IDB WORKING PAPER SERIES No. IDB-WP-300

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The Case of Venezuela

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August 2012

Inter-American Development Bank
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Inter-American Development Bank
2012

Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Ríos, Germán.
Sub-national revenue mobilization in Latin America and Caribbean countries : The case of Venezuela / Germán Ríos, Federico Ortega, J. Sebastián Scrofina.
p. cm. (IDB working paper series ; 300)
Includes bibliographical references.
1. Local taxation—Venezuela—Case studies. 2. Revenue—Venezuela—Case studies. 2. Finance, Public —Venezuela—Case studies. I. Ortega, Federico. II. Scrofina, J. Sebastián. III. Inter-American Development Bank. Research Dept. IV. Title. V. Series.
IDB-WP-300

http://www.iadb.org

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Abstract[1]

This paper analyzes the high fiscal dependence of Venezuelan states and municipalities on the central government and the political economy process embedded in the interaction between the central government and sub-national entities. Also explored is whether there is scope to increase sub-national governments' revenues, improve the current intergovernmental transfer system, and reduce horizontal imbalances; of particular importance is analyzing the impact of current transfer mechanisms on sub-national governments' revenues volatility. Following a presentation of Venezuela's economic background, public sector and fiscal variables, the paper describes the process of decentralization, inter-governmental transfer mechanisms and revenue volatility, and local governments' own revenues. Subsequently presented are sub-national governments' fiscal dependence and its determinants, followed by options for revenue mobilization and improving the transfer mechanism. The paper concludes with a summary and policy recommendations.

JEL classifications: H70, H72, H77
Keywords: Sub-national revenues, Intergovernmental transfers, Decentralization, Fiscal dependence, Revenue mobilization

[1] The authors gratefully acknowledge comments on previous drafts from Teresa Ter-Minassian, Eduardo Lora, Ernesto Stein, Rafael de la Cruz, Rolando Ossowski, Giorgio Brosio and participants in IDB seminars. We would like to acknowledge excellent research assistance provided by Ricardo Suárez, Amanda Beaujon and Anderson Gómez. This paper was undertaken as part of the Latin American and Caribbean Research Network project "The Future of Taxation in Latin America and the Caribbean."

1. Introduction

The recent increase in oil prices to historical levels and their subsequent drop as a result of the international financial crises have once more demonstrated the need for fiscal and macroeconomic policies to reduce the volatility in hydrocarbon exporting countries. As in the 1970s when oil prices quadrupled, the external shock was perceived to be permanent by many oil economies, which did not implement any measures to mitigate the risk of a further negative external shock. Venezuela did not escape this pattern.

In fact, volatility has been the main feature in Venezuela's main macroeconomic variables, mainly due to the country's high reliance on oil. From having a high growth rate and a low inflation during the 1950s and the 1960s, Venezuela turned into a country with a relatively low growth rate and moderate inflation levels starting in the 1970s. However, what attracts particular attention is the variability in the macroeconomic performance of the country, as well as how oil price volatility has affected the rest of the economy.

The volatility of fiscal revenues clearly affects sub-national finances. Given that around 70 percent of sub-national revenues come from transfers from the central government, local authorities face problems that are similar to those of their central policymaker counterparts. As a matter of fact, one of the main sources of financing for governors and mayors is the *Situado Constitutional*, which is a transfer of 20 percent of ordinary fiscal revenues from the central government, and is closely linked to highly volatile oil fiscal revenues. For this reason, it is important in the case of Venezuela to study the fiscal dependence of local governments, which is defined as the proportion of revenues that is received from the central government. In addition, since several states and municipalities have spending responsibilities, mainly in education and health services, that were transferred from the central government with no clear funding mechanisms, the volatility of revenues makes it very difficult to provide reliable and efficient public services. To work on improving current taxes and fees, and implementing new ones, could mitigate this situation by providing local governments with a higher degree of fiscal independence.

