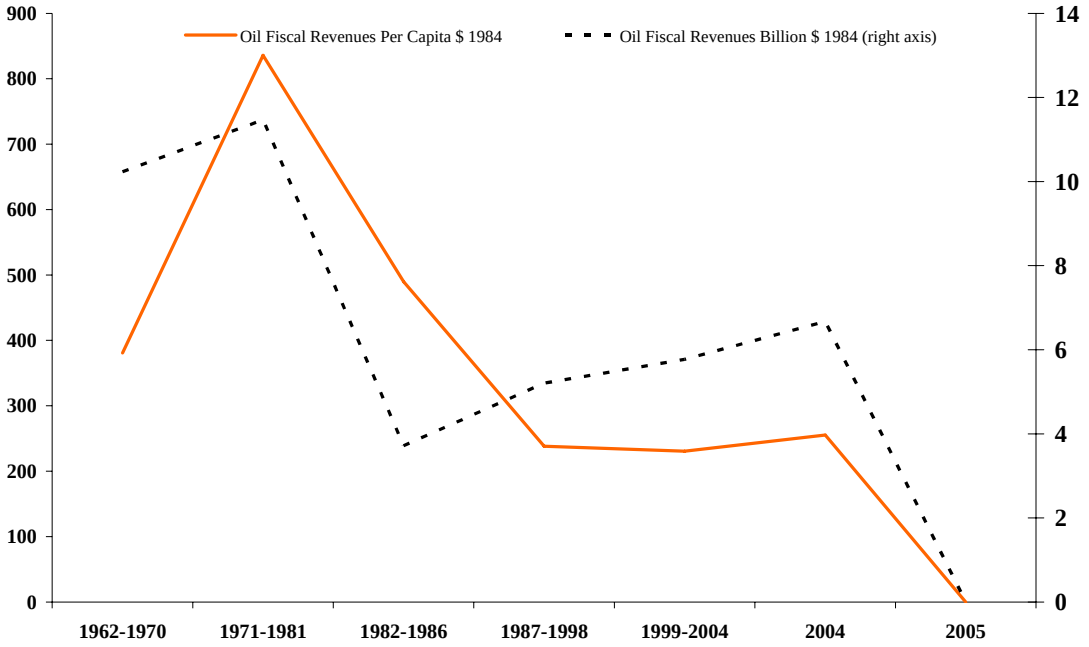
Oil fiscal revenues have registered strong swings along these periods. Annual real average of oil fiscal revenues 1999-2004 have declined by 32% from the seventies and early eighties (1970 to 1985) and by more than 50% in real per capita terms, even after one accounts for the recent upsurge. As Figure 14 shows, this has coincided with a decline of the average government take on profits. It is evident form a comparison of the magnitudes in Figures 13 and 14 that the greatest contributing factor to this decline is not the decrease in taxation; however, one may well deduce that one strategy to increase fiscal space may be to

return taxes on petroleum production back to its level for the eighties. This strategy was behind the formulation of the 2001 Hydrocarbons Law Reform which significantly altered the tax regime on PDVSA and its private associates. Royalty payments were raised from 16.67% to 30% on production, an increase which more than offset the reduction in the income tax rate (from 67.7% to 50%). Other recent legal changes included the elimination of Strategic Associations and Operational Contracts that had been used to bring in participation of transnational firms, and substituted them by Mixed Capital Contracts with a required 51% participation.

Is increasing the tax rate on oil production a feasible way to generate fiscal space? Manzano (2006) has argued that the current tax take constitutes a significant hindrance to investment. High government takes imply fewer funds are left over for investment; indeed, investment has generally declined when government take has increased (Figure 15). Although PDVSA can finance investment with debt, its debt is commonly viewed as a substitute to national government debt in international markets, so that it has a high cost. While current oil prices imply that some additional resources can be raised by increasing taxes on foreign companies, such a renegotiation would imply incurring significant credibility costs that may become relevant if oil prices

decline.[25]

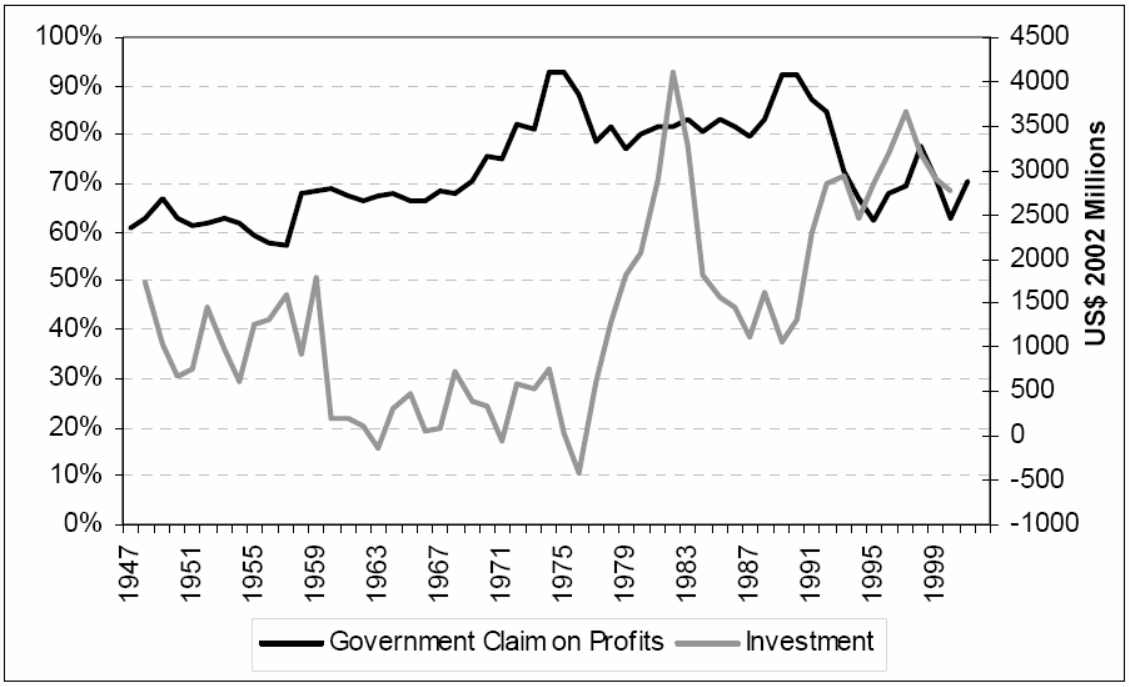
Figure 14: Oil Fiscal Revenues



Oil revenues include exchange gains.
Source: Central Bank of Venezuela, Ministry of Finance and own calculations.

[25] Indeed, private participation in Venezuelan oil production is relatively recent. It is a by product of the *Apertura Petrolera* (Oil Opening) policy initiated in the eighties, which began with the internationalization of the industry in 1985 (that is, the establishment of joint ventures with European and US enterprises such as Veba Oel and Rhur Oel in Germany, Nynas Petroleum in Sweden, and Citgo in the US) and continued with the opening process of the domestic industry to foreign capital in 1996-97. During these years, PDVSA gained autonomy and independence from the Executive and managed to reduce its fiscal contribution. It procured from the authorities the progressive elimination of the export fiscal value – a device that allowed governments ex ante to set the price that would determine tax contributions irrespective of market conditions - between 1993 and 1995. PDVSA also proposed the elimination of royalties in different opportunities, but this was not approved. (Espinasa, 1999) In exchange, PDVSA would begin paying dividends to the Central Government.

Figure 15: Petroleum Taxes and Investment, 1947-2003

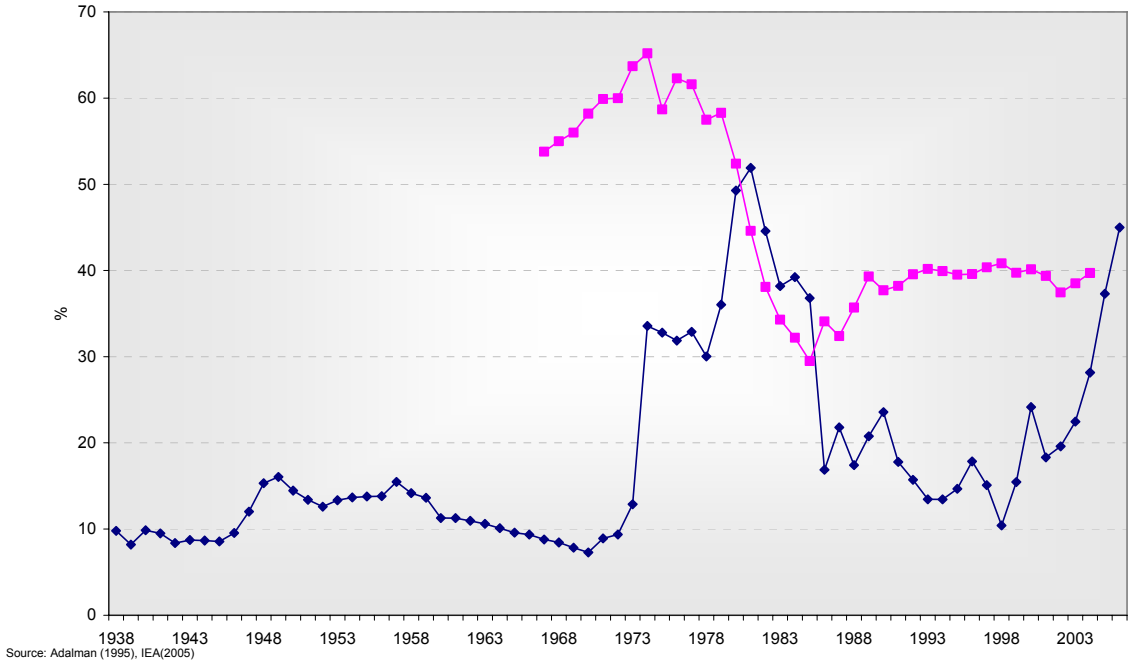


Source: Manzano (2006)

If increasing taxes on oil production is unlikely to bring about enhanced fiscal space, how about increasing oil revenues? Maximizing oil revenues has been a cornerstone of Venezuelan fiscal policy since the 1940s, and is the obvious motivation for the country's participation in OPEC. As Figure 16 shows, this has implied a significant loss in world market share. Whether there have been price benefits depends on whether one thinks OPEC has effective market power, which is subject to considerable debate (Smith (2005)). If OPEC has no market power, then obviously Venezuela would be better off by leaving OPEC. If OPEC has market power, then the issue becomes more complicated. Venezuela could obviously play the strategy of defecting and expect other members to not defect from the cartel. This was the policy played by Ecuador when it left OPEC in 1992. If the strategy touches off no retaliation; it is optimal. If it generates retaliation,

then it is not evident that Venezuela is best poised to win a price war against OPEC: as Table 8 shows, Venezuela's proven reserves are approximately one-fourth those of Saudi Arabia.

Figure 16: OPEC World Market Share and Venezuelan Oil Price, 1938-2004



Source: Adalman (1995), IEA(2005)

Table 8: World Proved Reserves of Oil and Natural Gas, Year-End 2004		
Country/Region	Reserves (Billion Barrels)	Percent
Saudi Arabia	262.730	22.11%
Iran	132.460	11.15%
Iraq	115.000	9.68%
Kuwait	99.000	8.33%
United Arab Emirates	97.800	8.23%
Venezuela	77.226	6.50%
Russia	72.277	6.08%
Kazakhstan	39.620	3.33%
Libya	39.126	3.29%
Nigeria	35.255	2.97%
United States	29.299	2.47%
China	17.070	1.44%
Canada	16.802	1.41%
Qatar	15.207	1.28%
Mexico	14.803	1.25%
Algeria	11.800	0.99%
Brazil	11.243	0.95%
Norway	9.673	0.81%
World Total	1,188.505	100.00%
Source: BP Statistical Review		

A less dramatic way to increase fiscal oil revenues could be by increasing domestic prices of gasoline. There are two channels through which this could impact fiscal revenues: through the gasoline tax and through the profits of PDVSA. Before the 2001 Hydrocarbons Law, the gasoline tax took the form of a specific tax expressed in Bs. per liter. Under the 2001 law it became an ad-valorem tax on prices (30%). The change actually involved a significant reduction in the average fiscal burden (more than 50%). Since Venezuela has quite possibly the lowest price of gasoline in the world, collection on this tax is a small fraction of what it could be. As Figure 17 shows, this tax has collected up to .9% of GDP on several occasions, giving a measure of the possible increase in revenues that could be generated by a rate increase.

Table 10 displays a more comprehensive exercise simulating the effect of alternative scenarios of the price of gasoline on the 2004 budget. Column 2 shows the historical 2004 scenario. In it gasoline tax collection is .08% of GDP and PDVSA losses from selling gasoline at below cost are 0.62% of GDP. That year the government spent 0.02% of GDP on subsidizing public transportation. Scenario A assumes that Venezuela set a price of gasoline necessary for PDVSA to break even on the domestic market. This would imply an increase from 2.1 (US) cents a liter to 5.5 cents. The net gain from this move would be .71% of GDP, even after assuming that the public transportation subsidy increases proportionately to the price increase. A second, more ambitious scenario (B) would increase the price to Niger's price of 7 cents a liter. The net gains sum 1.04% of GDP. Scenario C simulates increasing the price to Saudi Arabia's price

of 17.5 cents/liter. The net gains are 3.25 points of GDP. This is 2.66 times the yearly average that the government has spent on its hallmark social programs, the *Misiones*, between 2003 and 2005. These gains do not take into account the social benefits from reducing resource misallocation - overuse of roads and highways, high maintenance costs and losses associated with heavy traffic, noise and pollution.[26]

Despite huge potential fiscal gains, Venezuelan governments have been hesitant to increase the price of gasoline ever since rate increases in February 1989 set off massive riots. Adjustments have mainly taken place during times of extreme fiscal distress, and even then they have faced strong opposition. The Chavez administration has refused to alter the nominal price of gasoline, which has remained constant since 1999. Although the social and political impact of gas price increases should not be underestimated, it is difficult to believe that present Venezuelan pricing policy is optimal from any viewpoint.[27]

[26] Alternative massive transportation systems, such as railroads, might be more efficient, but their costs are artificially raised with the policy of low price of gasoline. The absence of railroads forces the transportation of goods by trucks; thus, raising the price of gasoline implies an important raise in inflation.

[27] Some research has indicated that subsidizing the price of gasoline is indeed regressive (Rigobón, 19xx), although the regressivity of reducing the subsidy is inextricably linked to the marginal increases in spending/reduction in taxation that would occur as a result.

Table 9: Retail Motor Gasoline Prices in Selected Countries, 1990-2004 (Dollars[1] per Lt.)

Regular Unleaded

	Australia	Canada	China	Germany	Japan	Mexico	South Korea	Taiwan	United States	Venezuela[3]
1990	na	0.494	na	0.700	0.835	0.264	0.541	0.658	0.306	0.068
1991	0.518	0.507	na	0.766	0.914	0.343	0.658	0.631	0.301	0.075
1992	0.499	0.457	na	0.864	0.948	0.396	0.700	0.639	0.298	0.066
1993	0.457	0.415	na	0.811	1.062	0.412	0.761	0.600	0.293	0.050
1994	0.486	0.383	0.254	0.930	1.160	0.391	0.758	0.565	0.293	0.032
1995	0.515	0.404	0.272	1.046	1.170	0.296	0.777	0.589	0.304	0.024
1996	0.560	0.425	0.272	1.041	0.964	0.333	0.840	0.568	0.325	0.088
1997	0.541	0.428	0.283	0.932	0.864	0.388	0.882	0.589	0.325	0.119
1998	0.431	0.365	0.251	0.882	0.747	0.396	0.803	0.491	0.280	0.120
1999	0.454	0.401	0.251	0.903	0.864	0.475	1.004	0.491	0.309	0.104
2000	0.512	0.491	0.280	0.911	0.964	0.534	1.104	0.568	0.399	0.097
2001	0.452	0.454	na	0.898	0.864	0.584	0.993	0.534	0.386	0.089
2002	0.465	0.449	na	0.969	0.832	0.594	1.014	0.510	0.359	0.054
2003	0.581	0.526	na	1.212	0.917	0.552	1.088	0.571	0.420	0.047
2004	0.718	0.626	na	1.384	1.038	na	1.191	0.650	0.497	0.039

Premium Unleaded [2]

	France	Italy	South Africa	Spain	Thailand	United Kingdom	United States	Venezuela[4]
1990	0.959	1.212	na	na	na	0.745	0.357	
1991	0.911	1.189	na	na	na	0.795	0.349	
1992	0.943	1.197	na	0.924	0.357	0.808	0.349	
1993	0.901	0.972	na	0.795	0.333	0.750	0.343	
1994	0.948	0.977	na	0.790	0.320	0.790	0.346	
1995	1.125	1.057	na	0.856	0.333	0.848	0.354	
1996	1.165	1.160	na	0.877	0.394	0.882	0.372	
1997	1.057	1.075	0.454	0.795	0.335	1.012	0.375	
1998	1.022	1.014	0.399	0.740	0.288	1.072	0.330	
1999	1.017	1.022	0.409	0.745	0.322	1.133	0.359	0.150
2000	1.004	0.996	0.470	0.755	0.365	1.210	0.446	0.139
2001	0.927	0.943	0.420	0.724	0.351	1.094	0.438	0.127
2002	0.956	0.988	0.372	0.766	0.357	1.099	0.412	0.069
2003	1.149	1.197	0.504	0.924	0.401	1.241	0.470	0.061
2004	1.318	1.400	0.681	1.080		1.471	0.547	0.051

[1] Nominal dollars.

[2] Research Octane Number (RON) of 95 for IEA data.

[3] There have been changes in Venezuela's RON: from 1990 to 1993 RON of 83; from 1994 to 2001 RON of 87 and 91; from 2002 to 2004 RON of 91.

[4] From 1999 to 2004 RON of 97.

Sources: International Energy Agency for all countries except Venezuela; Ministry of Energy Venezuela

Notes on data presented by the IEA:

Prices are those actually paid, i.e., net of rebates, and include transport costs and taxes which are not refundable.

Prices in national currencies are converted to U.S. dollars using exchange rates published by the International Monetary Fund.

Prices for all countries, except the United States, have been converted from dollars per liter to dollars per gallon at 3.786 liters per gallon.

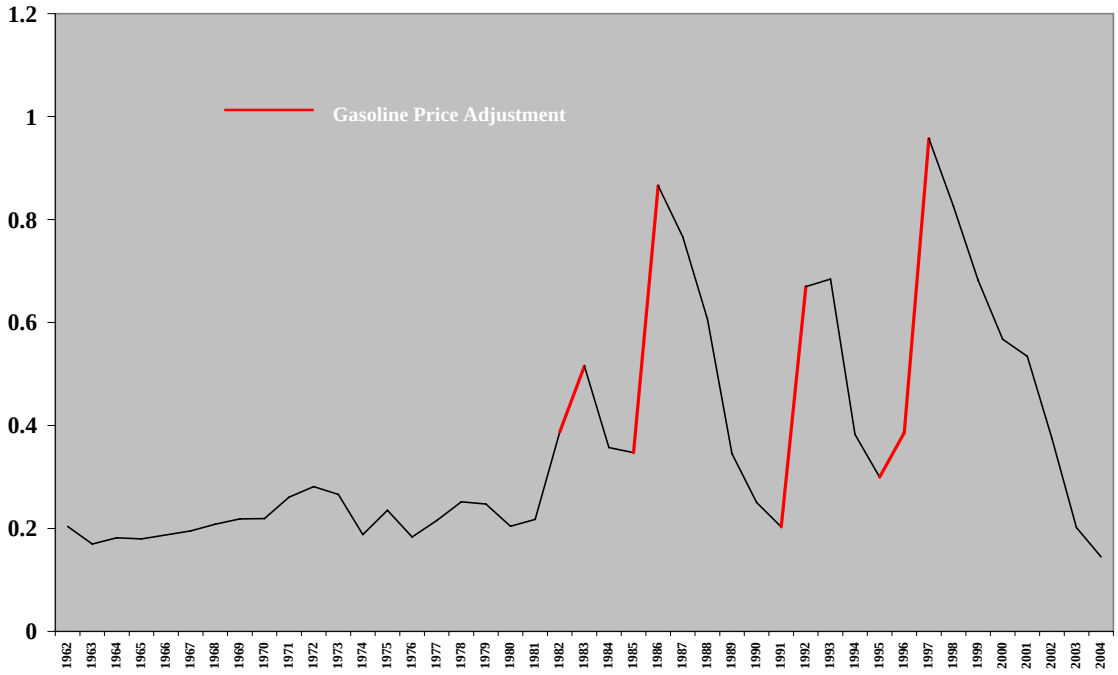
Comparisons between prices and price trends in different countries require care. They are of limited validity because of fluctuations in exchange rates, differences in product quality, marketing practices, market structures, and the extent to which the standard categories of sales are representative of total national sales for a given period.

na = not available.