One important characteristic of the Venezuelan economy is the low level of non-oil taxation. In 2009 non-oil taxes reached 14 percent of GDP, while the average for Latin America is around 17 percent, and some countries such as Brazil and Argentina have tax burdens above 30 percent of GDP. This could be viewed as an opportunity because there is room to increase

sub-national governments' resources through taxation. This will contribute to reducing revenue volatility for states and municipalities brought about by their dependence on transfers from the central government, which in turn show large fluctuations due to their reliance on oil revenues. This could also help to improve accountability, because citizens will pay more taxes at the sub-national level and require better public services from local authorities. As a result, these efforts could increase the overall non-oil tax ratio and reduce dependence on oil revenues and its impacts on the economy.

The process of decentralization in Venezuela can be viewed as a political response to the loss of legitimacy of the political system. The weakening of an economic system based almost exclusively on the distribution of the oil revenues, and the lack of representativeness of traditional political parties paved the way for an increased role by local governments. Although unintended, the activation of the federal system in Venezuela with the direct election of governors and the creation of mayors in 1989 was instrumental in the reshaping of political institutions, principally political parties, in Venezuela. Even after the 1999 Constitution was approved, which in many ways increased the central government's powers, the main political features of the decentralization process remained basically unchanged.

Indeed, the increased political competition brought about by the possibilities of re-election of local authorities, the changes of electoral rules for electing national legislators, and the decentralization process that followed, all played an important role in the collapse of the traditional party system. Before the decentralization, the party system was very centralized, and parties controlled almost all levels of government and key posts in the public administration. Once the oil rent distribution system collapsed in the mid-1980s, it was increasingly difficult for parties to maintain their grip on the main political institutions, and civil society pressures brought about several political reforms, which included the above-mentioned direct election of governors and the creation of mayors. This allowed several regional leaders to emerge, undermining and eventually weakening the bipartisan system, which by that time had lost legitimacy.

However, a process of fiscal decentralization has not accompanied the political decentralization. As mentioned before, the bulk of local governments' resources comes from central government mandatory legal transfers. As a matter of fact, most of the fiscal and administrative responsibilities of states and municipalities have been rather limited. For the period 1998-2007 only an average of 4 percent of states' revenues came from their own sources,

while for municipalities almost 51 percent came from their own sources. However, there are enormous differences among municipalities; while some can generate up to 98 percent of their revenues, primarily those in cities with important industrial and commercial activities, rural municipalities' revenues depend almost exclusively on central government transfers.

Another key problem is the fiscal sustainability of public services transferred from the central government to local administrations. Although the central government has transferred resources previously included in the national budget, there are no operational criteria to determine whether those resources are enough to maintain levels of efficient services. In recent years there is evidence of a marked deterioration in public services transferred to the regions due to lack of funding, mainly in the areas of health and education.

There are also restrictions on the way sub-national governments obtain their funds. By law states cannot levy taxes and have no borrowing authority, therefore their budgets depend almost entirely on transfers from the central government budget. The 1999 Constitution establishes that states' revenues can come from their assets and the administration of their goods, proceeds for the use of their goods and services, fines and penalties, transfer from the Central Government (*Situado Constitucional*), receipts from the sale of fiscal stamps, and resources allocated by the FCI.[2] In the case of municipalities, the 1999 Constitution states that their revenues can come from the same sources as those of states, but they have some limited tax authority on urban property and industrial and commercial activities. There are, however, legal and institutional difficulties to collecting some of these taxes, such as inadequate local ordinances and outdated cadastres, as well as very important differences in municipalities' ability to collect them. These differences have also contributed to increase disparities in the scope and quality of goods and services offered by municipalities.

More recently, a recentralization trend has emerged. The central government has retaken the operations of ports and airports, which were previously decentralized, changed laws to redirect smaller transfer funds like FIDES and LAEE[3] to politically influenced authorities, and diminished the role of the local police. Moreover, recently approved legislation was approved to

[2] *Fondo de Compensación Interterritorial* (FCI): a fund administered by the *Consejo Federal de Gobierno* (Federal Government Council), used mainly to finance investment initiatives executed by sub-national governments (SNGs).
[3] *Fondo Intergubernamental para la Descentralización* (FIDES) is funded by 15 percent of VAT revenues. It is distributed as follow: 42 percent to states, 28 percent to municipalities and 30 percent to communal councils. Sub-national governments must apply to obtain funding by presenting investment projects. The *Ley de Asignaciones Económicas Especiales* (LAEE) is funded by 25 percent of tax revenues, after deduction of the amount of *Situado Constitucional*. It is distributed in the same way as the FIDES.

create communes that could undermine the autonomy and authority of states and municipalities. In addition, due to the reduction of oil prices, increasing off-budget expenditures, and underestimation of fiscal revenues, central government transfers to the regions have declined, making the delivery of public services at the local level more difficult.

The main mechanism to underestimate fiscal revenues is to forecast an oil prices well below market expectations. In this way, ordinary fiscal revenues are underestimated and therefore mandatory transfers are below of what they should be otherwise. If oil prices are above what is forecast in the budget, which is the case most of the time, the government transfers most of the excess revenues to several off-budget funds, bypassing the transfer mechanisms. Moreover, there is no timeframe to transfer the remaining additional resources, which introduces even more uncertainty into sub-national finances.

This paper analyzes the large fiscal dependence of states and municipalities in Venezuela caused by the manner they receive their funding, and the political economy process embedded in the interaction between the central government and sub-national entities. It also explores whether there is scope for sub-national governments to increase revenues, improve the current inter-governmental transfer system and reduce horizontal imbalances. Of particular importance is analyzing the impact of sub-national governments' revenues volatility due to the current transfer mechanisms (*Situado Constitucional).*

The paper is organized as follows. Section 2 provides the economic background of Venezuela and describes the public sector and the fiscal variables. Section 3 describes the process of decentralization in Venezuela, and Section 4 presents intergovernmental transfer mechanisms and revenue volatility. Section 5 describes local governments' own revenues, while Section 6 presents the fiscal dependence of sub-national revenues and its determinants. Section 7 explores options for revenue mobilization and for improving the transfer mechanism, and Section 8 offers conclusions and recommendations.

2. The Venezuelan Economy and Public Sector

To analyze the Venezuelan economy, it is key to highlight the enormous impact of oil on the macroeconomic variables. For instance, during the period 2000-2010, when the average annual oil price for the Venezuelan basket was $50 per barrel, 90 percent of total exports were oil related, 48 of fiscal revenues were generated by oil activities, and around 15 percent of total

GDP came from the production of oil and related products. Table 1 shows the impact of oil exploitation on the fiscal, external and real sectors for several periods of Venezuela's economic history.

Table 1. Impact of Oil

Indicator (average)	1970-1979	1980-1989	1990-1999	2000-2010
Oil fiscal revenues / GDP*	15.1	13.2	11.4	11.6
Oil fiscal revenues/ total fiscal revenues*	70.1	60.7	59.0	47.6
Oil exports/ total exports	87.4	82.2	71.1	90.0
Oil exports / GDP	23.0	21.2	20.5	25.9
Oil GDP/ GDP	30.0	14.9	17.1	15.1

Sources: Central Bank of Venezuela and Ministry of Economy and Finance.
* Available until 2009.

The volatility of oil prices has had significant negative effects on the Venezuelan economy, making the work of policymakers extremely difficult. In addition, the country has not made sufficient efforts to implement effective stabilization mechanisms. Therefore, when the oil price is above its historical mean, in general, economic growth accelerates, the fiscal balance is positive, and the current account has a surplus. The contrary often happens when the oil price is below its historical average. These boom and bust cycles cause major distortions in the economy and make public and private planning a daunting task. To address this problem, in 1998 a macroeconomic stabilization fund was created; however, the rules of the fund were changed several times to try to solve short-term fiscal problems, undermining the credibility and effectiveness of the mechanism.