Table 10: Taxation on Gasoline Consumption (Simulation)						
		2001	2004	2004a	2004b	2004c
Consumption	lts	13,079	11,535	11,535	11,535	11,535
Price	Bs/lt	39	47	121	154	384
Tariff	Bs/lt 2001; 30% on price 2004	35	14	36	46	115
Sales	Million Bs	515,313	543,321	1,393,068	1,771,849	4,429,623
Margin Rate Distribuitors	%	10	10	10	10	10
Total Margin Distribuitors	Million Bs	51,531	54,332	139,307	177,185	442,962
Tax Collection	Million Bs	457,765	162,996	417,921	531,555	1,328,887
Tax Collection	% of GDP	0.50	0.08	0.20	0.26	0.64
Cost (1$/lt)	Bs/lt	41	121	121	121	121
Total Cost	Million Bs	536,773	1,393,068	1,393,068	1,393,068	1,393,068
PDVSA's Surplus/Deficit	Million Bs	-21,460	-849,747	0	378,781	3,036,555
PDVSA's Surplus-Deficit/GDP	%	-0.02	-0.62	0.00	0.28	2.21
Subsidy to Public Transportation	25% of Tax Collection	114,441	40,749	104,480	132,889	332,222
Subsidy to Public Transportation/GDP	%	0.13	0.02	0.05	0.06	0.16

Notes: data in shadowed cells are parameters used in the 2001 and 2004 Budget Law estimations of Taxes on Gasoline
The margin rate is assumed, cost/lt are proxied by $ cost production and refination per barrel publicated by the Ministry of Energy. In scenario a price is equal to cost, in scenario b we use Niger's price and in c Saudi Arabia's price
Sources: Budget Laws 2001, 2004, PODE 2001 and own calculations.

Figure 17: Tax Collection on Domestic Consumption of Gasoline and Oil Products
% of GDP



3.3 Domestic Taxation

We now turn to the analysis of non-oil taxation. Potential sources of enhanced fiscal revenue are easier to find in the domestic tax space. As we have

discussed above, the non-oil tax rate is extremely low by international standards. In this section we will attempt to identify the specific areas in domestic taxation in which specific reforms could lead to an enhancement of fiscal space.

The Venezuelan Domestic Tax System relies on both direct and indirect taxes. Among the first ones are the corporate and individual Income Tax (IT) and the Tax on Inheritance and Donations. A tax on corporate assets existed between 1993 and 2004. Indirect taxes include the Value Added Tax (VAT), Customs, Excises (on liquors, cigars, and matches), Real Estate Registration Rights, a Tax on Gambling and Lotteries and a Telecommunications Tax. Payroll taxes, usually reported separately by the collecting entities, include Social Security (retirement, medical assistance and unemployment insurance) as well as specific taxes with revenues earmarked to cover work training, recreational services, housing, assistance to elderly and daycare. There are also various municipal and state taxes. Table 11 shows their real collection level and their shares in total domestic taxation. Although some analyses have emphasized the need for a reform in excise and other minor taxes that should report higher yields, we will concentrate on those with the largest potential impact on revenues, namely VAT, IT, trade, payroll, and state and municipality taxes.

Table 11: Sources of Domestic Taxation

	1962-1973	1974-1983	1984-1988	1989-1998	1999-2004
	% of GDP				
Total	**6.659**	**6.356**	**5.861**	**6.374**	**7.960**
Direct	**4.303**	**4.288**	**3.826**	**2.478**	**2.502**
On Domestic Income	2.877	2.993	2.839	1.747	1.891
Inheritance and Gifts	0.071	0.073	0.070	0.024	0.027
Social Security	1.356	1.223	0.918	0.707	0.584
Indirect	**2.356**	**2.068**	**2.035**	**3.896**	**5.458**
VAT	0.000	0.000	0.000	1.917	3.728
Customs	1.185	1.208	1.075	1.312	1.066
Liquors	0.651	0.377	0.456	0.247	0.152
Cigarrettes	0.505	0.361	0.385	0.237	0.280
Matches	0.009	0.004	0.000	0.000	0.001
Real Estate Rights	0.005	0.117	0.112	0.135	0.082
Gambling and Lottery	0.000	0.000	0.000	0.000	0.007
Telecommunications	0.000	0.001	0.000	0.027	0.142
Others	0.000	0.001	0.006	0.021	0.000
	% Share in Total				
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Direct	**64.6%**	**67.5%**	**65.3%**	**38.9%**	**31.4%**
On Domestic Income	43.2%	47.1%	48.4%	27.4%	23.8%
Inheritance and Gifts	1.1%	1.1%	1.2%	0.4%	0.3%
Social Security	20.4%	19.2%	15.7%	11.1%	7.3%
Indirect	**35.4%**	**32.5%**	**34.7%**	**61.1%**	**68.6%**
VAT	0.0%	0.0%	0.0%	30.1%	46.8%
Customs	17.8%	19.0%	18.3%	20.6%	13.4%
Liquors	9.8%	5.9%	7.8%	3.9%	1.9%
Cigarrettes	7.6%	5.7%	6.6%	3.7%	3.5%
Matches	0.1%	0.1%	0.0%	0.0%	0.0%
Real Estate Rights	0.1%	1.8%	1.9%	2.1%	1.0%
Gambling and Lottery	0.0%	0.0%	0.0%	0.0%	0.1%
Telecommunications	0.0%	0.0%	0.0%	0.4%	1.8%
Others	0.0%	0.0%	0.1%	0.3%	0.0%

Source: National Budget Office

The entries of Table 11 picture two remarkable facts on the Venezuelan tax system. One is the declining share of direct taxes, not only in total revenue, but also as a share of GDP. The other one is the negligible role played by social security taxes. These features have been systematically pointed out by previous

studies on the Venezuelan tax system, including those commissioned by different administrations.[28]

Table 12 compares Venezuelan tax collection to that of the rest of the region. We exclude oil taxes and present Venezuelan tax collection as a percentage both of GDP and of non-oil GDP. In the case of evaluating the tax burden, it appears that the correct standard is the latter. As is evident from Table 12, the indirect tax burden in Venezuela is similar to that of the rest of the region (8.7% vs. 8.6%). However, the direct tax burden appears to be much lower (3.3% vs. 5.9%). This suggests that the Venezuelan tax system may be considerably more regressive than that of the rest of the region. Indeed, Venezuela shares with Bolivia the second lowest position (after Peru) in the comparison of the direct taxes' share in total (26.2%).

Table 12:Total Taxes
1990-2003

	% of GDP			%
	Indirect	**Direct**	**Total**	**Direct/Total**
Venezuela	7.1	2.5	9.6	26.2
% of Non-Oil GDP	8.7	3.3	12.0	27.5
Argentina	7.6	3.7	11.3	32.7
Bolivia	10.3	3.7	13.9	26.2
Brazil	5.8	11.7	17.5	67.1
Chile	11.8	5.8	17.7	33.1
Colombia	7.3	5.8	13.2	44.1
Mexico	9.2	6.7	15.9	42.2
Paraguay	8.0	2.7	10.8	25.2
Peru	10.5	4.2	14.7	28.5
Uruguay	14.1	10.3	24.4	42.1
Latin America	8.6	5.9	14.6	40.6
OECD	10.9	19.1	30.0	63.6

Source: IMF

[28] Among the most prominent are the Mission Shoup contracted by the Venezuelan government in ... and the Study and Fiscal Reform Commission created in 1980 by the administration of President Luis Herrera Campins.

3.3.1 VAT

The VAT, which is presently the most important source of ordinary[29] domestic fiscal revenues (60% in 2004), was introduced into the Venezuelan tax system in 1993. This signaled a significant delay in adoption in comparison to other countries. Indeed, adoption of a VAT had been recommended by the 1958 Shoup Commission as well as by the Commission for Study of the Fiscal Reform constituted in 1980. Section 6 discusses the incidence of political economy factors in its adoption. It has also been reformed numerous times – including two name changes and continuous modifications to the list of exempt taxes. Since its introduction, VAT collection has averaged 4.5% of GDP,[30] with an efficiency (tax collection divided by the nominal tax rate) of 0.30. Tax collection (as percent of non-oil GDP) is similar to the average of Latin America, but considerably lower than those of the best performers in the region (Bolivia, Chile, Mexico, Peru and Uruguay) (Table 13).

The existence of differential tariffs, an extended list of exemptions, and a high threshold for determining contributing firms are among the factors that contribute to low collection levels. Since 1998, the authorities have chosen to reduce the VAT rate, which is now at 14.0% (down from 16.5% in 1996-98 – see Table 14). Casanegra et al. (1996) argue that the establishment of additional rates on certain goods and imports in the 1994 reform appears to have increased the

[29] In the Venezuelan public finance terminology, "ordinary" resources are those received for more than three years in a row (Organic Law of the Public Sector Financial Administration).
[30] This average does not include the 1993-1994 figures. In 1993, the collection of the tax began in October of that year; while in 1994, the VAT law was revoked and the tax was substituted by one on Retail Sales and Luxurious Consumption whose collection started in April.

complexity of the system with a marginal contribution to tax collection. He also calculated that the implicit subsidy that accrued to the 25% lowest income houses from exonerations and exemptions (16%) was considerably lower than that perceived by the 25% highest income houses (41%).

Table 13: Taxes on goods and services, 1990-2003

	% of GDP
Venezuela	4.3
% of Non-Oil GDP	5.8
Argentina	3.9
Bolivia	7.5
Brazil	4.0
Chile	10.4
Colombia	5.4
Mexico	8.1
Paraguay	5.0
Peru	8.0
Uruguay	9.7
Latin America	6.3
OECD	10.2

Source: IMF

Table 15 shows the result of calculations of potential tax collection based on the Venezuelan Central Bank's 1997-98 Consumption and Expenditure Survey. Our estimates indicate projected evasion rates of 30-40%. Fortunately, these have been declining over time. Not reflected in the calculations is a recent administrative reform of 2003, which imposed a payment of 75% of estimated taxes before the start of the exercise. Conversations with SENIAT staff suggest that this simple reform has been particularly effective in raising collection.

Table 14: Chronology of VAT Tax Rates

	1993	1994 (b)	1995	1996	1997	1998	1999	2000	2001	2002 (b)	2003	2004	2005
VAT/GDP	0.6%	2.0%	3.3%	3.6%	4.3%	5.4%	4.8%	4.0%	4.1%	4.1%	4.7%	6.4%	7.1%
Basic Rate	10.0%	10.0%	12.5%	16.5%	16.5%	16.5%	15.5%	14.5%	14.5%	14.5%	14.5%	15.0%	14.0%
Valid													
From	1/10/1993		1/1/1995	1/8/1996			1/6/1999	1/8/2000		1/8/2002		1/9/2004	1/10/2005
To	1/1/1995		1/8/1996	1/6/1999			1/8/2000	1/9/2002		1/9/2002		1/10/2005	
Basic Rate										16.0%			
Valid													
From										1/9/2002			
To										1/9/2004			
Additional Rate (a)		15.0%								10.0%			
Valid													
From		1/1/1994								1/8/2002			
To		1/8/1994								1/9/2002			
Additional Rate (a)		20.0%								8.0%			
Valid													
From		1/8/1994								1/9/2002			
To		1/1/1995								1/9/2004			
Free Zone Rate							8.0%						
Valid													
From							1/6/1999						
To							1/8/2000						

Source: Budget Laws, VAT Laws, MF
(a) Rates on luxury goods
(b) two reforms in the same year

Table 15: VAT Simulations

	% of GDP					
	1997	1998	1999	2000	2001	2002
Estimated Tax Base	43.6	48.3	47.5	42.9	46.1	39.8
Potential Tax Collection	7.2	8.0	7.4	6.2	6.7	5.8
Effective Tax Collection	4.3	5.4	4.8	4.0	4.1	4.1
Difference	2.9	2.6	2.6	2.2	2.6	1.7
Estimated Evasion	40.3	32.6	35.1	36.2	38.9	29.4

Source: CBV, MF and own calculation

3.3.2 Income Tax

The stylized facts of the Venezuelan **Income Tax** (IT) suggest that some reforms might bring about permanent additional resources here as well. Some of the salient features of this tax are: a declining share over time in revenues; a low ratio to GDP compared to other Latin American countries; a reduced tax base determined by an indiscriminate and generous system of exemptions, exonerations and discounts; a bias against labor income; and a complex system of

tariffs. Several reforms have been implemented, but they still limit the tax collection.[31]

The initial introduction of the tax in 1942 responded to falling fiscal revenues brought about by the interruptions in international trade caused by the Second World War. The design of the tax followed the "cedular" approach that taxed the income according to the source of the revenues (tax on manufacturing, labor, hydrocarbons and mines, retail, etc.), with rates that oscillated between 1.5% and 3%, and with a complementary tax with 20 sections of income and rates that went from 2% for the lowest to 9.5% for the highest sections. As discussed in section 2, the law allowed for a broad set of exemptions in each case and gave competences to the government to establish discretionary exonerations.

Table 16: Tax on Income, 1990-	**% of GDP**
Venezuela	1.8
% of Non-Oil GDP	2.4
Argentina	0.9
Bolivia	1.5
Brazil	4.1
Chile	4.4
Colombia	5.8
Mexico	4.8
Paraguay	1.8
Peru	2.8
Uruguay	2.9
Latin America	3.6
OECD	8.6

Source: IMF

[31] The Income Tax Law of 1942 was reformed twice, and derogated in 1948. The law of 1955 substituted the one approved in 1958, and was reformed in 1958. This year a new law was approved and reformed in 1961. The 1966 law was reformed four times and substituted by another one in 1978. This law has been reformed seven times until a new one was approved in 2001. Between 1942 and 1966, most of the reforms focused in the modification of tariffs and in the rise of the burden on oil activities. The law of 1966 adopted the global system, but most of its reform concentrated on the tax regulations on oil activities. The adjustment for inflation and the issue of double taxation were introduced in the 1991 reform, and the world rent principle in the 2001 law.

The new law brought about additional revenues to the treasury that amounted to less than 1% of GDP. The brief democratic 1945-48 administration introduced three reforms that grounded on the financing needs of the new political project: one of them established an extraordinary contribution on high income sectors (1945), while the other two mainly affected oil activities – increase in the complementary tax rate (1946) and an increase in the fiscal share in oil corporate profits to 50% (1948) –. Taking into account a raise in the rate on fortuitous gains in 1955, the annual average of the tax collection increased up to 1% of GDP until 1958.

The democratic regimes that started in 1958 showed an initial disposition towards the improvement of the non-oil public finance structure by designating the study of the domestic tax system to the Mission Shoup[32] in 1958. This Mission recommended a radical reform that would have implied the substitution of the cedular system by a global one, but their recommendations were ignored. The reforms that took place in 1958 and 1961 were instead directed at raising the contribution of high income sectors, starting from increases in the marginal rates of the complementary tax and the introduction of a pay-as-you go system to finance Social Security. These changes brought about additional tax revenues that allowed an annual average tax collection that amounted to 2.5% up to 1966[33] when a new IT law was approved.

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[32] The name is the mission obeys to the fact that Carl Shoup, a Columbia Economics Professor who advised several countries on tax system reform. In recognition to his contribution to Japanese reforms, he was twice decorated with the Order of the Sacred Treasure by Emperor Hirohito.

[33] The average refers to the 1958-1966 period.

Faced with declining oil prices (Figure 16), the Leoni administration finally adopted some of the Shoup Mission's suggestions in 1966, particularly in reference to the principles of global taxation to individual and corporate income. The new law, however, maintained a vast system of exemptions and exonerations. Revenues increases in 0.5% of GDP on average during the next decade.

The efforts of future administrations to improve the IT collection would, basically, be devoted to introduce new dispositions on the oil IT. That was the case of the reforms to the 1966 law applied in 1970, 1974, 1975 and 1976, which progressively increased the tax rate to oil activities from 52% to 72%. This burden was reduced to 67.7% in the new law approved in 1978, two years after the nationalization of the oil industry. That law also established a higher burden to personal and corporate income through the raise in intermediate marginal rates. A simplification of the tariff system on the corporate tax – reduction of five brackets to three – was approved in 1986, but appears to have had little effect on tax collection.

The 1989 Washington Consensus Package of Reforms contemplated an aggressive reform of the IT. Its proposal was to considerably simplify the rate structure, introducing an inflation adjustment, increasing the threshold level on the individual income tax, eliminating double taxation on dividends and eliminating many of the differential tax rates and other sources of presumed distortions. The reform was approved in 1991. The reform did not have the

intended effects: the IT tax's collection declined to around 2% of GDP, a loss of one percentage point of GDP with respect to the average reached before 1989. In 2001, a new law was approved to incorporate the principle of world rent (taxing of foreign source income by Venezuelan citizens), with little discernible effect on collection.

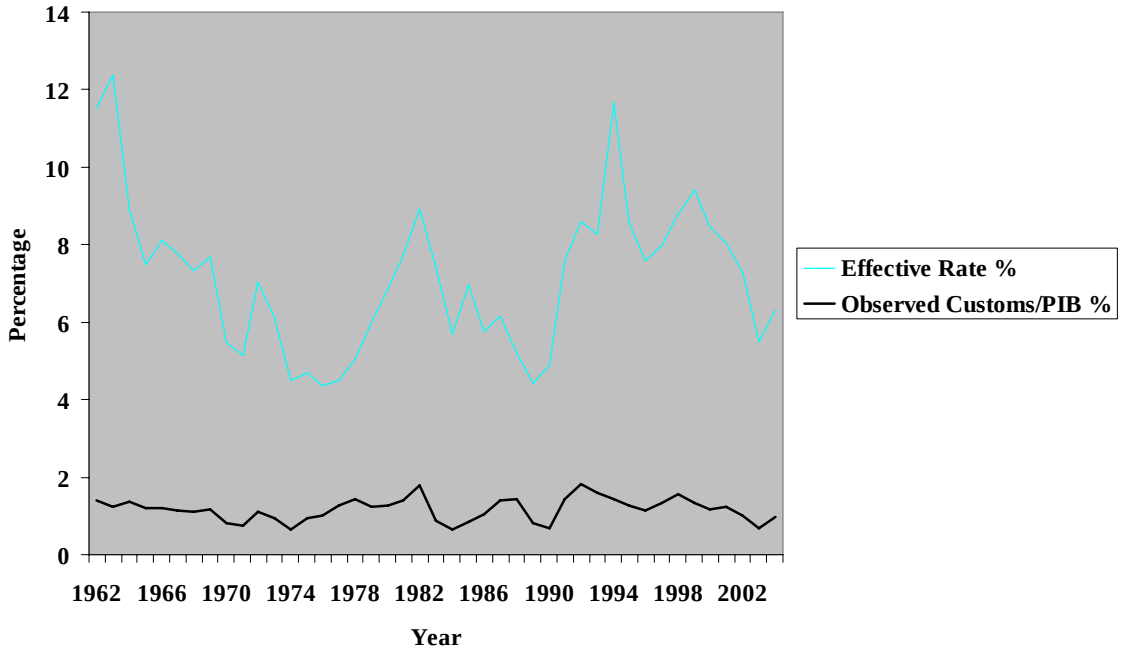
3.3.3 Trade Taxes

Taxes on international trade represented until 1993 the main indirect tax in Venezuela. Despite Venezuela's reliance on an ISI strategy until 1989, effective tariff rates were actually quite low for a great part of the period. Although NTBs, particularly a rigid exchange control, was prevalent in the 1983-89 period, they were marginal for the rest of the period of study. Indeed, a free trade treaty with the US made Venezuela a particularly open economy until 1972 (when the treaty was repealed).