Table 2 shows that the negative economic impacts of oil in the economy started in the 1980s. From the 1950s to the 1970s Venezuela was characterized by fast economic growth, low inflation and sound fiscal and external accounts. Nevertheless, after the oil boom of the 1970s economic growth begun to slow down and became very volatile, inflation rose to double digits, and both the fiscal and external balances deteriorated. Moreover, unemployment and the exchange rate started to show instability never seen before. The main reasons for these radical changes were the oil shocks experienced by Venezuela during the 1970s (positive) and 1980s

(negative). Policymakers were not well equipped to deal with volatility, and the economic policies that worked well during the years of stability were clearly inadequate for more turbulent times. In 1989, an ambitious stabilization and structural economic program was implemented, but it faced strong opposition and was abandoned shortly after implementation.

Table 2. Main Macroeconomic Indicators

Indicator (average)	1951 1960	1961 1970	1971 1980	1981 1990	1991 2000	2001 2010
Real GDP Growth (%)	7.9	6.0	4.2	0.7	2.1	3.9
Consumer Price Index (%)	1.9	1.0	8.5	25.0	44.8	23.0
Current Account Balance (as a percentage of GDP)	-0.7	2.6	2.0	1.9	2.9	9.8
Fiscal Balance of the Central Government (as a percentage of GDP)*	n.a.	0.2	1.2	-1.3	-1.7	4.8
Venezuelan Oil basket Price (USD)	13.3	9.4	28.1	21.5	16.8	50.0
Oil Exports (per capita (USD of 1995)	1,425	1,006	1,482	983	674	1,301

Sources: Central Bank of Venezuela, Ministry of Economy and Finance.

* Available until 2009.

On the other hand, and notwithstanding the important efforts made by the tax administration (SENIAT) in recent years, non-oil revenue as a percentage of GDP is lower compared with international standards, and when oil prices are below their historical average, financing needs by the public sector generally increase, leading to higher internal and external indebtedness levels. Moreover, in times of fiscal stress, the devaluation of the exchange rate has been often used as a policy measure to generate additional revenues, causing strong inflationary pressures.

2.1 The Public Sector

Although Venezuela is a federation, because oil revenues are administrated directly by the central government, the fiscal dependence of sub-national governments is rather substantial. Table 3 shows the structure of budgeted expenditures by type of government and highlights the importance of transfers. In 2009, while the central government represented 94 percent of total

budgeted expenses, states and municipalities accounted for 1 percent and 5 percent, respectively. However, when transfers from the central government to sub-national governments are taken into account, the central government represents 71 percent of the total, and local governments increase their share to 29 percent.

Table 3. General Government Expenditures Structure (USD Billion)[4]

	1999	% Total	% GDP	2009	% Total	% GDP
Public Sector	19.1	100%	20%	74.9	100%	23%
Central Government	17.7	92%	18%	70.5	94%	22%
States	0.4	2%	1%	1.0	1%	0%
Municipalities	1.1	6%	1%	3.4	5%	1%
After Transfers						
Central Government	12.4	65%	13%	52.9	71%	16%
States	4.7	25%	5%	15.4	21%	5%
Municipalities	2.0	10%	2%	6.6	9%	2%

Source: ONAPRE.

2.1.1 Central Government

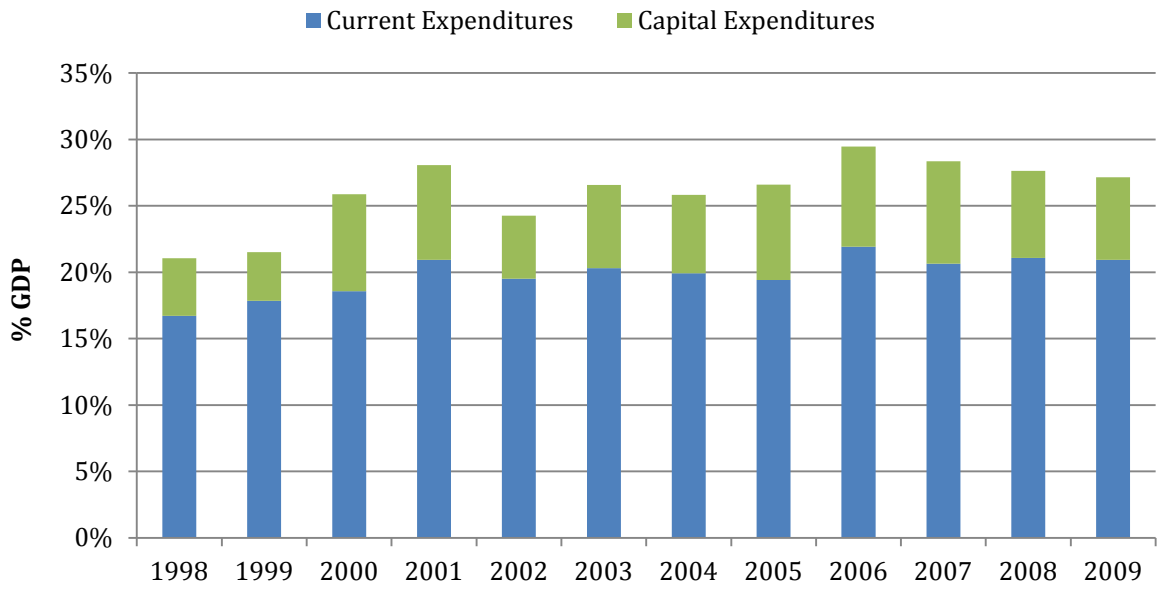
Table 4 shows the composition of the central government's revenues. Oil revenues are comprised of income tax paid by the state oil company PDVSA, royalties, and dividends paid by PDVSA; those revenues were equivalent to 21.6 percent of GDP in 2009. Non-oil revenues consist of taxes and non-tax revenues. Tax revenues are divided between indirect taxes (mainly VAT and trade taxes) and direct taxes (personal and corporate income tax). As mentioned above, a salient characteristic of the Venezuelan economy is the very low level of non-oil taxation.

[4] Public enterprises are not included.

Table 4. Central Government Revenues Composition (% of GDP)												
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Revenues	17.4%	18.0%	20.2%	20.8%	22.2%	23.4%	24.0%	27.5%	29.7%	29.1%	24.9%	21.6%
Oil Revenues	5.8%	6.7%	10.0%	9.4%	10.5%	11.6%	11.2%	13.4%	15.9%	14.7%	12.3%	7.6%
Income Tax PDVSA	1.3%	2.2%	4.2%	2.5%	0.9%	1.5%	1.8%	3.7%	4.0%	4.1%	2.7%	1.8%
Royalties	2.4%	2.8%	4.3%	3.1%	6.4%	7.4%	8.2%	8.8%	11.2%	9.5%	9.0%	5.1%
Dividends PDVSA	2.1%	1.7%	1.5%	3.8%	3.2%	2.8%	1.2%	0.9%	0.7%	1.1%	0.6%	0.6%
Non-oil Revenues	11.7%	11.4%	10.1%	11.3%	11.7%	11.8%	12.8%	14.1%	13.8%	14.3%	12.5%	14.0%
Taxes	10.9%	10.8%	8.6%	8.9%	9.7%	9.8%	10.9%	11.6%	11.6%	12.1%	10.9%	11.6%
Indirect	8.6%	7.8%	6.5%	6.7%	6.2%	6.3%	7.8%	8.2%	8.5%	8.0%	6.7%	7.9%
VAT	5.6%	5.0%	4.1%	4.2%	4.2%	4.8%	6.2%	6.4%	6.4%	5.7%	4.7%	5.9%
Trade	1.6%	1.4%	1.2%	1.3%	1.1%	0.7%	1.0%	1.2%	1.4%	1.6%	1.1%	0.9%
Other consumption taxes	1.3%	1.3%	1.2%	1.3%	0.9%	0.8%	0.7%	0.6%	0.7%	0.7%	0.9%	1.0%
Direct	2.1%	2.0%	1.7%	2.0%	2.1%	2.0%	2.1%	2.4%	3.0%	3.6%	3.3%	3.7%
Income tax	2.1%	2.0%	1.7%	2.0%	2.1%	2.0%	2.1%	2.4%	3.0%	3.6%	3.3%	3.7%
Others	0.2%	1.1%	0.5%	0.1%	1.4%	1.5%	1.0%	0.9%	0.1%	0.6%	0.9%	0.0%
Non Tax	0.8%	0.6%	1.5%	2.5%	2.0%	2.0%	1.9%	2.6%	2.2%	2.2%	1.6%	2.4%
Source: ONAPRE.												