Curiously, the strategy of trade liberalization adopted in 1989 has appeared to increase tariff revenues after 1989 (Figure 18). Nominal tariff rates were cut from 40% to 7.5% while the number of different rates went from over forty to four ad-valorem rates. Most NTBs had been eliminated by early 1992. Tax credit incentives were also gradually reduced until their total elimination in 1991, and substituted by a system of duty drawbacks; a 10 per cent export credit form some agricultural products was, however, retained. Venezuela joined the World Trade Organization in 1990. After the reform, the yield of customs averaged 1.7% per

year and followed a closer pattern to that of imports; improvements in the administration of the tax reflected in the continuous increase of the effective rate between 1989 and 1994. Indeed, trade tax collection compares favorably with that of other Latin American countries (Table 17).

Figure 18: Tariff Revenue and Effective Rate (Collection/Imports)



Since 1999 the Chávez administration has reversed the openness strategy. The 1999 reform to the Organic Custom Law allowed discretionary government protection to domestic activities. This is obviously limited by Venezuela's membership in the WTO. However, Venezuela has decided to renounce its membership in the Andean Community and the G-3 (an FTA that comprised Mexico, Colombia and Venezuela), as well as imposing exchange controls and

significant restrictions on cross-border trade with Colombia.[34] Trends in integration are far from clear, however, as Venezuela has signaled its willingness to join Mercosur. The strong appreciation of the Bolívar in recent years has also led to an increase in imports. However, Figure 18 does show in general a declining trend in trade tax revenues in recent years.

Table 17: Taxes on International Trade, 1990-2013

	% of GDP
Venezuela	1.6
% of Non-Oil GDP	2.1
Argentina	1.9
Bolivia	0.8
Brazil	0.5
Chile	0.6
Colombia	1.1
Mexico	0.8
Paraguay	2.0
Peru	1.6
Uruguay	1.3
Latin America	1.6
OECD	0.3

Source: IMF

3.3.4 Social Security

Venezuelan payroll taxes include social security taxes as well as labor taxes earmarked to finance vocational training, a housing fund, unemployment insurance and daycare expenditures. Their annual average share in GDP amount to 1.3% for the whole period 1970-2003. The comparison with other countries shows that social security taxes are a very small source of revenue in Venezuela (Table 18). Many government workers have their own social security programs

[34] See Gutiérrez (2002) for a discussion of the effect of restrictions on cross-border transport with Colombia in 1999.

but information on contributions is very disperse and not fully reported in the statistics of public finance. [35]

Table 18: Social Contributions, 1990-2003

	% of GDP
Venezuela	0.7
% of Non-Oil GDP	0.9
Argentina	2.8
Bolivia	2.2
Brazil	7.6
Chile	1.5
Colombia	0.1
Mexico	1.9
Paraguay	0.9
Peru	1.4
Uruguay	7.4
Latin America	2.3
OECD	10.5

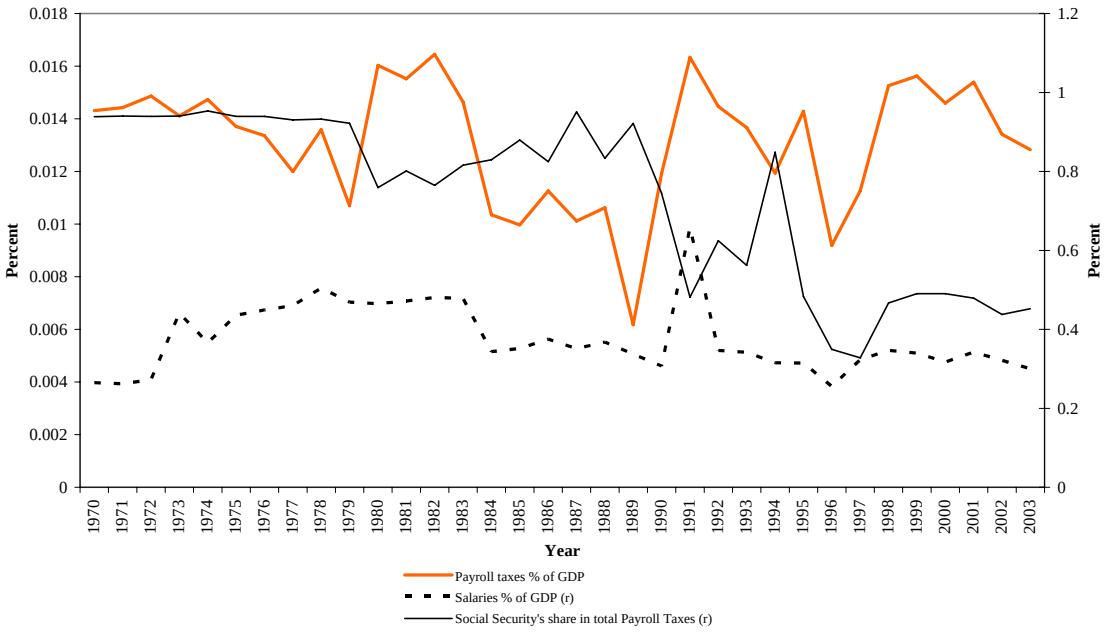
Source: IMF

The present social security system consists of a pay-as-you-go mechanism under which taxes collected from current workers are used to pay current retirees. Active workers finance contingencies covered by the system with monthly contributions. The average tax rate on payroll income is close to 20%, of which the employee share is about a fifth (Table 19). International comparisons tend to rank Venezuela as one of the countries with greatest regulation-imposed labor market rigidities in Latin America (Bermúdez, 2004).

[35] Social security programs for public workers include those of Ministry of Education, Health and Defense, and of others decentralized entities (PDVSA, Universities among others). The costs supported by public entities are estimated in approximately 1% of GDP.

Table 19: Social Security Taxes and Contributions				
Contributions	**Employer**	**Employee**	**Total**	**Share Employee**
Social Security	13.8	3.2	17.5	
Pensions	5.4	0.8	6.8	0.1
Medical Assist	4.7	1.6	6.3	0.3
Unemployment	2.0	0.5	2.5	
Other	1.8	0.3	2.0	
Work Training	0.3	0.1	0.3	
Housing	2.0	1.0	3.0	
Total	16.1	4.2	20.3	

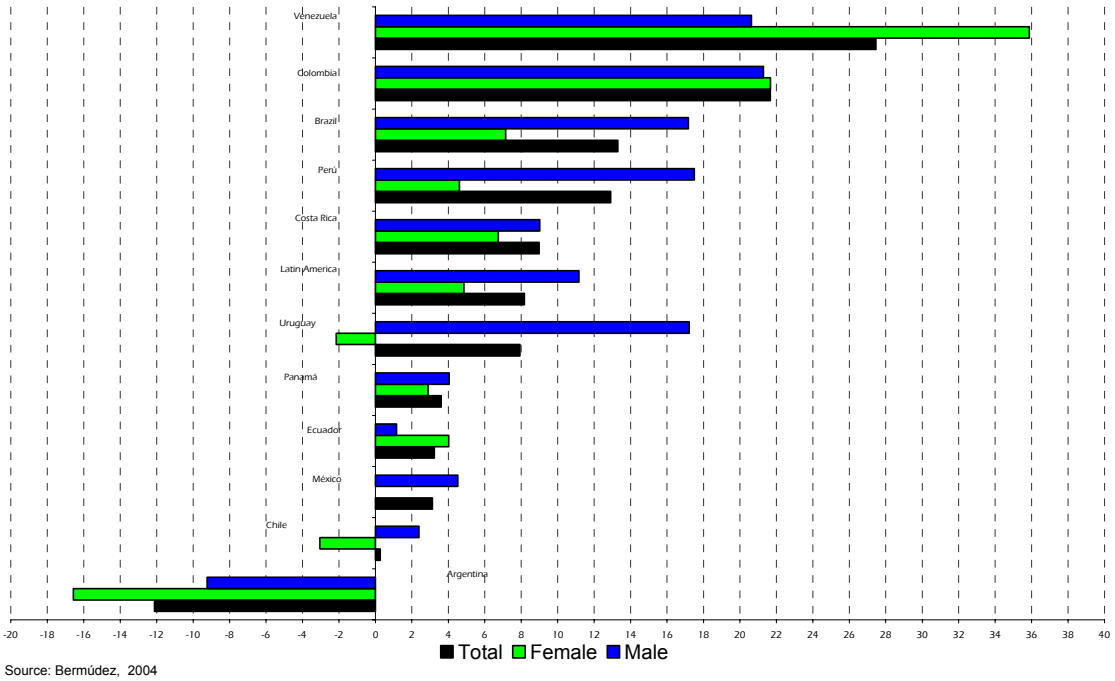
Figure 19: Social Security and Payroll Taxes and Salaries, 1970-2003



One of the reasons for a declining share in GDP of social security taxes has been the dramatic increase in the size of the informal sector. From 1990 to 2001, Venezuela suffered the greatest increase in the size of the informal sector in the region (Figure 20). The dependency ratio (# of workers/# of retirees) has thus fallen dramatically since the seventies (from 48 in 1974 to 7 in 1999), and the

relation of the contributor numbers to total employment has fallen by almost a half (40% from 1995 to 23% in 1999). Tax evasion has also affected the collection of the tax: according to reports of the Social Security Institute (IVSS) the rate of nonfulfilment is 50% of formal sector workers (which are about half of the labor force).

Figure 20: Growth Rate of Informal Sector, 1990-2001



Source: Bermúdez, 2004

The Venezuelan social security system was created in 1944 with the Mandatory Social Security Law. The reach of that law was limited: occupational illness and industrial accidents. Social security was given constitutional rank in 1961[36] which referred to the contingencies of occupational accidents, diseases, disability, retirement, death, unemployment and any other related to working conditions. The development of these aspects was not immediate, though. The 1967 law included pensions (retiree and surviving worker relatives) and disability

[36] Article 94, Constitution of Venezuela 1961.

insurance; the payments for these new concepts only started in 1972. In 1975, pensions were extended to cover all workers.

The 1997 IMF/World Bank adjustment program contemplated the adoption of measures oriented toward the reduction of the labor costs. One of them was the reform to the Social Security System, which materialized with the approval of a new law in 1997. New laws were approved in 1998 covering pensions, health and unemployment insurance.

Except for the unemployment insurance law, th1 1998 laws were suspended in 1999 by the Chávez administration. The new Constitution approved that year gave social security a wider scope, including a provision for a minimum pension equal to the urban minimum wage for all workers (including rural workers). The full budget impact of the new system has been estimated at 8% of GDP (OAEF, 2001). The complexity of the new system and its high budget impact has delayed its total implementation. The new Organic Law of Social Security was only approved in 2002, but a transition period of five years was legally established in order to be fully operative. In 2003, the average pension was US$ 167 (Table 20).

Table 20: Social Security Pension

	Bs. /month	$ /month
1980	899	209
2003	321,235	167

Source: IVSS and Ministry of Work

Although social security would appear to be a fertile area for the application of reforms that could generate increased revenues, those revenues

would be earmarked towards the social security system and therefore it would be difficult to direct them towards fulfilling the MDG goals. That said, a solid social security system could be a significant contributor in itself to achieving the MDGs. Furthermore, ensuring that the CG will not have to cover a set of conti9ngent liabilities arising from the social security system could also free up a significant amount of resources by itself.

3.3.5 States and Municipalities Taxes

We have already referred at length to issues of fiscal decentralization in Section 2 above; this section will make a few additional comments referring to the imbalance between spending and taxation responsibilities.

The approval of the 1989 reforms that allowed for direct elections of governors and mayors was originally designed to occur simultaneously with greater fiscal decentralization. The idea was that the Central Government would progressively transfer competences in public service provision to states and municipalities, while at the same time giving them the capacity to generate the resources to cover them. In practice, what occurred was a transfer of competences accompanied by a transfer of resources derived from national tax collection. Spending by states and municipalities has thus risen from 2.7% to 6.8% of GDP between 1990 and 2002 (Table 21). However, they are still as dependent on CG transfers as at the beginning of the 90s (Table 22).

This strongly centralized system entails not using one of the most valuable resources that the state has at its disposal for increasing tax collection: the legitimacy and capacity of local governments. A more decentralized system could generate a virtuous circle in which state and local governments make efforts to convince their constituents of the need to collect taxes in order to finance particular projects. Perhaps the most important effect of such a move would not be in the fact that it would help resolve free rider problems in garnering support higher marginal taxes, but in that it would allow to clearly communicate to voters the idea that there is a link between taxation and spending. That idea, which appears commonsensical to anyone in a developed country, is far from clear in a country where spending has typically been paid with natural resource rents.

Table 21: General Government

	1990		2002		1990		2002	
	Revenues	Share	Revenues	Share	Expenses	Share	Expenses	Share
	% of GDP	% of total	% of GDP	% of total	% of GDP	% of total	% of GDP	% of total
Total	26.7	100.0	28.6	100.0	27.6	100.0	31.9	100.0
Central Government	22.6	84.7	21.6	75.4	25.0	90.4	25.0	78.6
States	3.32	12.5	4.8	16.9	2.2	7.9	4.6	14.5
Municipalities	0.76	2.9	2.2	7.7	0.5	1.7	2.2	6.9

Source: Ministry of Finance and Central Bank of Venezuela

Table 22:Revenues States and Municipalities										
	% of GDP									
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Transfers from Central Government	3.7	3.7	4.3	6.6	5.6	5.2	6.0	5.9	5.6	5.7
Constitutional Grants	3.3	3.2	3.1	4.1	3.0	3.0	3.6	3.5	3.5	3.5
AEE				0.2	0.5	0.4	0.8	0.6	0.8	0.8
FIDES			0.2	0.4	0.5	0.5	0.4	0.4	0.3	0.4
Special transfers	0.4	0.5	1.0	2.0	1.6	1.4	1.1	1.4	1.0	1.0
Own revenues	0.4	0.1	0.1	0.1		0.1	0.1	0.1	0.2	0.4
Other resources									0.7	0.4
Total	4.0	3.8	4.4	6.8	5.6	5.3	6.1	6.0	6.5	6.5
Transfers from Central Government	90.9	96.8	98.7	98.4	100.0	98.6	98.1	97.8	86.2	88.5
Constitutional Grants	81.6	83.9	71.8	60.7	53.2	55.8	59.0	57.7	53.8	54.5
AEE	0.0	0.0	0.0	2.4	8.8	8.2	13.7	10.7	12.0	12.3
FIDES	0.0	0.0	4.6	6.0	8.5	8.5	7.1	6.5	4.3	5.7
Special transfers	9.3	12.9	22.2	29.3	29.5	26.1	18.3	22.9	16.1	16.0
Own revenues	9.1	3.2	1.3	1.6	0.0	1.4	1.9	2.2	2.5	5.5
Other resources									11.2	6.0

Source:National Budget Office

3.3.6. Some tentative conclusions

How can Venezuela generate more resources for the fight against poverty? First, raise the price of gasoline to the same price currently charged in Niger, whose per capita GDP is 4.4% that of Venezuela. This would still be only 14% of the US retail price. Even a reasonably inept politician should be able to explain that this is not an outrageous price to pay. This will give you 1.04% of GDP. Second, reform the income tax system. Randomly copying any Latin American country would generate 0.9 percent of GDP in expected value (just try not to copy Argentina). Third, raise the VAT tax back to 16.5%, where it was back in 1989. This will give you 0.75 % of GDP. Fourth, create a states sales tax surcharge that can be levied by state governors and make transfers to governors depend on tax

collection in their states and municipalities. If the average surcharge is 1%, that will give you 0.3% of GDP and take away a few headaches.

This set of simple reforms would increase tax revenues by 2.99% of GDP, or 40.2% of the 2004 extreme poverty gap measured by the one dollar a day criterion. Raising resources for poverty reduction is not difficult in Venezuela. In the arena of tax policy, Venezuela does have plenty of room.

4. Budget Management and Fiscal Space

In the previous section we looked at ways in which the Venezuelan state could increase its tax take. But resources may well be wasted at the stage of budget planning and management. If that is the case, it may be possible to reorient resources towards poverty reduction without necessarily increasing the tax burden. The present section looks at this type of reforms. In particular, we look at two instances in the design and implementation phase with significant implications for the efficiency of pubic resource allocation: the budget planning stage and the management of government financial assets.

4.1 Fiscal Space in the budget planning process

After the budget has been approved by the Legislative, Venezuelan governments have a limited number of mechanisms through which they can

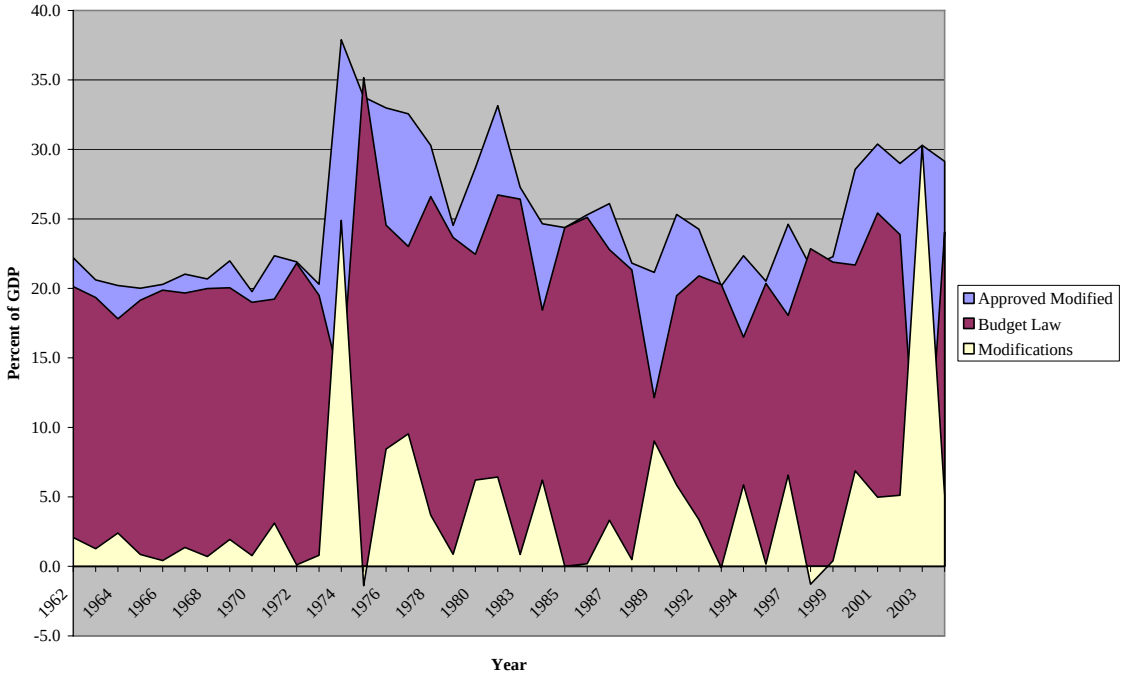
modify it. *Additional budget appropriations* are approved whenever unexpected increases in revenues are realized. *Insubsistencies and reductions* are legal figures that allow for the elimination of budget credits that will not be used for the end for which they were allocated. Once they are not used, they can be deducted from the total of the budget or they can be reallocated to expenditure. Finally, there is the *traspaso* which consists of reallocating resources between items; this is a limited practice that is only allowed under relatively strict restrictions. However, insubsistencies and reductions are in effect a perfect substitute for the traspasos, so that legal restrictions on the latter end up being of little relevance.