In the last 12 years budgeted expenditures have averaged 24 percent of GDP, of which 19 percent are current expenditures and 5 percent are capital expenditures. The recent evolution of budgeted expenditures can be seen in Figure 1. It is important to notice that, due to the volatility of oil prices, actual expenditure could be substantially lower/higher than budgeted, as a result of shortfalls/excesses of oil prices compared to budgeted levels. In recent years, actual expenditures have reached close to 30 percent of GDP. Expenditures are very volatile and correlated to oil prices. The most important categories are wages, interest payments and transfers, which make the budget rather rigid. Capital expenditures are relatively low and tend to be reduced first when oil prices fall below budgeted levels, causing significant delays to public infrastructure projects.

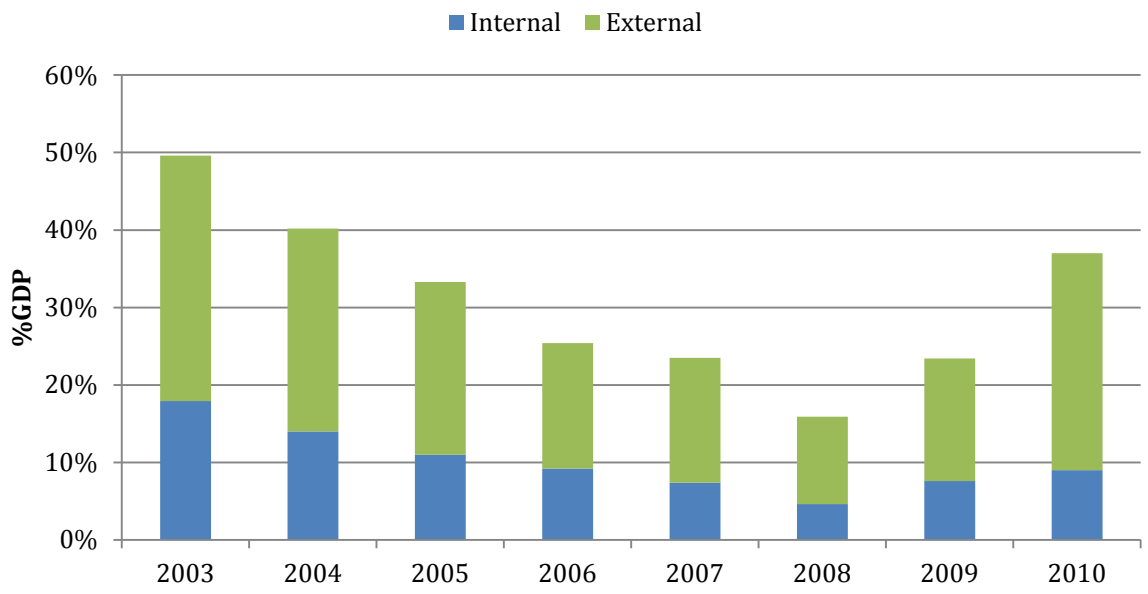
Figure 1. Central Government Expenditures (% GDP)



Source: ONAPRE.

Despite the recent increase in oil prices, Venezuela has registered significant fiscal deficits, which have caused an increase in the public debt/GDP ratio. This indicator declined in the period 2003-2008, but increased in the period 2008-2010 (see Figure 2). Most of the increase (80 percent) is due to the national oil company PDVSA. This reflects recent changes in public finance in Venezuela in which the government allocates a higher proportion of oil income to off-budget funds (FONDEN, China fund, etc.), reducing the availability of funds by PDVSA, and in turn increasing its financial needs. In addition, PDVSA has been undertaken several quasi-fiscal activities such as social policies, which have reduced its financial room for maneuver. However, overall debt service is less than 10 percent of total exports (5 percent for the Central Government), and its maturity profile appears manageable in the near future. In addition, prospects for oil prices and low international interest rates could contribute to fiscal sustainability, in the absence of strong external shocks.

Figure 2. Stock of Government Debt (% GDP)



Source: MF, BCV, PDVSA and own calculations

2.1.2 Sub-national Governments

By law, the states cannot levy taxes and have no borrowing authority, therefore their budgets depend almost entirely on transfers from the central government budget. Table 5 shows that transfers represented 91 percent of total revenues in 2010, while own revenues amounted to 9 percent (see Section 4 below for further details).

Table 5. Composition of States' Revenues 2008-2010

	2008		2009		2010	
	MM USD	% Total	MM USD	% Total	MM USD	% Total
Total Transfers	13,276	95%	14,376	93%	6,078	91%
Situado	8,801	63%	11,546	75%	4,617	69%
LAEE	826	6%	963	6%	427	6%
FIDES	813	6%	1,020	7%	618	9%
Special Transfers	2,835	20%	847	6%	416	6%
Own Revenues	638	5%	1,002	7%	623	9%
Total	13,913	100%	15,378	100%	6,702	100%

Source: ONAPRE.

Municipalities can receive revenues from the same sources as states, but they have more autonomy because they can tax industrial and commercial activities, as well as urban properties and other assets. However, there are important disparities in tax bases and capacity to tax, mainly between urban and rural municipalities. Table 6 shows that in 2010, transfers accounted for 36 percent of total revenues, while own revenues reached 61 percent (see Section 5 below for a fuller description of these revenues).

Table 6. Composition of Municipalities' Revenues 2008-2010

	2008		2009		2010	
	MM USD	% Total	MM USD	% Total	MM USD	% Total
Ordinary Revenues	**4,714**	**94%**	**6,467**	**98%**	**4,129**	**97%**
Transfers	2,392	48%	3,185	48%	1,550	36%
Situado Municipal	1,601	32%	2,147	32%	976	23%
LAEE	398	8%	507	8%	238	6%
FIDES	380	8%	498	8%	314	7%
Other Transfers	144	0%	33	0%	22	1%
Own Revenues	2,323	46%	3,282	50%	2,579	61%
Indirect Taxes	2,047	41%	2,720	41%	2,133	50%
Non-tax Revenues	82	2%	181	3%	131	3%
Sales of Goods and Services	3	0%	25	0%	4	0%
Property Revenues	30	1%	42	1%	42	1%
Other Ordinary Revenues	160	3%	314	5%	269	6%
Extraordinary Revenues	**558**	**6%**	**150**	**2%**	**131**	**3%**
Sales of Assets	29	1%	16	0%	15	0%
Other Extraordinary Revenues	529	5%	134	2%	115	3%
Total	**5,273**	**100%**	**6,617**	**100%**	**4,260**	**100%**

Source: ONAPRE.

States' expenditures are concentrated on health, education, social security, defense, urban development and housing, and administration. In 2010, their total expenses reached 2.4 percent of GDP (see Table 7).