In principle, one should expect the value of additional appropriations to be compensated by that of the insubsistencies and reductions. In other words, one would expect the government to underestimate the budget on occasions (generating additional appropriations) and to overestimate it on other occasions (generating budget reductions). In practice, budgets have never been reduced by a significant amount. Insubsistencies and reductions are rather used to reallocate resources between expenditures. As Table 23 shows, additional appropriations have averaged 4.4% of GDP a year. Net transfers between budget items due to insubsistencies and reductions average 0.9% a year. In other words, Venezuelan budgets are routinely underestimated.

There are two rationales for budget underestimation. One is that additional appropriations are legally defined as extraordinary revenues and thus are not subject to earmarking rules that apply to ordinary revenues. The second one is that the Executive has greater bargaining power vis-à-vis Parliament with

additional appropriations. While the Legislative has the capacity to alter the composition of the budget, it can simply vote an additional appropriation up or down.[37] As the Legislative is unlikely to turn down additional appropriations, this gives the Executive complete power to decide on additional appropriations. The same is true for reallocations of expenditures financed with insubsistencies and reductions. Budget underestimation commonly takes the form of underestimating the price of oil.

Figure 21: Budget Law and Approved Changes



[37] It can alter the composition of the appropriation but cannot transfer funds to goals distinct from those for which the appropriation proposal is intended.

	Table 23: Changes to Budget during Fiscal Year	
	Insubsistencies and Reductions	Additional Credits
1962	0.3	2.4
1963	0.0	1.3
1964	0.1	2.4
1965	0.0	0.9
1966	0.0	0.4
1967	0.0	1.4
1968	0.0	0.7
1969	0.2	2.2
1970	0.1	0.9
1971	0.0	3.1
1972	0.2	0.3
1973	0.0	1.4
1974	0.0	24.9
1975	5.3	3.8
1976	0.3	8.8
1977	2.9	12.5
1978	1.5	5.5
1979	1.9	4.0
1980	1.1	7.3
1981	0.3	6.7
1982	2.8	2.7
1983	0.2	1.1
1984	0.5	6.7
1985	1.1	3.2
1986	0.7	0.9
1987	0.5	3.8
1988	0.0	0.2
1989	1.6	10.6
1990	0.1	5.9
1991	0.7	3.6
1992	1.8	5.2
1993	0.8	0.7
1994	1.2	7.1
1995	1.3	1.5
1996	0.1	8.0
1997	0.2	6.8
1998	2.4	2.2
1999	1.9	3.3
2000	1.9	8.8
2001	0.5	5.8
2002	1.6	6.3
2003	3.6	0.0
average	0.9	4.4
standard deviation	1.2	4.5

Source: Budget National Office

Particularly striking is the high variation in insubsistencies and reductions over time. While high values of additional appropriations can be understood as being the effect of positive revenue (primarily oil) shocks, it is hard to think of any shock that could generate spending projections to be off by more than 5% of GDP *given the level of revenues*. One combined effect of the high reliance on additional appropriations and insubsistencies/reductions is that the budget bargaining stage doesn't just occur at the moment of budget formulation but rather takes place continuously over the year. Government institutions are routinely told to wait for an additional appropriation if their requests were not included in the budget. Likewise, those who fall out of favor know that their budget can be cut indiscriminately. Such a possibility generates a scramble to overestimate budget proposals on the part of government institutions that feel that they have to protect themselves from possible future cuts.

What would a sensible reform of this system look like? It could start by limiting the role of budget modifications to a maximum that could be specified as a percentage such as 1% of GDP. It could also allow the Assembly to reallocate resources from additional credits to other budget lines and to end the distinction between ordinary and extraordinary revenues for the effect of earmarking rules. Since the latter would, *ceteris paribus*, generate an increase in nondiscretionary spending, the percentage allocations could be proportionately reduced to keep average transfers constant. These reforms would end the incentives for revenue underestimation, and limit the scramble for resources on the part of government institutions.

Limiting the use of additional appropriations requires devising a rule for the use of non-budgeted increases in oil revenues, as these will often exceed the 1% threshold. This can be done through the design of a Macroeconomic Stabilization Fund for the savings of oil revenues. Indeed, such a fund was constituted in Venezuela and operated since 1998. Despite its constitutional status, the Fund has been all but dismantled by the present administration.

4.2 Closing rules matter

A second source of inefficiencies in the budget execution stage has to do with the rules for budget closure. These refer to the rules for determining the resources that a government institution has used up at year end. These can be related either to *committed* expenditures or to *caused* expenditures. Expenditures are *committed* when a good or service is ordered, while they are *caused when* the good is received or the service is performed. Until 1976, budget closure was based on caused expenditures. This meant that budgeted expenditures that had not been used – in the sense of receiving the good or service they were destined to pay – would go back to the Treasury. In 1976 a new Budgetary Regime Law shifted to the committed expenditure rule. Although the 1999 law reverted to the caused expenditure rule, this provision has not been enforced by the Ministry of Finance, which has kept on applying the committed expenditures rule.[38]

[38] The law's Regulation 1 (Article 116), approved by the Ministry of Finance contrary to what is ordered by the Organic Law, authorizes the automatic imputation of committed expenditures to the credits of the next budget.

The basic problem is that it is much easier to commit expenditures than to cause them. Government institutions routinely scramble to commit resources at year-end, by signing contracts which they do not always intend to satisfy. In this way, they protect themselves from future cuts. The fact that committed expenditures often go unspent is revealed in Table 24. There are two key items here: pending credits (line 16) and budget balance from previous year (line 17). Pending credits refers to committed expenditures which are not paid on a cash basis. Budget balance from previous year refers to expenditures that are paid from last year's budget. That is, line 16 refers to the resources set aside to pay for committed expenditures, while line 17 refers to those that were effectively used to pay the same expenditures. The conclusion is straightforward: the government sets aside, on average, 3.2% of GDP to pay for pending credits, but ends up paying only for 1.9% of them. 1.3% of GDP is overbudgeted due to poor planning.

Obviously, this doesn't mean that the government can increase yearly spending by 1.3% of GDP, as unspent resources ultimately devolve to the Treasury. What it does mean is that at any moment of time there are 1.3 points of GDP that are not being used in expenditures.

Table 24: Overlapping Budgets

	National Treasury	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Annual average	Standard deviation
1	Initial Balance	1.9	7.5	18.0	14.8	10.1	6.5	4.5	1.4	2.7	3.4	0.6	0.5	0.5	0.1	0.1	0.9	4.6	5.5
2	Fiscal Revenues	21.7	24.8	26.3	20.5	19.5	19.3	17.9	22.0	23.8	18.1	20.9	24.9	25.5	24.0	28.0	30.0	22.9	3.5
3	Ordinary	19.5	22.5	22.9	17.5	16.6	16.3	15.9	18.0	20.4	13.2	15.8	17.7	18.0	17.5	19.7	21.8	18.3	2.7
4	Extraordinay	2.2	2.3	3.4	3.0	2.8	3.0	1.7	3.5	1.1	4.9	4.7	7.1	7.5	5.7	8.0	2.7	4.0	2.1
5	Financial Sources	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.3	1.3
6	Revenues from previous Budget	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0	0.4	0.1	0.0	0.8	0.4	0.0	0.2	0.3
7	Short-Term Treasury Bonds	7.5	15.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	-0.3	0.3	0.5	0.3	0.7	0.1	1.6	4.1
8	Placements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.6	1.5	2.1	3.7	5.3	2.9	1.2	1.7
9	Rescue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.8	1.2	1.6	3.4	4.6	2.8	1.1	1.5
10	Expenditures	19.9	23.7	24.2	21.9	19.2	18.7	19.3	19.5	22.4	21.3	20.5	25.2	26.3	24.2	27.4	27.3	22.6	3.0
11	Year Budget	18.8	22.3	22.2	19.3	16.4	17.5	16.9	18.2	20.5	18.9	18.7	22.6	21.7	22.0	26.0	25.9	20.5	2.9
12	Last Year Budget	1.1	1.3	2.0	2.6	2.8	1.3	2.4	1.3	1.9	2.4	1.8	2.6	4.6	2.3	1.5	1.4	2.1	0.9
13	Final Balance	11.2	24.0	20.1	13.4	10.4	7.1	3.2	4.0	4.1	0.7	0.7	0.5	0.2	0.1	1.4	3.7	6.6	7.4
14	FIEM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.1	0.4
15	Change of reserves	9.3	16.6	2.1	-1.4	0.2	0.6	-1.3	2.5	1.4	-2.7	0.1	0.0	-0.2	0.0	1.3	2.8	2.0	4.7
16	Pending credits	2.4	3.0	4.2	4.9	3.8	4.1	2.7	2.8	2.8	2.2	4.6	5.1	2.8	1.8	2.1	1.7	3.2	1.1
17	Budget Balance from previous year 6-12	-1.1	-1.3	-2.0	-2.6	-2.8	-1.3	-2.1	-0.7	-1.9	-2.4	-1.4	-2.6	-4.6	-1.5	-1.1	-1.4	-1.9	0.9
18	Budget Expenditures Approved + Mod	21.2	25.3	26.4	24.3	20.2	22.3	20.5	21.9	24.6	21.5	22.2	28.6	30.4	29.0	30.3	29.1	24.9	3.7
19	% of Budget Execution 18/11	88.8	88.3	84.1	79.7	81.3	78.1	82.3	83.4	83.3	87.9	84.3	79.0	71.5	75.7	85.8	88.9	82.7	5.0

Source: Ministry of Finance

4.3 Where's the Money? Management of government deposits

The previous discussion logically raises the question: where is this 1.3% of GDP? A little reflection reveals that if these represent resources that have been disbursed to government agencies but are not spent then they must be deposited in banks. This fact illustrates a broader problem that is one of the most alarming features of Venezuelan public finance management: the buildup of a huge amount of government deposits in non- or low-interest bearing accounts.

At the close of 2004, the Venezuelan government held deposits on private banks equal to 4.7% of GDP (Figure 22). These deposits, predominantly placed in current accounts, yielded negligible revenues of no more than 0.2% of GDP.[39] At the same time, outstanding government debt totaled 4.6% of GDP, of which 4.1% of GDP was held by private agents.[40] Interest payments on that debt amounted to 2.1% of GDP, of which we estimate 1.9% of GDP went to private agents.[41] Using these conservative estimates, we conclude that, despite being a net creditor to the Venezuelan private sector, the Venezuelan state transfers at

[39] Central government interest revenue has been less than 0.01% of GDP since 1998. Interest revenues of autonomous public entities have averaged 0.1% of GDP from 1998 to 2003, with a maximum of 0.2% of GDP in 2002. Thus we estimate an upper bound of 0.2% of GDP for CPS interest and dividends.

[40] The bulk (3.6% of GDP was held by private banks, with the rest by private individuals and private non-financial institutions).

[41] Since we do not have information on interest payments by recipient, we have assumed in our calculation that all holders of public debt (public and private) receive the same return on it.

least 1.7% of GDP a year to this sector through net interest payments on its government debt.[42]

While some part of that transfer may adequately compensate for the service of financial intermediation between government agencies, it is difficult to conceive that the public sector could not perform this at a lower cost. Indeed, in August 2005, the Executive created the Treasury Bank in order to centrally manage all government accounts.[43] By the end of 2005, the Treasury Bank's balance of credits and deposits amounted to 0.2% of the total reported by Universal and Commercial Banks; 86.5% of credits were placed in the Central Bank (Table 25). Although the creation of the Treasury Bank seems a promising reform on paper, in practice it has yet to show any significant results.

Table 25: Credits and Deposits, Venezuelan Banking Sector (December 2005)
(Millions of Bs.)

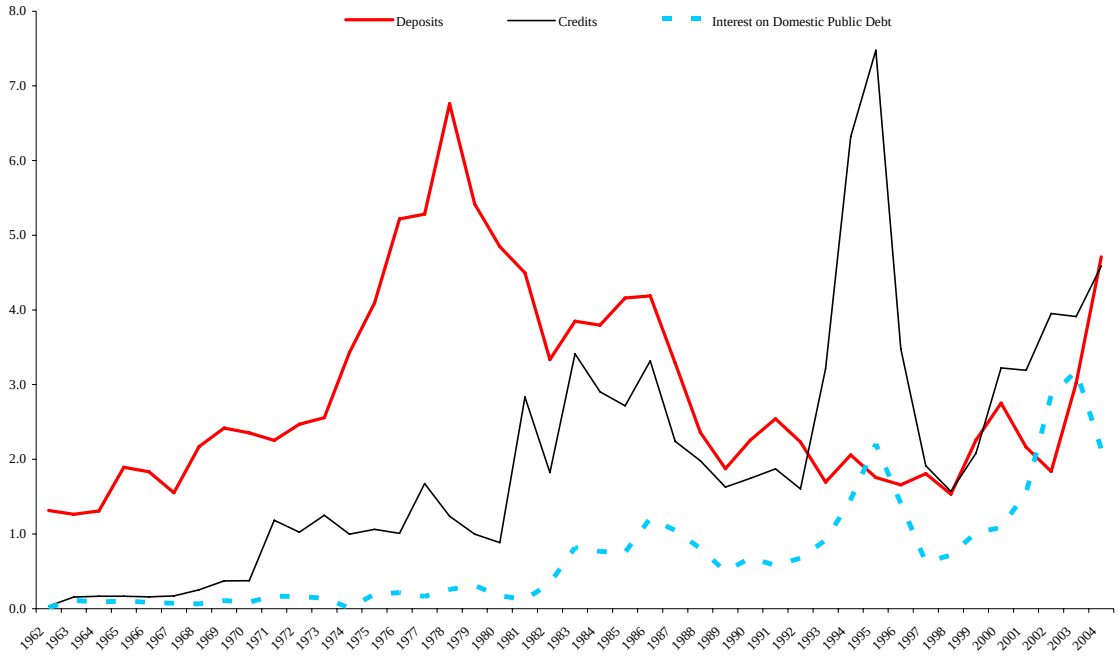
	Universal and Commercial Banks	Treasury Bank
Credit	63,158,457	148,629
of which		
Public Sector	10,067,319	na
	15.9%	
Central Bank	10,431,926	128,596
	16.5%	86.5%
Deposits	66,429,406	121,799
of which		
Public Sector	13,388,073	na
	20.2%	

Source: Central Bank of Venezuela

[42] Our calculation may entail an underestimate for at least two reasons. The first one is that government agencies are likely to be receiving a lower return on domestic debt than private banks, both because they may have less bargaining power vis-à-vis the central government than the private sector and because their financial management practices may be less efficient. The second reason is that we have put together our estimate of public sector interest revenues from those reported by the central government and those reported by autonomous entities. If part of the latter comes from its holdings of public debt, net revenues would be correspondingly reduced. In any case, the upper bound on the opportunity cost is given by total government interest payments (2.1% of GDP).

[43] The Treasury Bank is an agency of the Ministry of Finance; it replaced the Banco Hipotecario Latinoamericano.

Figure 22: Public Sector Deposits and Credits with the Private Financial System
% of GDP



In principle, similar economies could be achieved not by the unification of public financial resources but from a modernization of the public finance's methods and processes, involving the centralization of the information on the public funds by the National Treasury, the requirement that banks and collecting agencies report to the Treasury, and the effective enforcement of the National Treasury's authority and responsibility on the management of public funds. These considerations, in fact, accounted for the creation in the late nineties of the Integrated System of Financial Management and Control of Public Finance (SIGECOF). The SIGECOF was meant to provide accurate, real-time information on the management of human, financial, and non-financial public resources that would help decision-makers in the budgetary decision-making. This would be accomplished through four stages: legal and policy reforms, organizational and bureaucratic culture changes,

modernization of methods and procedures of each management function, and the development of related information systems and complementary tools. The reform was expected to allow the integration of the financial administration systems with the internal control and the evaluation of public expenditures (Ministerio de Finanzas, 2005). Although the Ministry of Finance has claimed that this reform is still in process[44], there is little evidence that it has helped improve the management of public deposits.

4.4 Even more room?

Our analysis of the budget process has shown that concrete improvements in budget planning, execution and management could lead to significant improvements in resource availability. On first sight, these reforms look comparably much easier to carry out than those regarding taxation as they would appear to have no political or social cost. However, if we think more carefully, we will find that these reforms may, if anything, be more difficult to carry out than those discussed in section 3. A transfer of 1.7% of GDP to the banking sector does not occur without generating significant vested interests in its maintenance. Anecdotally, during our tenure in the Economic and Financial Advisory Office to the National Assembly between 2000 and 2004, we had the chance to interact with five Ministers of Finance,[45] all of which made reference to the management of government deposits as a way to generate resources. None of them were able to alter the trend of growing deposits shown in Figure 21. This fact suggests that

[44] By the end of 2005, a presentation of the Ministry of Finance reported that the integration of the basic systems – budget, public debt, treasury and accounting – contemplated in the SIGECOF project was not yet accomplished (Carreño, 2005).

[45] José Rojas, Nelson Merentes, Francisco Usón, Jesús Bermúdez, and Tobías Nóbrega.

altering the distribution of government deposits between private and public sector financial institutions is far from trivial, an may well be politically more difficult than raising the price of gasoline.

5. The Composition of Public Expenditures: The Infrastructure Example

In Section 2 we argued that the composition of Venezuelan public expenditures was heavily distorted by the historical influence of patronage-based politics and the strong bias towards public employment by Venezuelan political parties. Further signs of this distortion can be glimpsed by looking at the composition of public expenditures in Venezuela in comparison to other Latin American countries. This comparison is displayed in Table 26, which displays the breakdown of government spending by function for 12 Latin American countries, including Venezuela. A few interesting facts jump out of this picture. In the first place, Venezuela's share of spending on general public services (43.33%) is the highest in the region, and far above the Latin American average (24.68%). This fact coincides with the presumption that Venezuela's government bureaucracy may be excessive. It is interesting in this respect that the country which allocates the lowest fraction of spending to general public services is Chile (7.12%), which also tends to score very high in most international government efficiency and institutional quality comparisons. A second interesting fact is that Venezuela has the second lowest level of spending in the region on social

protection (10.13%, as opposed to a regional average of 23.64%). This is primarily due to the lack of development of an adequate social security system, as was discussed in section 3.

Table 26: Composition of Central Government Spending, Latin America	Argentina	Bolivia	Brazil	Chile	Costa Rica	Dominican Republic	El Salvador	Mexico	Nicaragua	Panama	Trinidad and Tobago	Venezuela, Rep. Bol.	Latin American Average
General public services	23.20%	21.13%	34.58%	7.12%	21.88%	16.50%	13.34%	35.83%	22.53%	22.39%	34.30%	43.33%	24.68%
Public debt transactions	13.57%	7.70%	20.54%	3.15%	16.83%	5.81%	8.00%	16.92%	11.12%	13.92%	19.24%	14.74%	12.63%
Transfers of a general character between different levels of government		2.78%		0.08%									1.43%
Defense	4.83%	8.39%	3.59%	8.35%	0.00%	4.84%	4.78%	3.46%	7.45%	0.00%	1.73%	5.12%	4.38%
Public order and safety	3.67%	7.23%	2.67%	5.57%	6.63%	4.16%	13.28%	1.84%	8.75%	7.90%	6.88%	3.08%	5.97%
Economic affairs	7.40%	15.67%	5.33%	13.07%	10.49%	27.81%	15.26%	12.49%	13.36%	6.79%	11.26%	5.84%	12.06%
Agriculture, forestry, fishing and hunting	0.86%	1.92%	2.59%		2.58%	8.70%	2.59%	3.67%	3.62%	1.96%	4.35%	0.66%	3.04%
Fuel and energy	1.62%	1.00%	0.45%		0.14%	3.81%	0.02%	1.35%	0.68%	0.01%	0.30%	0.53%	0.90%
Mining, manufacturing and construction	0.42%	0.40%	0.12%		0.20%	3.74%	0.07%	0.48%	0.00%	0.20%	0.31%	1.74%	0.70%
Transport	3.48%	8.94%	1.29%		5.55%	6.76%	9.00%	3.77%	7.86%	2.82%	3.60%	1.84%	4.99%
Communication					0.00%	0.05%							0.02%
Environment protection	0.00%	0.00%	0.00%	0.00%	0.00%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%
Housing and community amenities	2.10%	1.23%	0.58%	4.66%	0.23%	9.84%	9.79%	4.76%	2.44%	4.36%	8.30%	4.91%	4.43%
Health	2.21%	6.23%	6.67%	12.05%	21.73%	11.39%	10.80%	3.87%	13.33%	19.02%	8.04%	6.90%	10.19%
Outpatient services	0.00%	0.52%	5.89%				3.92%			0.10%	0.52%	0.10%	1.58%
Hospital services	0.26%	0.90%	0.00%				5.11%			18.84%	5.20%	1.97%	4.61%
Public health services										0.00%			0.00%
Recreation, culture and religion	0.31%	0.36%	0.08%	0.00%	0.80%	0.93%	1.70%	0.63%	1.15%	0.85%	0.86%	1.02%	0.72%
Education	5.92%	19.13%	4.99%	16.42%	20.20%	14.15%	15.35%	24.39%	15.26%	17.57%	13.35%	19.64%	15.53%
Secondary education	0.38%	3.19%	2.78%				12.70%			9.91%	10.50%		6.58%
Tertiary education	0.45%	5.23%	2.00%				1.85%			4.53%	1.97%		2.67%
Social protection	50.63%	20.63%	42.78%	34.98%	21.03%	8.48%	22.86%	20.04%	15.68%	21.13%	15.28%	10.17%	23.64%
Adjustment to total outlays	-0.27%	0.00%	-1.25%	-2.21%	-2.99%	1.66%	-7.15%	-7.31%	0.04%	0.00%	0.00%	0.00%	-1.62%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%
Total outlays	100.00%	100.00%	100.00%	100.00%	100.00%	100.23%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.02%

Source: IMF(2006)

A closer analysis brings out other facts consistent with a more general story. Venezuela's spending on economic affairs (5.84%) is the second lowest in the region, at approximately one half of the region average (12.06%). Particularly striking is the general trend of underinvestment in transport infrastructure (1.84%), less than 2/5ths of the regional average (4.99%). This fact is consistent with the low levels of public investment in infrastructure also highlighted in section 2. On the other hand, Venezuelan investment in education (19.64%) is relatively high in relation to that of the rest of the region (15.53%). Appendix Table A1, based on the Ministry of Finance Classification, tells a similar story, with a decline in spending on productive sectors from 29.0% in 1977 to 7.8% in 2004. Although Venezuela does not provide a breakdown of its education budget by level of education, the fact that it has higher enrolment rates than the regional average in tertiary education but not in primary, secondary or higher education is a clear indicator of the fact that educational policies have not been oriented towards the most needy sectors (Table 27).

Table 27: Gross Enrolment rates by level, 1998-2002				
Country Name	**Preprimary**	**Primary**	**Secondary**	**Tertiary**
Argentina	58.82	119.58	94.74	50.82
Aruba	98.89	112.64	100.00	28.67
Barbados	83.81	107.96	103.13	36.15
Belize	28.17	118.54	70.94	1.99
Bolivia	45.78	113.94	79.69	35.99
Brazil	60.14	151.23	104.41	15.80
Chile	69.16	102.23	83.94	37.81
Colombia	36.28	111.36	69.49	23.05
Costa Rica	67.76	108.09	54.86	18.04
Cuba	108.06	101.85	85.54	25.01
Dominica	67.63	95.51	98.25	.
Dominican Republic	35.45	122.36	60.16	34.46
Ecuador	69.34	115.45	57.87	.
El Salvador	44.20	111.76	54.11	17.55
Grenada	67.89	94.60	.	.
Guatemala	43.26	100.95	36.43	9.33
Guyana	116.76	121.07	87.36	6.09
Honduras	21.35	105.82	.	14.45
Jamaica	85.06	98.61	83.64	15.97
Mexico	74.92	110.55	72.52	19.96
Netherlands Antilles	91.96	108.75	71.54	14.82
Nicaragua	26.33	104.22	54.51	18.35
Panama	45.75	109.39	68.26	43.78
Paraguay	28.01	111.89	57.81	16.30
Peru	57.70	121.63	85.58	31.79
St. Kitts and Nevis	141.62	117.29	.	.
St. Lucia	68.82	112.24	84.36	1.43
St. Vincent and the Grenadines	.	103.08	68.80	.
Suriname	94.05	126.23	72.96	12.24
Trinidad and Tobago	62.47	100.47	81.28	6.92
Uruguay	60.09	110.63	99.75	35.40
Venezuela, RB	48.45	103.54	64.81	34.00
Latin American Average	64.77	111.05	76.09	22.45

Source: World Bank (2005)

Perhaps even more important than the static comparison of Venezuelan spending vis-à-vis that of Latin America is the analysis of its changes over time. Similarly to many other Latin American countries, Venezuela carried out a set of fiscal adjustments in the eighties and nineties in order to deal with the onset of

the debt crisis. In contrast to other Latin American countries, however, in the mid-80s Venezuela had to contend not just with the effects on its fiscal accounts of a drastic increase in U.S. interest rates but also with a significant decline in oil revenues. As we show in Figure 23, after reaching their peak in the seventies, per capita fiscal oil revenues fell by approximately two-thirds during the eighties, requiring a drastic adjustment of expenditures.

Figure 23: Per Capita Fiscal Oil Revenues in constant US$. 1943-2001

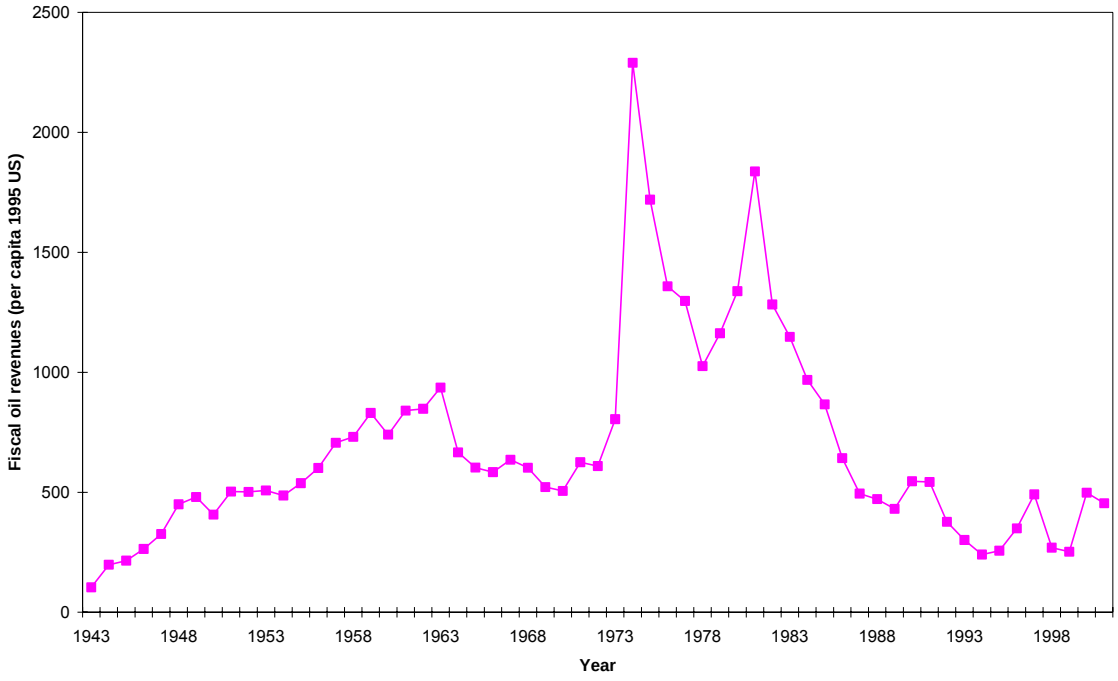
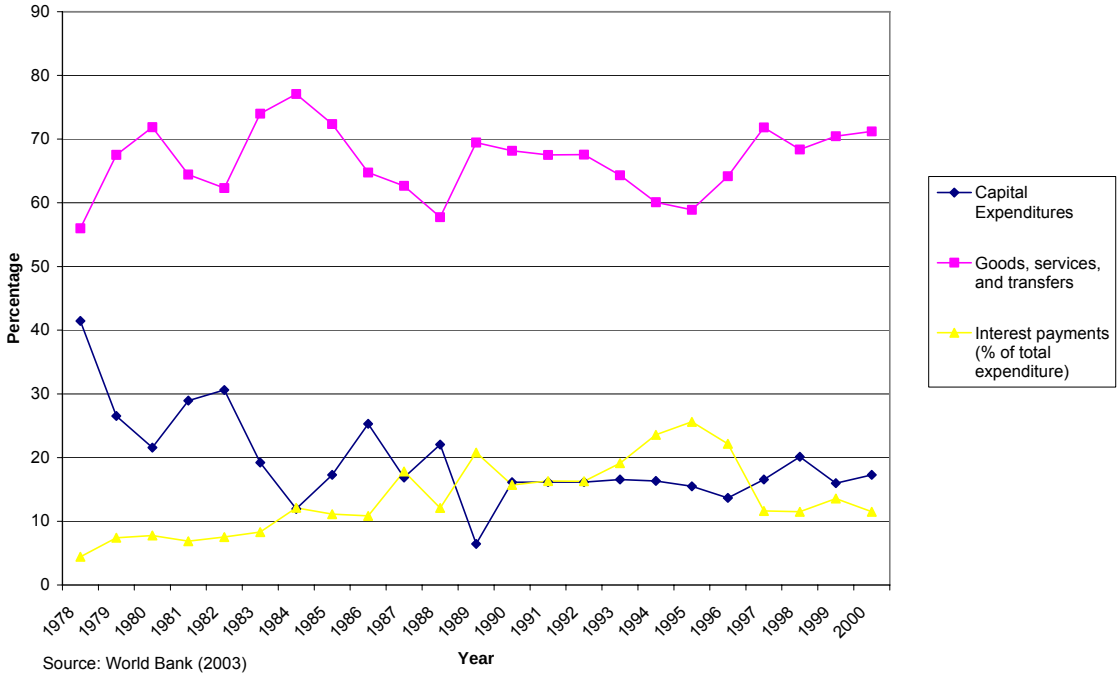


Figure 24 and Table 28 show two key characteristics of the nature of this adjustment. The first one is that it was significantly biased against government investment. Spending on purchases of goods, services and transfers actually increased its participation in the government budget, while the share of capital expenditures fell dramatically, from 41.4% in 1978 (the year of peak non-oil GDP) to 17.3% in 2000. Venezuelan Ministry of Finance data, based on a somewhat

different classification, provide direct estimates of CG gross fixed capital formation. This goes from a peak of 4.8% of GDP in 1969 to 0.4% of GDP in 2004 (see Appendix Table A2). The need to make room for the increase in interest payments was thus accommodated exclusively by a decrease in investment. The second one is that a significant cost within this adjustment was paid by infrastructure expenditures. On average, the Venezuelan decline in public infrastructure spending was similar to that of the rest of the region in its proportion. However, the fact that Venezuela was starting from a much lower level of infrastructure spending – a fact that was already discussed in section 2 above – meant that there was much less room to cut back. Thus Venezuelan infrastructure investment shares fell to dramatically low levels. These levels of public investment were incompatible with compensating for the effects of depreciation and population growth. The end result of this process was a precipitous decline in the public capital stock, which by 2001 had fallen back to the same levels of the 1950s (Figure 25)

Figure 24: Composition of Public Spending, 1978-2000



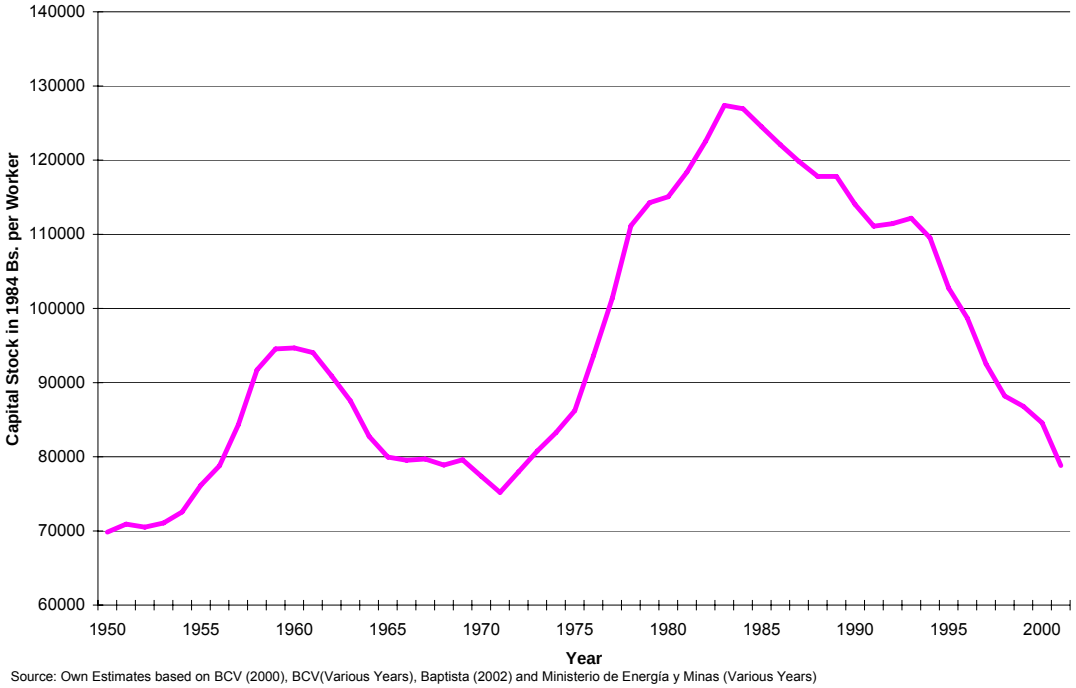
Source: World Bank (2003)

Table 28: Changes in Infrastructure Investment, Venezuela and Latin America

	Venezuela			Latin America		
	1981-85	1996-00	Percent Change	1981-85	1996-00	Percent Change
Telecommunications	0.19	0.01	-94.74%	0.29	0.19	-34.48%
Electricity	0.11	0.03	-72.73%	1.38	0.2	-85.51%
Transport	0.19	0.06	-68.42%	0.81	0.15	-81.48%
Total	0.49	0.1	-79.59%	2.81	0.56	-80.07%

Source: Calderón and Servén (2002)

Figure 25: Public Capital Stock per Worker, 1950-01



Source: Own Estimates based on BCV (2000), BCV(Various Years), Baptista (2002) and Ministerio de Energía y Minas (Various Years)

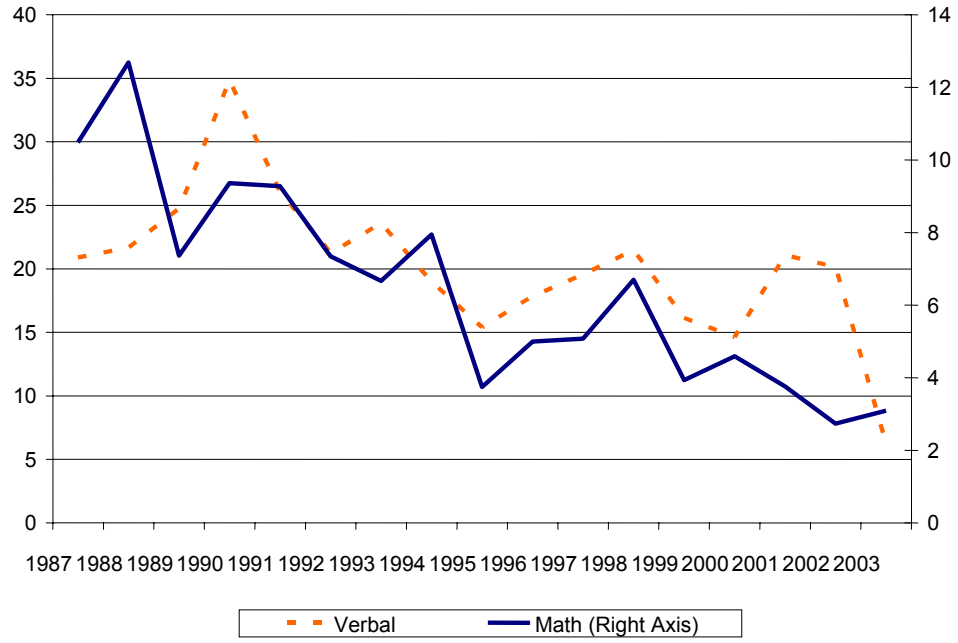
The distorted adjustment phenomenon is not only relevant to the case of infrastructure. Table 29 and Figure 26 illustrate that a similar phenomenon took place in the arena of public education. In particular, enrolment rates continued growing while the quality of schooling education declined significantly.[46] This phenomenon is symptomatic of a process of adjustment whereby labor-intensive expenditures are protected, but capital-intensive ones are not. Since labor laws and political arrangements make it very difficult to fire workers, public employment becomes relatively protected during fiscal adjustments. Quantity measures of performance that are proportional to the number of employees, such as enrolment rates, need not decline. The decline in the provision of materials, training and incentives is felt in the acute deterioration of quality indicators such

[46] Pritchett and Ortega (2006) present other measures of schooling quality, such as those derived from teacher dummies in Mincer regressions, all of which tell a similar store.

as that presented in Figure 13. This phenomenon of distorted adjustment appears to characterize other dimensions of public spending (see Puente, 2004).

Table 29: Enrolment rates by level	1990	2002
Preprimary	40.78	52.67
Primary	95.70	103.86
Secondary	34.68	69.89
Tertiary	29.17	40.25
Source: World Bank (2005)		

Figure 26. Test scores for Scholastic Aptitude Tests in Venezuela, 1987-2003



Source: Pritchett and Ortega (2006)

Asymmetric adjustments that privilege current expenditures vis-à-vis capital expenditures raise a set of interesting issues from the perspective of fiscal space. If these adjustments have significant negative effects on productivity, what is their long-run effect on a nation's fiscal space? Easterly (1998) and Easterly and Servén (2002) raised the concern about the possibility of "illusory fiscal adjustments": fiscal adjustments that bring about long-run costs because

they are financed on by a reduction in capital expenditures and thus shift inwards the state's intertemporal budget constraint. Is it possible that the quality of fiscal adjustments is an important determinant of a nation's fiscal space? Over what horizon would the effects of an asymmetric adjustment on fiscal space become manifest? Would it make sense for a country to protect public investment as a way of salvaging its fiscal space?

A second related question concerns the capacity of the state to create fiscal space in the short run for the protection of public investment. Given the existence of legal and political rigidities which make it nearly impossible to reduce employment in the context of a fiscal adjustment, is there a set of policies that governments can adopt in order to ensure the availability of resources for public investment?

The answer to any of these questions will depend on the strength of the causal link going from public investment to productivity. The existence of such a link is far from established in the empirical literature. Although there are good theoretical reasons to expect public capital to have an effect on productivity (Arrow and Kurz (1970), Ogura and Yohe (1977)), empirical results are mixed (Aschauer (1989), Munnell (1990), Hulten and Schwab (1991), Easterly and Rebelo (1993), Esfanhani and Ramírez (2003)).[47] These studies are all confronted by a daunting empirical problem. Precisely because of the political forces in action to determine the allocation of investment projects, spending on infrastructure is likely to be an endogenous variable, making identification of its effect on productivity growth difficult. If governments are more likely to invest

[47] See Rodríguez (2005) for a survey of this literature.

in prosperous and economically developed regions, then there will be a spurious positive correlation between investment in infrastructure and productivity growth; if policymakers try to use public investment to compensate for the backwardness of existing regions or to help out regions in crisis, in contrast, there will be a downward bias in estimates of the effect of infrastructure investment on productivity growth. It will be extremely difficult to find valid instruments that can address this issue.

In the rest of this section, we will address these issues by looking in detail at a unique policy experiment carried out in the mid-nineties in Venezuela: the creation of a set of budget preallocations designed to be specifically targeted towards public investment. This example will allow us to illustrate (i) the magnitude of the effects of public investment on productivity (ii) the time horizon over which these productivity effects have a significant effect on resource availability (iii) the way in which mechanisms to raise fiscal space for spending on infrastructure can be designed.

5.1 The FIDES Experience

In June of 1993, the Venezuelan historian and intellectual Ramón J. Velásquez reached an agreement with the nation's key political parties (AD and COPEI) to head a caretaker administration after Carlos Andrés Pérez's (1989-1992) impeachment by the Venezuelan Supreme Court on corruption allegations. Velásquez was among the few persons in Venezuela that had sufficient prestige so as not to generate an outcry in a period of deep discontent with the role of

traditional parties. Velásquez's condition for assuming the Presidency was that AD and COPEI give him special powers to allow him to adopt what he viewed as necessary immediate economic reforms.

Velásquez's concerns were not unfounded. Oil prices were winding back down after the resolution of the Persian Gulf War and the only way in which the Pérez administration had been able to get the budget deficit down to -1.8% of GDP in 1992 was through the use of the proceeds of $2.03 billion (3.4% of GDP) from the privatization of the state-owned telephone company (CANTV) and airline (VIASA).[48] Pérez's proposal for a VAT had been sidetracked by AD and COPEI deputies in the Venezuelan Congress who saw little benefit from its approval. Velásquez wanted the power to enact this and other reforms to make sure that he could adequately manage the economy for his year in office.

As part of the political deal that was hammered out to give Velásquez the power to adopt the VAT was a commitment from the administration to design a mechanism that would ensure that a fraction of the proceeds form VAT collection would be transferred to regional governments. Regional leaders had started to become an important political force in Venezuela after the political reforms of 1989 which allowed for the direct election of mayors and governors, and many Congressional deputies felt that their political chances of survival were linked to the prospects of these regional leaders instead of to the national parties that had lost significant levels of legitimacy (Penfold-Becerra, 2000).

Velásquez's team came up with the idea of the Intergovernmental Decentralization Fund, which we will refer to by its Spanish acronym FIDES

[48] Bekaert and Harvey (2004)

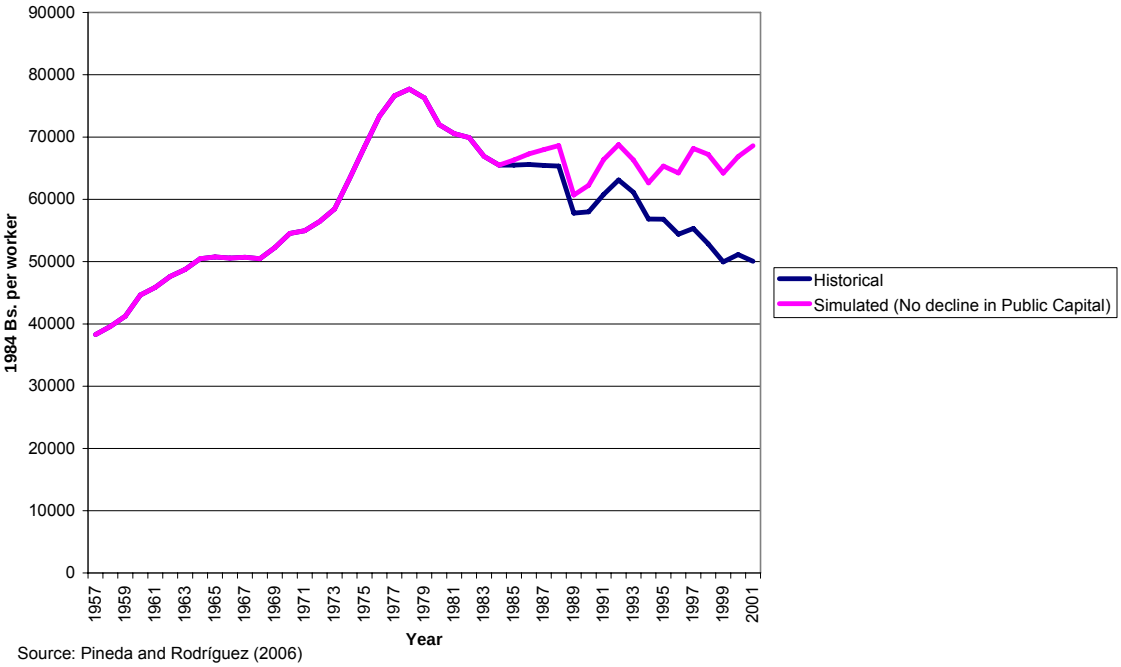
(Fondo Intergubernamental para la Descentralización). The FIDES set apart a fraction of VAT revenue to be transferred to state and municipal governments. This fraction would start at 4% and increase proportionally every year. In 1996, the law was reformed and the portion was fixed at 15%, level at which it has stayed since. Given that the *Situado* already ensured a 20% share for regional governments, the FIDES reform effectively implied that subnational governments would perceive 35% of the additional revenues from the adoption of the VAT. There was, however, a caveat. Velásquez's team insisted that these revenues not be allocated to current expenditures, since they viewed the central government as the ultimate guarantor of such expenditures. Therefore, they built into the law the proviso that the FIDES share should be allocated to public investment. In order to ensure that this would occur, they set up a formal directory of the FIDES, which would have representation of the regional government but majority control by representatives of the national executive, and which would be in charge of approving the list of investment projects and to only disburse the funds after approval and subject to the coparticipation of the state or local government in funding the project.

The FIDES law contemplated a broad definition of areas in which the fund could finance public investment projects. The list included "Projects of productive investment that promote the sustainable development of the community, states and municipalities," and "works of infrastructure and activities within the framework of national development plans" (FIDES, 2005, Article 22). Although these provisions allow for a broad definition of the type of investment projects, the law does specifically state that these resources must only

be used for “programas y proyectos” (programs and projects), a term that in Venezuelan legislation is formally equivalent to capital expenditures. Projects typically financed include construction of schools, repairs to roads and acquisition of vehicles for use by the local police force.

The FIDES provides us with a fascinating natural experiment to evaluate the effect of infrastructure spending on productivity. Since the FIDES rule was held constant over time, it generated variations in transfers to regions that depended on the interaction between the parameters of the rule and national VAT collection, both of which can be taken to be exogenous at the state level. This exogenous source of variation allowed Pineda and Rodríguez (2005) to estimate the effect of state infrastructure investments on firm-level productivity growth in the Venezuelan manufacturing industry using state-level data from the Venezuelan *Encuesta Industrial*. Pineda and Rodríguez’s results indicate a strong effect of FIDES investment on productivity, with an elasticity of .32-.4. Curiously, these estimates are remarkably similar to John Fernald’s (1999) estimate of an elasticity of .38 with respect to public infrastructure provision in the US manufacturing industry.

Figure 27: Historical and Simulated per Worker GDP, Scenario of No Decline in Infrastructure Investment



Source: Pineda and Rodríguez (2006)

The empirical estimates are economically very significant. Given a ratio of the stock of public capital to GDP of 0.615 (its 2001 value), the estimated effects imply a short-run rate of return to infrastructure investment of .52-.65 and a long-run rate of return (i.e., the partial derivative of steady-state income to changes in infrastructure spending) of .80. Figure 27, taken from Rodríguez and Pineda (2006), show the authors' estimates of the path of Venezuelan non-oil GDP that can be derived from these estimates if the public capital stock had stayed constant at its 1983 value. According to these calculations, per capita GDP would be 37% higher than its present value under that scenario. It appears that the shift in the composition of government spending is an important part of the story behind Venezuela's growth collapse.

5.2 Does Infrastructure Pay for Itself?

These high rates of return may lead to thinking that "infrastructure pays for itself", and that concerns over fiscal space to pay for infrastructure investments should at most be concentrated on finding short-run financing. However, this belief would be exaggerated. Even with these high rates of return, it is unlikely that the state will be able to capture more than a fraction of the derived productivity gains. To see why this is the case, consider a stylized model where the government public sector balance is the difference between expenditures *E* and revenues *R* and the latter are the product of a proportional tax rate τ and GDP *Y*. We consider expenditures to be the sum of investment in public capital *dP* and current expenditures C. Thus the budget constraint is:

$$D=E-R=P_t-P_{t-1}+C-t*Y \quad (1)$$

Suppose that GDP depends on the public capital stock (with elasticity β) and on other factors of production which we label K and L:

$$Y=P^{\beta}F(K,L) \quad (2)$$

Then substituting (2) in (1) gives:

$$D_t=E_t-R_t=P_t-P_{t-1}+C_t-\tau P^{\beta}F(K,L) \quad (3)$$

We are interested in calculating the effect of an increase in one unit of P_t on the budget deficit. In order to do this, we will distinguish analytically between three moments at which this effect can be evaluated: (i) a fiscal period in which the initial infrastructure investment is made and productivity gains on existing capital are realized (the short run) (ii) a period in which the government has to pay for operations and maintenance expenditures but in which the capital stock is assumed not to vary (the medium term) (iii) a period in which the government continues paying for operations and maintenance expenditures but in which the capital stock has gone because of a positive investment response to the increase in productivity (the long run or steady state).[49]

$$dD_t/dP_t=1-\tau\beta P_t^{\beta-1}F(K_t,L_t)=1-\tau\beta(Y_t/P_t) \qquad (4)$$

We can derive the short-run rate of return by using the Pineda and Rodríguez estimate of $\beta=0.32$ and the Venezuelan P/Y ratio of .615. If we use the non-oil average tax rate of .13 as our indicator of τ, this gives us:

$$dD_t/dP_t =.933 \qquad (5)$$

so that in the immediate period in which the investment is carried out, assuming productivity gains are realized that year, the fiscal situation still worsens by .933 cents for every dollar of investment.

[49] In a growth framework, each period after the initial one would be a combination of what we have termed the medium run and the long run, with convergence occurring to the latter at an exponential rate. For purposes of exposition, we abstract from this dynamics in the text.

What happens after the initial period? The new infrastructure investment requires operations and maintenance investment (so that $dC_{t+n}/dP_t>0$). UN (1993) estimates annual average operations and maintenance costs for public infrastructure at 7.8% of public asset value yearly. Using this figure would give us:

$$dD_m/dP_t = .0108 \qquad (4)$$

so that roughly the returns from infrastructure investment pay for O&M costs in the medium term. In the long run, the capital stock should react to the higher rate of return, raising the level of the capital stock and thus F(K,L). Under a Cobb-Douglas specification, the capital stock would react with an elasticity of $1/(1-\alpha)$ with α being the capital share. In other words, steady state income would be:

$$Y_{ss} = P^{\beta}K^{\alpha}L^{1-\alpha} = P^{\beta}(K_0P^{\beta})^{\alpha/(1-\alpha)}L^{1-\alpha} = P^{\beta(1+\alpha/(1-\alpha))}G(K,L) \qquad (5)$$

Using the conventional $\alpha=1/3$, this increases the steady state effect of infrastructure investment on tax collection by a factor of 1.5 $(1+(1/3)/(2/3))$, giving us a steady-state change in the budget deficit of:

$$dD_{ss}/dP_t = -.0234 \qquad (6)$$

In the steady state, infrastructure investment leads to an improvement in the fiscal position.

The bottom line is that, even though in the very long run infrastructure spending can reduce deficits, this is unlikely to happen in the short run. The reason is that, given existing tax rates, the government reaps only a small fraction of the private return to public investment.

Let us think in turn about what can occur to the fiscal position if the government were able to recapture a greater part of the productivity gains from public investment. We can model this by assuming that the government can collect a greater marginal tax rate τ on productivity improvements derived from increased infrastructure provision. Suppose, for example, that τ were 0.4 on the marginal increments to productivity. Then the above calculations would be modified as follows:

$$dD_t/dP_t = .7919 \quad (7)$$

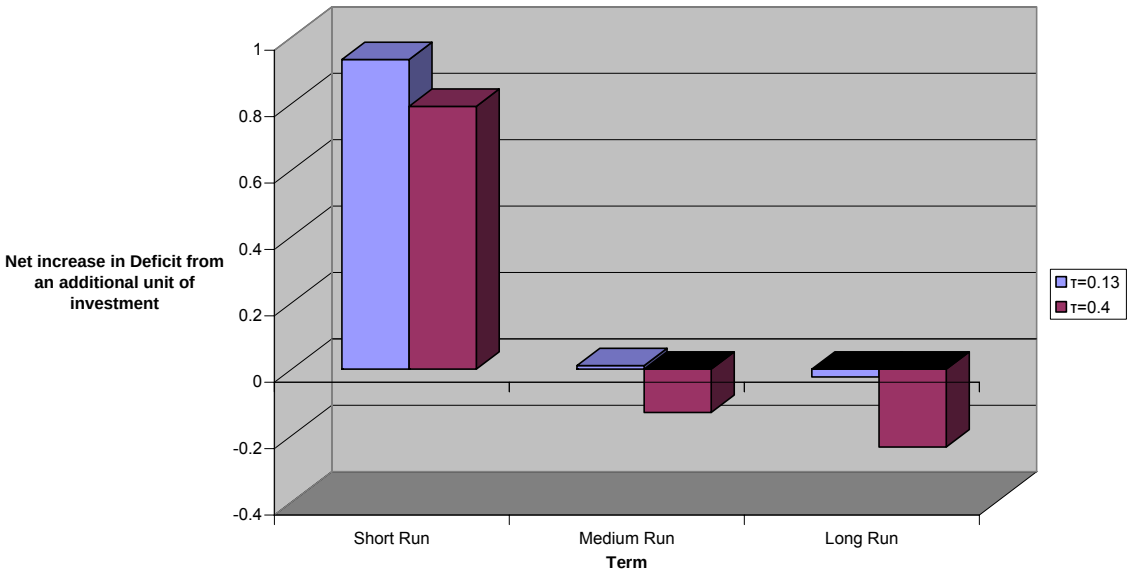
$$dD_m/dP_t = -.13013 \quad (8)$$

$$dD_{ss}/dP_t = .-.2342 \quad (9)$$

After the initial period, the rate of return turns strongly positive and is high enough to cover any reasonable cost of financing. In the steady state, the improvement is significant and considerably enhances the public sector's resource availability. To illustrate the significance of this magnitude, suppose that Venezuela increased pubic infrastructure investment back to its 1981-85 level, that is, from 0.1 to 0.49% of GDP. Equation (9) implies that such a change

would be associated with along-run improvement of 0.09% of GDP in the fiscal position. Figure 28 summarizes these calculations.

Figure 28: Simulated Effect on Budget Deficit of Infrastructure Investment



In sum, with tax rates similar to those currently in place in Venezuela, infrastructure does not pay for itself. Even in the very long run, the improvement in the public finances is low and insufficient to pay for the cost of financing the initial investment. With higher tax rates, however, the long run return is more than adequate and investing in infrastructure can actually generate additional fiscal space in the medium and long runs.

The key to understanding the policy relevance of this result lies in realizing that, if adequate policies are in place, the relevant tax rate need not be the economy-wide tax rate but rather the marginal tax rate on productivity

improvements charged on beneficiaries. Cost recovery policies and laws that target beneficiary sectors can easily raise revenues to the levels necessary to ensure long-term, or even medium-term, fiscal viability. These policies can include targeted taxes, user fees, private-pubic partnerships and road funds (Gwilliam and Kumar, 2003). In order to make such policies feasible, however, much more work is needed in identifying the beneficiaries of infrastructure investments.[50]

5.3 Finding room for infrastructure: Lessons form the FIDES example.

Our above discussion paints a very positive view of the FIDES experience. Through a skillful political deal, the Velásquez administration ensured the approval of a much needed tax reform. It also created a mechanism that helped direct much needed resources to public investment. The above discussed estimates point to a significant positive effect of FIDES-financed infrastructure investment on productivity. The FIDES reform is thus an interesting example which is worth studying in depth by countries thinking about mechanisms to generate fiscal space for infrastructure investments.

However, the use of earmarking rules like FIDES is generally viewed negatively by economists and IFIs. The generalized perception among these

[50] Pineda and Rodríguez (2006) find that these beneficiaries are actually concentrated among firms that do not have foreign participation and sell exclusively to the domestic sector. The interpretation the authors give to this result is that it is precisely these firms that tend to be liquidity constrained and have greater coordination problems and thus tend to be unable to resolve basic infrastructure investments through their own investments.

circles is that earmarking leads to misallocation of resources, hampers effective budgetary control, infringes on the powers and discretion of the legislative and introduces inflexibility into budgets (McCleary, 1989). It is quite probable that if Venezuela had been on an IMF or World Bank structural adjustment program in 1993 these institutions would have taken a negative view of the FIDES law.

In the Venezuelan case, however, budget earmarking of VAT revenues through the creation of FIDES was necessary to garner approval for the adoption of VAT law. It makes little sense to criticize revenue earmarking on the grounds that it creates inflexibilities in the management of resources that would not exist if the earmarking rule were not there. The FIDES experience rather appears to confirm the intuitions behind some of the early public choice literature on earmarking (Buchanan, 1963, Goetz, 1968), which emphasized the political endogeneity of earmarking rules.

However, the FIDES experience does not provide us with a blanket endorsement of generalized earmarking. On the contrary, FIDES meets a set of peculiar characteristics which may or may not be reproducible in other instances. In the first place, it provides an example of a case in which earmarking was necessary to garner political support for a broader reform which generated additional tax revenues, the bulk of which were not earmarked. In the second place, the FIDES earmarking rule came together with the creation of a technical FIDES board that was required to approve investment projects for the disbursal of funds to take place. States were required to coparticipate by covering 20% of the investment cost, which implied that local policymakers had to believe in the benefits of the proposed project. Remarkably, the FIDES board appears to have

applied technical and not political criteria in the approval of projects, even in the context of significant political polarization. As Table 30 shows, the opposition controlled state governments had, if anything, greater execution percentages, implying that they did not find it more difficult to get approval of project and disbursement of FUNDS carried out by the FIDES board. The greater execution percentages for this group of governorships is also present in 1998 (before President Chávez is elected), implying that they most likely reflect structural characteristics such as greater technical capacity of the administrations of these states.[51] Greater investigation is necessary in order to uncover the characteristics that made the FIDES board relatively insulated from political pressure; without understanding these well it may be adventurous to try to extrapolate these lessons to other settings.

[51] In 2002, the opposition controlled status with greater per capita income such as Miranda, Carabobo and Zulia.

Table 30: FIDES Execution Percentages, 1998 and 2002			
Entidad Federal	**1998**	**2002**	**2002 Govt/Oposition**
Amazonas	0.62	1.20	GOVT
Anzoátegui	0.19	0.44	OPPOS
Apure	.	0.72	GOVT
Aragua	0.11	0.67	GOVT
Barinas	0.11	0.91	GOVT
Bolívar	0.24	1.04	OPPOS
Carabobo	0.58	1.17	OPPOS
Cojedes	.	0.99	GOVT
Delta Amacuro	0.54	0.84	GOVT
Distrito Capital	0.42	0.87	OPPOS
Falcón	0.24	1.05	GOVT
Guárico	0.13	0.97	GOVT
Lara	0.07	0.72	GOVT
Mérida	0.31	0.65	GOVT
Miranda	0.19	1.05	OPPOS
Monagas	0.48	1.48	OPPOS
Nueva Esparta	0.29	0.72	GOVT
Portuguesa	0.02	0.96	GOVT
Sucre	0.41	0.99	GOVT
Táchira	0.29	0.90	GOVT
Trujillo	0.48	0.80	GOVT
Yaracuy	0.23	0.73	OPPOS
Zulia	0.64	0.69	OPPOS
Average Opposition Group	**0.37**	**0.93**	
Average Government Group	**0.28**	**0.87**	

Source: FIDES

7. The *Misiones*: Is Oil Wealth Finally Reaching the Poor?

On July 1, 2003, President Hugo Chávez created by decree the Simón Rodríguez Extraordinary Literacy Plan, better known as the *Misión Robinson*. The program's objective was to reduce Venezuela's illiteracy rate, which stood at 6.99% at the close of 1998. The program was based on the "Yo Sí Puedo" ("Yes, I Can") method designed by Cuban educator Leonela Reys in 2001, which

consisted on 65 video classes and practical exercises supervised by trained instructors.[52]

Misión Robinson was part of an ambitious and high profile drive by the Chávez administration to launch a set of aggressive social programs directed at the most vulnerable groups in Venezuelan society. Over the next three years, the government announced the creation of thirteen additional *Misiones*. These included two additional adult education programs (Misión Ribas and Misión Sucre), two healthcare programs (Misión Barrio Adentro and Misión Milagro), a retraining program for unemployed workers (Misión Vuelvan Caras), and a program to sell subsidized food staples to low income consumers (Misión Mercal). Between 2003 and 2005, the Venezuelan government assigned 8.15 trillion bolivares (equivalent to US$4.14 billion) to these programs (Ministerio de Finanzas, 2006b). Total expenditure on the Misiones thus averaged 1.22% of GDP over these three years.

In several respects, the Misiones were a tremendous success. Opinion surveys indicate that up to 40% of Venezuelans claim to have received direct benefits from some of the Misiones, and approval ratings for the Misiones are typically above 70%.[53] The misiones are widely viewed at least as part of the explanation for the turnaround in President Chávez's popularity ratings that helped him win the 2004 referendum.[54]

Nevertheless, analytical studies of the impact of the Misiones are lacking. Few existing analyses of their impact on poverty and well-being are based on

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[52] "Misión Robinson: un híbrido cubano en Venezuela" *El Impulso*, May 13, 2006.
[53] "Entrevista a John Magdalena", *El Nacional*, February 26, 2006,P. A-4.
[54] Alfredo Keller y Asociados (2005).

back-of-envelope calculations or on survey data. For example, Weisbrot et al. (2006) estimate that access to free health care provided to Misión Barrio Adentro diminished Venezuelan poverty by 2.1 percentage points. His calculations are based on the assumption that Venezuelans would have spent 5% of their income on health care services which are otherwise provided by Barrio Adentro. This calculation is limited by the lack of statistics regarding the number of people who received free medical assistance before Barrio Adentro and by the assumption that Barrio Adentro covers all medical services required by the poor. On the other hand, survey data can be notoriously unreliable for uncovering program participation, as revealed by a recent experiment carried out by the Venezuelan polling firm Datanálisis. In 2006, the firm conducted a survey for which they asked respondents about participation in several *misiones*. The designers of the survey introduced an inexistent *misión*, which they called "Misión Patria." 20% of respondents alleged being beneficiaries of that program. [55]

Understanding whether the *misiones* have been successful or not is a fundamental part of the discussion about fiscal space in Venezuela. As we argued in the introduction to this paper, oil abundant nations have typically not been able to make greater progress than non-oil abundant nations in the fight against poverty. This lack of success would appear to reinforce the view that the problem is not one of resource availability, but rather one of the efficiency of existing expenditures. On the other hand, if one can establish that the *misiones* have indeed had a significant effect on poverty reduction, then the case for mobilizing

[55] "Entrevista a John Magdalena", *El Nacional*, February 26, 2006,P. A-4.

resources for financing this type of programs would be bolstered, and other countries may be well advised to carefully analyze the Venezuelan experience.

A comprehensive evaluation of the *misiones* is hampered by the lack of detailed disaggregated data on the amount of resources devoted to the programs or on program participation. Furthermore, there are few publicly available regionally disaggregated indicators in Venezuela that could allow us to track the effect of the misiones on health indicators. As Weisbrot (2006) accurately points out, the fact that the *misiones* primarily rely on cash transfers implies that there is little about their effect that can be derived from looking at the households survey, which only capture cash income.[56]

In the rest of this section, we look in detail at two of the *misiones* for which sufficient data is available to help us make a preliminary evaluation: Misión Barrio Adentro (the literacy program) and Misión Mercal (the food distribution program).

7.1 Misión Robinson[57]

On October 28 of 2005, President Chávez presided over a highly publicized symbolic event. Venezuela was being declared "Territory Freed from Illiteracy". According to the government's claims, 1.48 million adults had learned to write between 2003 and 2005 using the *Yo Sí Puedo* program. Thus

[56] Weisbrot et al.'s argument is, however, incorrect with respect to Mercal, since the National Institute of Statistics currently uses a price indicator that is designed to cover Mercal establishments.

[57] This section borrows significantly from current research with Daniel Ortega, Chiang-Tai Hsieh and Edward Miguel

Venezuela's illiteracy rate, which had stood at 9.05% of the adult population in 1998, had been brought down to less than 2%. During the event, UNESCO special envoy María Luisa Jáuregui stated that "Venezuela is the first and only country to meet the commitments adopted by the region's governments in 2002 in Havana to drastically reduce illiteracy." [58]

Almost eradicating illiteracy in such a short period would be a stunning achievement. However, although the government has publicly presented figures for the number of people who were taught how to read and write, it is unclear how they have arrived at these figures. There is, however, a simple way to verify the government's story. The *Encuesta de Hogares* regularly asks respondents about their literacy status. At the time of writing, we had at our disposal the *Encuestas* up to the 2nd semester of 2005, allowing us to capture the full period of operation of *Misión Robinson*.[59]

Is there any discernible effect? Figure 29 plots the historical evolution of the Venezuelan illiteracy rate for persons 15 and older derived from the *Encuesta de Hogares*. As the Figure shows, there is a long-run trend of decline in illiteracy rates. At best, there appears to be a minor change in that trend after 2003. The illiteracy rate falls from 8.25% to 6.94 % between the first semester of 2003 (before Mision Robinson) and the second semester of 2005 (after the program's completion). The net decrease in the number of non-literate Venezuelans is of 90,246 persons, a far cry from the government's claim (Table 31). Figure 29 also

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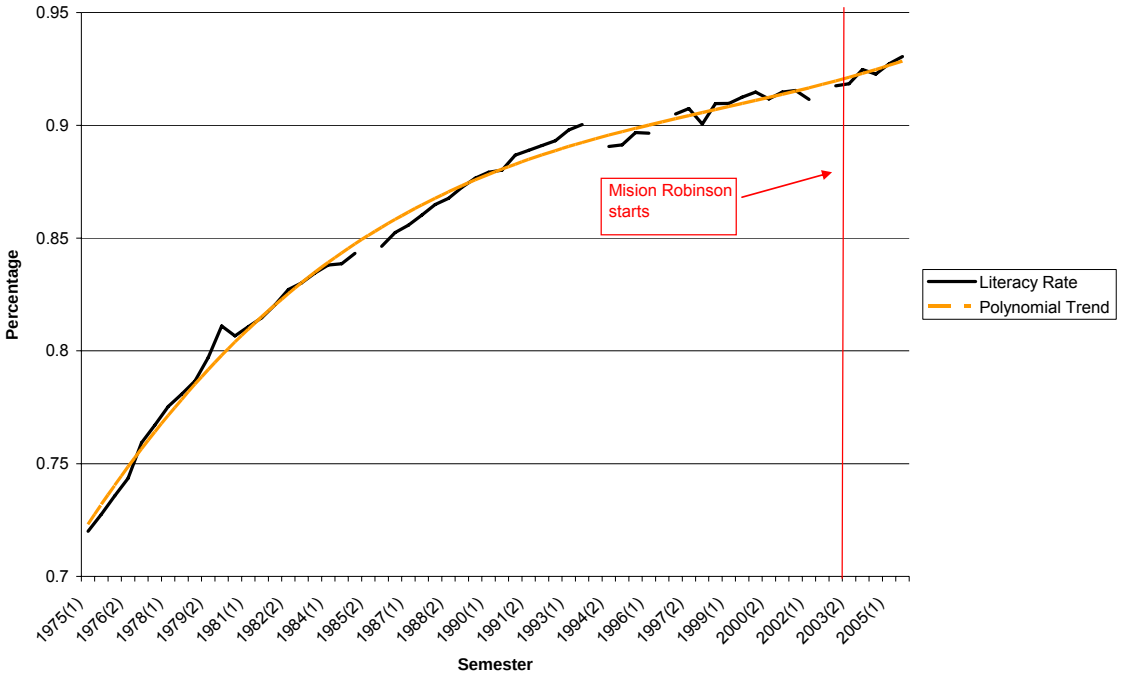
[58] Interpress news agency (2006) "Venezuela Declares Itself Illiteracy-Free," October 28, 2005, http://www.ipsnews.net/news.asp?idnews=30823 (Accessed June 9, 2005).

[59] Misión Robinson kicked off in the second semester of 2003 and was completed in the first semester of 2005, when the government declared its complete success in eradicating illiteracy.

plots a polynomial trend.[60] As one can observe, at the first semester of 2004, Venezuelan literacy was only 0.21 percentage points higher than would be predicted by the long-run trend. This corresponds to an increase in the number of literate Venezuelans by 27,774 persons.

Figure 29: Venezuelan Adult Literacy Rate, 1975-2004



[60] The trend includes quadratic and cubic terms. All terms were highly significant. A pure quadratic trend generated the counterintuitive prediction of a decline in literacy around 2004.

Table 31: Literacy Rates and Number of Non-Literate Persons over 25, 1975-2004

	1975(1)	1975(2)	1976(1)	1976(2)	1977(1)	1977(2)	1978(1)	1978(2)
Literacy Rate	0.720042508	0.727493922	0.73579589	0.743514148	0.759312125	0.767129819	0.775364721	0.780775945
Non-literate persons	1175733	1153797	1259396	1248489	1201517	1185805	1171475	1165823
	1979(1)	**1979(2)**	**1980(1)**	**1980(2)**	**1981(1)**	**1981(2)**	**1982(1)**	**1982(2)**
Literacy Rate	0.786667036	0.797029385	0.811037536	0.806700112	0.810747313	0.814653489	0.820504396	0.827216967
Non-literate persons	1162267	1127750	1073608	1118449	1118726	1114005	1102497	1080319
	1983(1)	**1983(2)**	**1984(1)**	**1984(2)**	**1985(1)**	**1986(1)**	**1986(2)**	**1987(1)**
Literacy Rate	0.830191703	0.834578157	0.838094615	0.838711047	0.843246094	0.846413758	0.852488564	0.855755256
Non-literate persons	1083074	1072759	1071949	1086404	1076620	1094879	1069506	1067742
	1987(2)	**1988(1)**	**1988(2)**	**1989(1)**	**1989(2)**	**1990(1)**	**1990(2)**	**1991(1)**
Literacy Rate	0.860173357	0.864832747	0.867623107	0.872533726	0.876629344	0.879254599	0.880092216	0.88685568
Non-literate persons	1052653	1037895	1034307	1014707	999042	986119	995193	954675
	1991(2)	**1992(1)**	**1992(2)**	**1993(1)**	**1993(2)**	**1994(2)**	**1995(1)**	**1995(2)**
Literacy Rate	0.888916052	0.891032312	0.893256857	0.897931498	0.900421901	0.890650143	0.891331474	0.896763965
Non-literate persons	954233	951199	948520	922065	914281	1028171	1043834	1006384
	1996(1)	**1997(1)**	**1997(2)**	**1998(1)**	**1998(2)**	**1999(1)**	**1999(2)**	**2000(1)**
Literacy Rate	0.89651496	0.905052834	0.907504327	0.900540862	0.909596395	0.909731606	0.912479489	0.91473377
Non-literate persons	1023632	947171	956141	822558	961471	974107	958041	946750
	2000(2)	**2001(1)**	**2001(2)**	**2002(1)**	**2003(1)**	**2003(2)**	**2004(1)**	**2004(2)**
Literacy Rate	0.911732808	0.914728588	0.915486089	0.911513966	0.917532203	0.918445187	0.924815207	0.9227376
Non-literate persons	995199	976640	983234	1045331	1004094	1003821	947302	944735
	2005(1)	**2005(2)**						
Literacy Rate	0.9273249	0.9305564						
Non-literate persons	943519	913848						

Source: Own calculations based on *Encuesta de Hogares*

Obviously, there is no way to square these numbers with the official claims to have taught how to read and write to 1.48 million persons? Indeed, according to the *Encuesta*, there were only 1.004 million Venezuelans who were non-literate at the start of Misión Robinson. One possibility is that the official figure be derived from staff reports. These reports may in themselves include a bias towards overreporting success rates. It may also be the case that beneficiaries derived or expected to derive significant incentives from joining the program, generated incentives to falsely claim illiteracy in order to gain access.[61]

7.2 Misión Mercal

[61] These incentives could include the provision of meals during classes, the perspective of participating in other government programs with tangible economic benefits (such as *Vuelvan Caras*, the job training program whose participants received a cash transfer), and the possibility of obtaining free eyeglasses.

Misión Mercal, launched on August 24, 2003, is a system of government-owned and franchised grocery stores that sell discounted goods at discounts between 20-40% of those at which they are sold in private establishments. Mercal currently has more than 13,359 branches in operation, and covers 47% of Venezuelan food distribution.[62]

Its distribution network includes six types of branches. Type I Mercales are supervised directly by the state and conform to two standard sizes: basic (154 square meters) and amplified (274 square meters), selling a standard selection of products. Type II Mercales are private franchised institutions which vary according to the choices made by the owners. Supermercales are substantially larger and sell a greater variety pf product. They are owned by the state and cooperatives. There are 3 other types of smaller or more mobile Mercales, called "Bodegas Mercal," "Bodegas Móviles," and "Megamercados al Cielo Abierto."

Mercal's web site has published information on the number of Type I, Type II and Supermercales by state. This information would allow for a tentative evaluation of the impact of the Mercal program if we had state-level nutrition or health indicators. We have been unable to find those indicators. The *Encuesta de Hogares*, however, does provide a mechanism to evaluate *Misión Mercal* through a more indirect route. The *Encuesta* has information on consumption of a set of durables, among which are some which we would expect to be particularly sensitive to changes in real incomes of the poor. If Mercal raises the incomes of the poor significantly, one would expect part of that increase to be devoted to increasing the quality of dwellings (replace earthen floors, upgrade zinc ceilings).

[62] Eickhaker(2006), Datanálisis (2006).

In order to test the hypothesis that Mercal leads to an increase in the real incomes of poor individuals, we will test whether there is a change in three indicators of the quality of dwelling in states with greater Mercal intensity. Our three indicators will respectively capture the quality of floors, walls and ceilings. In order to measure the quality of floors, we build an indicator that captures whether the dwelling had earthen floors (low quality) or cement, brick, granite and similar materials (high quality). Our measure of the quality of walls captures whether these are made with bricks, concrete or wood (high quality) or adobe or similar materials (low quality). Our measure of the quality of ceilings captures whether these are made of tiles or cement (high quality) or of zinc, asbestos, or palms (low quality).

Figures 30-32 plot the relation between the intensity of Mercal (measured by the number of Mercal establishments per capita) and the average change in the quality of walls, ceilings, and floors between the first semester of 2002 and the second semester of 2005 . Only one of the three relationships (ceilings) is positive, and far from significantly so (t-stat:.12). The other two point estimates are negative, implying a *deterioration* in average dwelling quality in states with greater Mercal intensity. Indeed, Mercal intensity is negatively and significantly related to the change in the quality of floors (t-stat:-2.16).

Figure 30: Mercal Intensity and Change in Quality of Walls

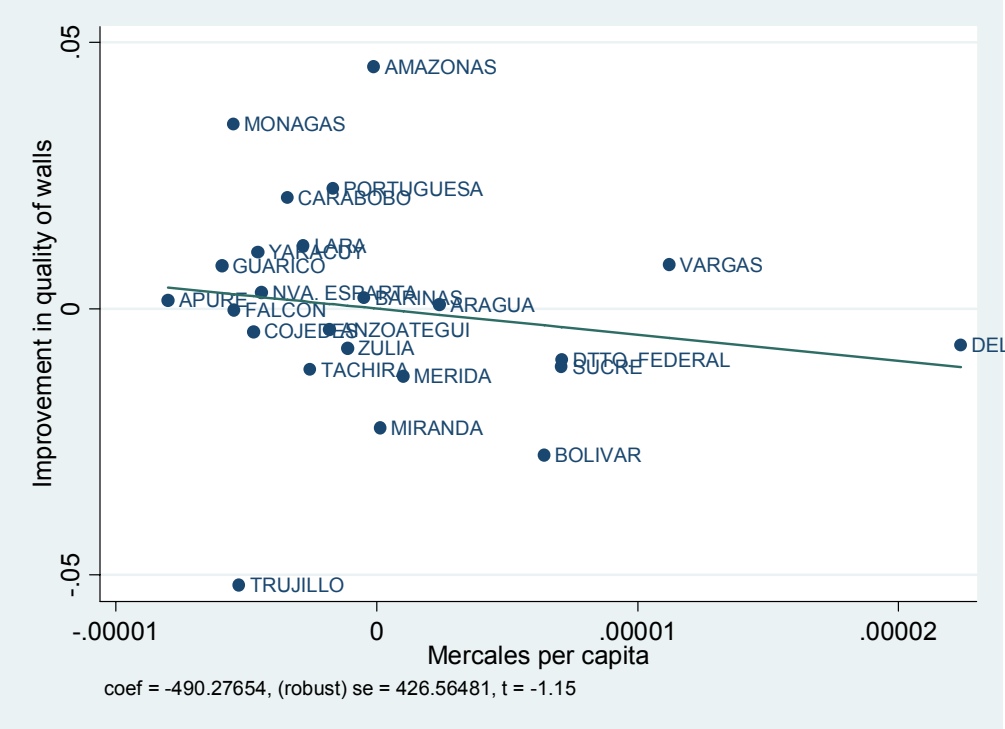


Figure 31: Mercal Intensity and Change in Quality of Ceilings

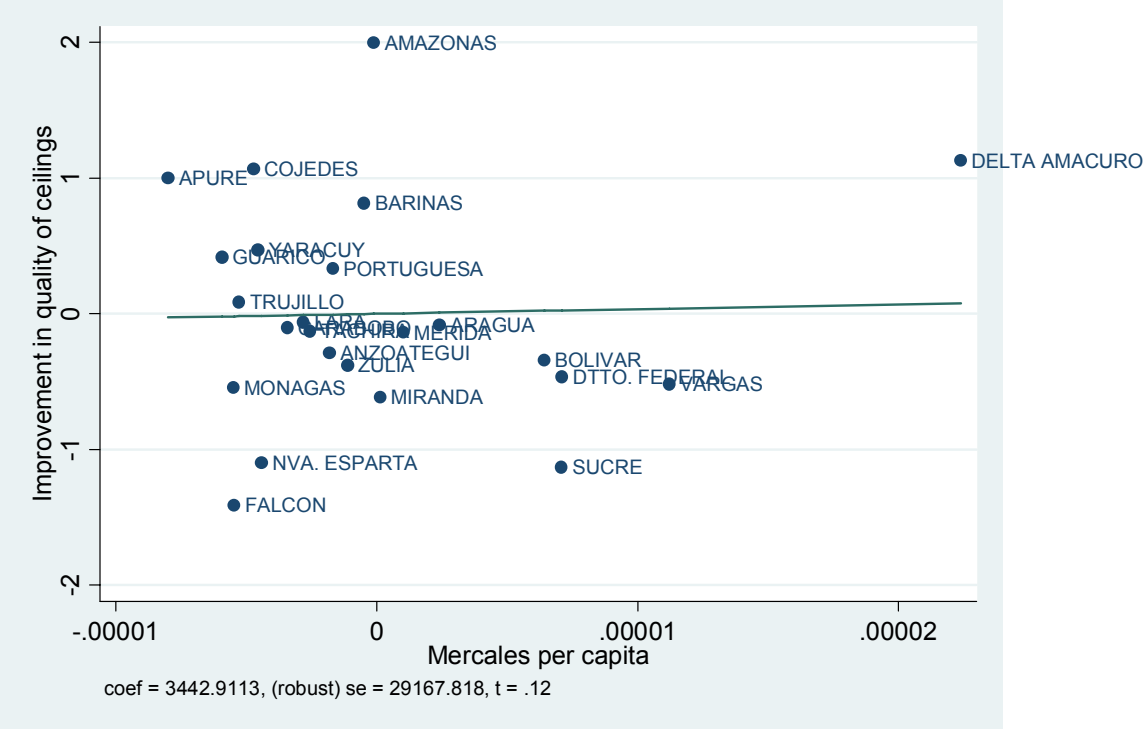
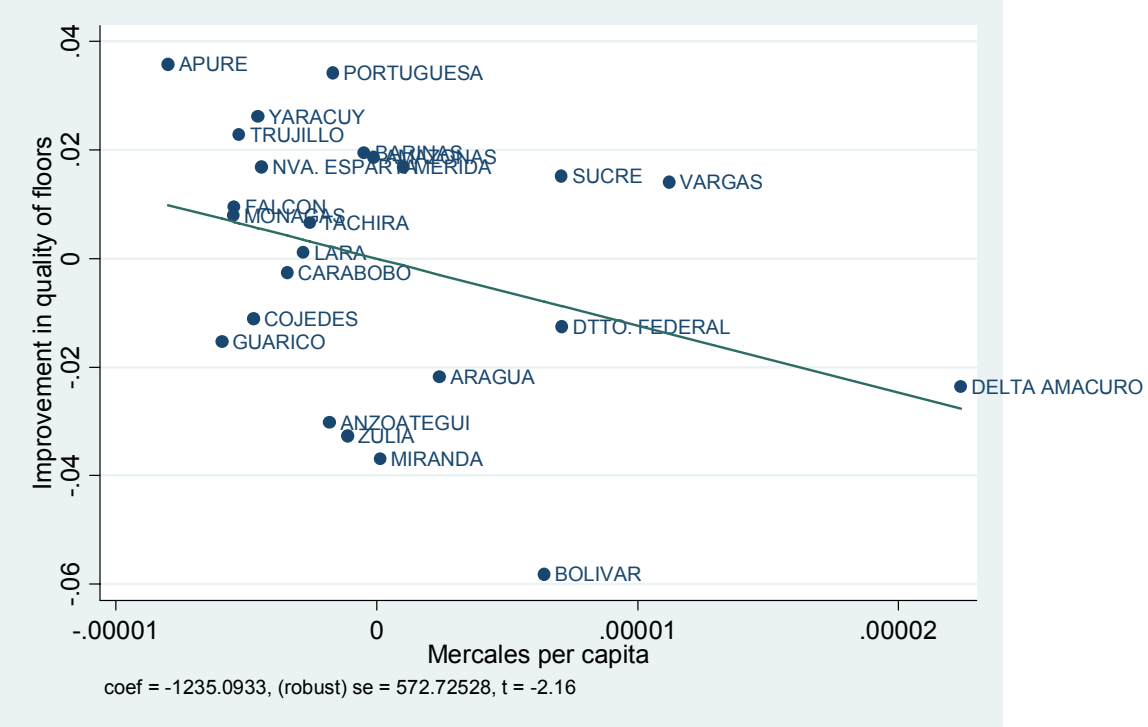


Figure 32: Mercal Intensity and Change in Quality of Floors



It is possible that the lack of relationship in Figures 30-32 is a consequence of Chávez administration's targeting states that were experiencing more adverse economic conditions in this period. One way to evaluate whether this is contaminating our estimates is to look for evidence of changes in the trend growth rates in dwelling quality. In other words, we can measure not whether Mercal intensity is associated with more improvements in dwelling quality but whether it is associated with a change in the rate of improvement (or deterioration) of dwelling quality. Figures 33-35 show the scatter plots of the number of Mercals per capita against the change in the growth rate between 2000-2002 and 2002-2005. These scatter plots only increase the paradox. The change in the trend of walls quality and floors quality are still negatively and insignificantly related to Mercal. The coefficient estimate on quality of ceilings does turn positive, albeit far from significantly so (t-stat=.23).

Figure 33: Mercal Intensity and Change in Trend of Quality of Walls

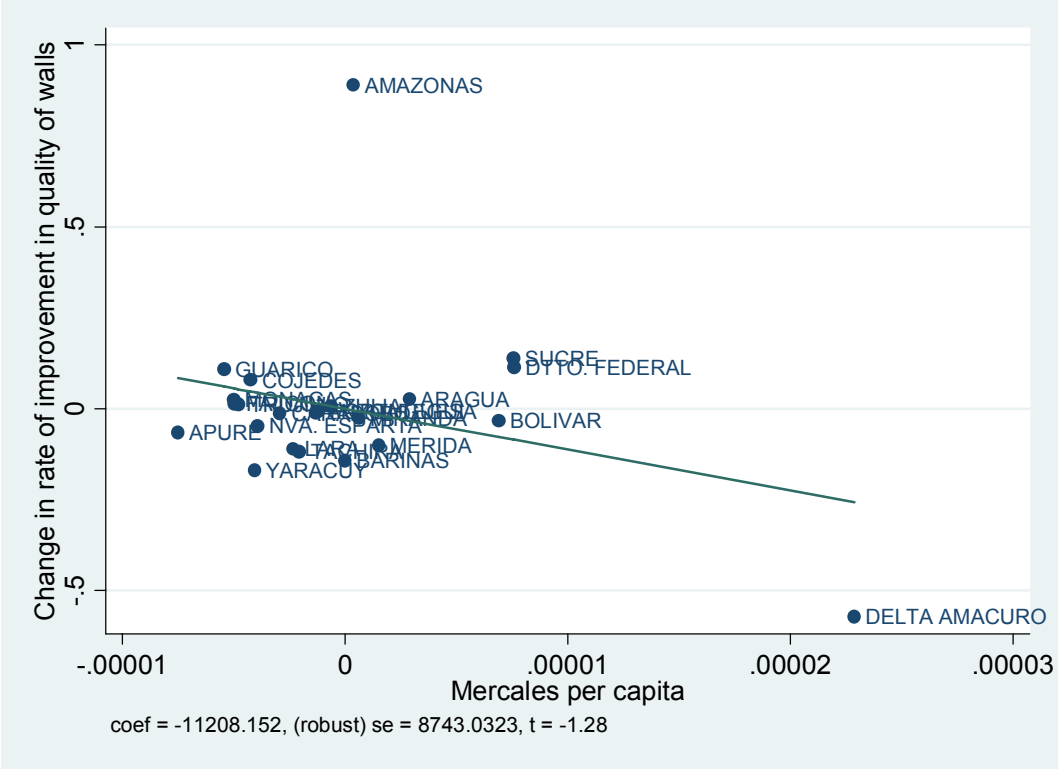


Figure 34: Mercal Intensity and Change in Trend of Quality of Ceilings

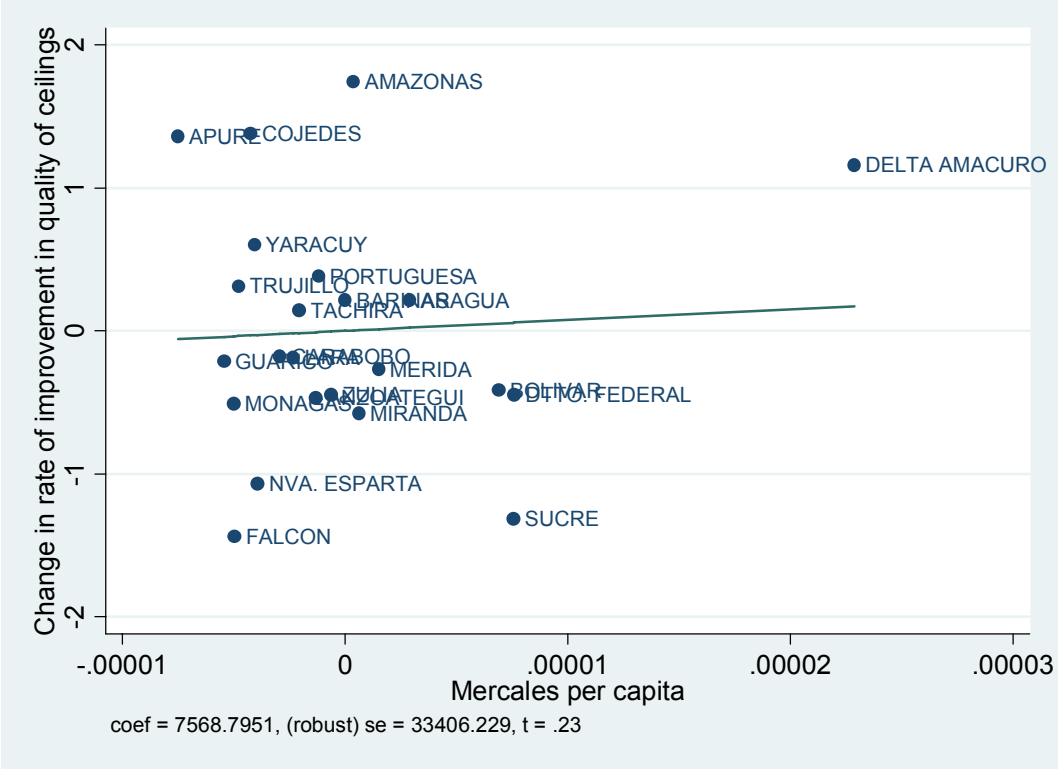
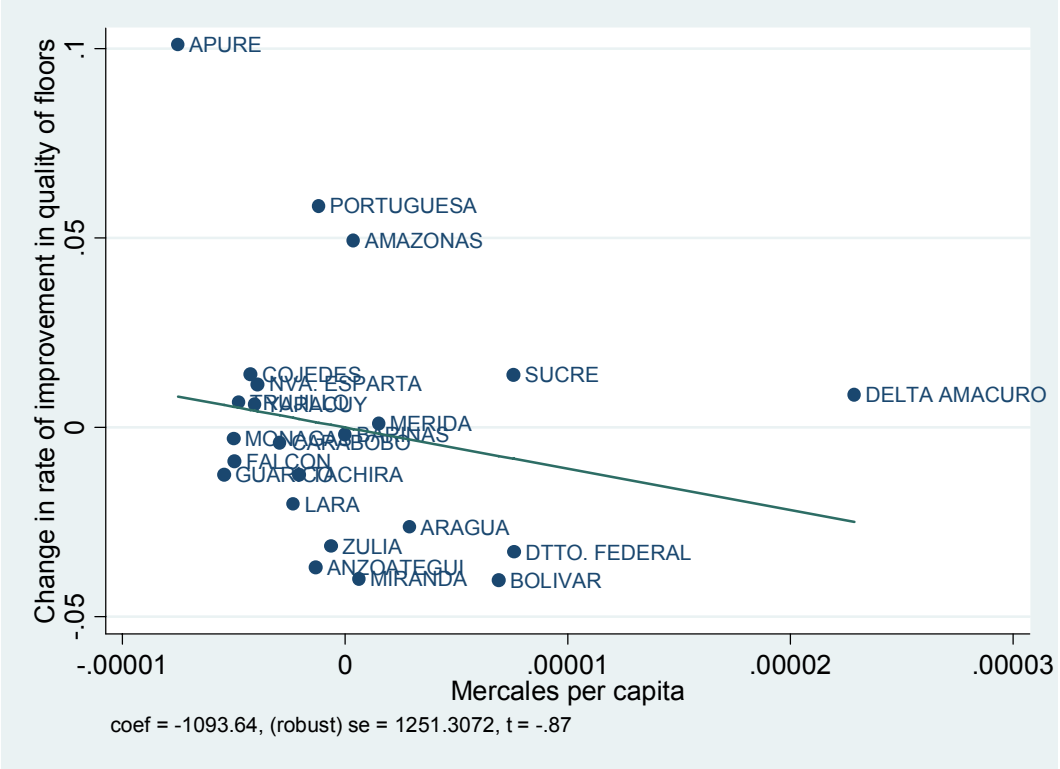


Figure 35: Mercal Intensity and Change in Trend of Quality of Floors



The analysis presented in this section has not given support to the claim that the Chávez administration's *misiones* are raising the living standards of the Venezuelan poor. Indeed, our analysis of Misión Robinson has found deep inconsistencies between the administrations claim to have taught 1.4 million people how to read and write and the fact that the absolute number of illiterate individuals has held roughly constant at 1 million through the implementation of the government's literacy campaign.

These conclusions should serve as a reminder that building fiscal space is only one part of the answer to poverty reduction. The second, most important part, has to do with channeling those resources effectively. The four-fold increase

in per capita oil revenues that occurred since 1998 has served as an exogenous increase in Venezuelan fiscal space, allowing it to target a substantial amount of resources towards poverty reduction. The evidence surveyed in this section suggests that there is still a considerable way to go before these resources are actually converted into initiatives that improve the well-being of the poorest.

6. Conclusions

We started out this paper by stating that studying fiscal space in Venezuela could leave one open to serious objections. The reader who has paid the cost of getting this far would be justified in requesting an answer to these questions now. What can Venezuela teach us about fiscal space? How can non-resource abundant developing economies gain from the analysis of this experience? Can Venezuela effectively be said to have a fiscal space problem? Or is studying fiscal space in Venezuela akin to studying overpopulation in Wyoming?

We suggest that it is useful to think about fiscal space in progressive levels of breadth distinct from those emphasized by Heller (2005) and Brun et al. (2005). We refer to **objective fiscal space** as the amount of resources that an economy could mobilize towards a desired purpose – without prejudice to its fiscal sustainability – if it carried out all the necessary reforms to its expenditure, taxation and budgetary policies, including necessary changes in institutional and political arrangements. **Effective fiscal space**, in contrast, is the amount of resources that an economy can mobilize for that same purpose subject to the constraints that are imposed by its structural, political and institutional

conditions. The notion of effective fiscal space implies that there are reforms that cannot be realized because there are significant impediments to them arising from a country's structure, politics and inherited institutions.[63] **Realized fiscal space** is the amount of resources that an economy is currently mobilizing for these aims.

In this sense, Venezuela's realized fiscal space is no different from those of other Latin American countries. Its share of Central Government spending in GDP is similar to those of most of its neighbors. Indeed, as we have argued, its spending and tax regimes are particularly distorted against the poor in relation to the rest of the region, suggesting that its realized fiscal space for the goal of poverty reduction may even be more reduced than that of its natural comparison group. In this sense, Venezuela has a fiscal space problem.

Venezuela's objective fiscal space, in turn, is huge. Given its level of income, Venezuela should have internal tax levels similar to those of the most advanced economies in the region, which would have the potential to raise tax revenues by approximately 6 points of GDP. As we have shown, it can also raise revenues by between 2 and 3% of GDP by making sensible changes to its pricing of gasoline in the domestic sector. On the expenditure side, moving government deposits to the *Banco del Tesoro* would allow it to save 1.7% of GDP, and other administrative reforms could allow it to have at least a one shot gain of more than 1% of GDP generated by eliminating asynchronies in the budget execution and

[63] However, some institutions can be reformed and political and structural constraints can be modified. When we speak about the constraints imposed by initial conditions, we recognize the possibility of altering constraints but emphasize that our institutional, political and structural choice sets are *path-dependent* in that they are constrained by our historically determined starting points (North, 1993, 2005).

completion stages. A recomposition of budget expenditures towards investment and non-labor intensive public goods could add on a few decimals more – and have much larger effects on long run GDP growth. Summing all of these components, Venezuela's objective fiscal space can be evaluated at more than 10% of GDP in excess of current spending levels. This extraordinary level is in essence a simple reflection of Venezuela's oil abundance: since Venezuela's oil accounts produce a surplus of ten points of GDP, then balancing its non-oil fiscal account (that is, doing what everyone else does) should logically lead it to have 10 points of GDP more to spend.

The real task of policymakers, in our view, is identifying a country's effective fiscal space. That is, one must recognize potential reforms, their expected payoffs, and the feasibility of overcoming the political, institutional and structural impediments to carrying them out, given initial conditions. In Venezuela, such an exercise implies asking about the feasibility of overcoming widespread resistance to high gasoline prices, imposing a personal income tax on income brackets that have never paid it, and weakening the arrangements between politicians and those financial institutions that follow rent-seeking strategies. One must propose strategies that can enhance resource availability, are politically feasible, are compatible with an economy's institutions, and can reasonably be implemented by the existing pubic service.

Venezuela's effective fiscal space could be broader than those of other countries, though that is by no means a foregone conclusion. On the one hand, we have suggested a set of simple reforms, some of which can apparently be carried out at a reasonable political cost, which would generate a significant

enhancement in fiscal resources. On the other hand, Venezuela's history of oil dependence may make it particularly difficult to reform some of the institutions that may be vital to enhancing resource availability, as our discussion of centralization in sections 2 and 3 highlighted.

We believe that some of the lessons drawn from the analysis that we have conducted of Venezuela can be appealed to when looking at other countries, provided sufficient attention is paid to relevant structural and historical specificities. Studying the history of centralization and the link between patronage-based political systems and public employment is likely to be fruitful in many countries which escaped anarchy in the 19th or 20th centuries through processes of political and economic centralization. Analyzing the specificities of particular taxes and studying the causes of their underperformance is a second route that should be valuable more generally. Each country is likely to have distinct characteristics in its budget planning and execution strategy, but analyzing the institutional sources of a "scramble for resources" by budget management institutions can reveal the existence of relevant binding constraints. Looking for asymmetries in past adjustments can help understand the links between lack of fiscal space and economic underperformance.

Our analysis also closes with a few words of necessary caution. Fiscal space is important, but it is not everything. In order to reduce poverty, resources generated by fiscal space enhancement must be spent wisely. Our analysis of the current Venezuelan administration's hallmark social programs, the *Misiones*, has produced disappointing results, revealing wide gaps between government claims and outcomes as captured by official statistics. Hopefully, Venezuela is still in

time to correct the problems in its social strategy and to take advantage of the extraordinary opportunities that the recent oil boom has given it to achieve significant advances in the war against poverty, thus allowing other countries to learn from its successes instead of from its failures.

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