Table 7. Composition of States' Expenditures 2008-2010						
	2008		2009		2010	
	Millions USD	% Total	Millions USD	% Total	Millions USD	% Total
Total Expenses	13,913	100%	15,378	100%	11,239	100%
Upper Management	2,505	18%	2,635	17%	893	8%
Defense	1,351	10%	1,564	10%	564	5%
Agriculture	99	1%	114	1%	42	0%
Oil, Mines and Energy	10	0%	6	0%	0	0%
Commerce and Industry	144	1%	121	1%	30	0%
Tourism	67	0%	72	0%	21	0%
Communications and Transport	355	3%	382	2%	139	1%
Education	2,155	15%	2,453	16%	933	8%
Culture	157	1%	163	1%	52	0%
Science and Technology	18	0%	21	0%	4	0%
Urban Development, Housing and	899	6%	1,356	9%	488	4%
Health	1,792	13%	1,510	10%	610	5%
Social Development	735	5%	843	5%	282	3%
Social Security	1,541	11%	2,051	13%	891	8%
Non-Classified Expenditures	2,084	15%	2,088	14%	669	6%
Source: ONAPRE.						

Social security, education, defense, social development, communications and transport, urban development and housing, and administration are the most important municipal expenditures. In 2010, total expenses reached 1.8 percent of GDP (see Table 8).

Table 8. Composition of Municipalities' Expenditures 2008-2010						
	2008		2009		2010	
	Millions USD	% Total	Millions USD	% Total	Millions USD	% Total
Total Expenses	5,003	100%	6,617	100%	4,262	100%
Upper Management	1,105	22%	1,514	23%	1,009	24%
Defense	143	3%	222	3%	250	6%
Agriculture	8	0%	8	0%	3	0%
Oil, Mines and Energy	9	0%	12	0%	7	0%
Commerce and Industry	15	0%	5	0%	2	0%
Tourism	33	1%	34	1%	26	1%
Communications and Transport	114	2%	103	2%	67	2%
Education	84	2%	115	2%	79	2%
Culture	41	1%	49	1%	46	1%
Science and Technology	2	0%	5	0%	2	0%
Urban Development, Housing	1,730	35%	2,128	32%	1,231	29%
Health	74	1%	131	2%	81	2%
Social Development	290	6%	287	4%	206	5%
Social Security	489	10%	941	14%	475	11%
Non-Classified Expenditures	864	17%	1,063	16%	778	18%
Source: ONAPRE.						

3. The Decentralization Process in Venezuela

Beginning with its first constitution in 1811, Venezuela adopted a federal system of government inspired by the United States' Constitution. However, during most of the nineteenth century the country was characterized by constant conflicts among regional leaders (*caudillos*), which eventually resulted in a process of centralization in order to consolidate a national state. For most of the first part of the twentieth century, several autocratic regimes, supported by the exploitation of newly discovered oil, ruled the country. It was only in the second part of the 20th century that democracy and its institutions started to develop, principally after the adoption of the 1961 constitution (Brewer-Carías, 2004).

The eventual exhaustion of the oil-revenues distribution model that had worked well since the end of the last military dictatorship in 1958, under the political pact known as The

Punto Fijo Pact (*El Pacto de Punto Fijo*),[5] made it vulnerable. The Pact experienced structural change on February 18, 1983,[6] when a massive devaluation brought about by declining oil revenues ended a long history of economic and political stability. Being unable to continue with the traditional mechanisms of oil-revenues distribution, the political institutions that functioned well under the *Punto Fijo* Pact collapsed, and mounting social pressures led to a revision of the structure of the state.

In 1985 a commission to reform the State was created (*Comisión para la Reforma del Estado*, known commonly as COPRE) including members of the major political parties and civil society institutions (unions, business and professional associations and NGOs). One of the principal conclusions of COPRE was that the legitimacy of democratic institutions was seriously impaired by the obsolescence of the oil-revenues distribution model, and that it was paramount to bridge the gap between citizens and the State by increasing the representativeness of democracy. To this end, COPRE proposed several measures: i) the direct election of state governors, who at the time were appointed by the President; ii) the creation of mayors as the highest authority at the municipal level; iii) separation between the legislative and executive branches of government at municipal councils; and iv) changing the electoral system to allow the direct election of congressional and council representatives.

These revolutionary proposals were enacted into law between 1989 and 1993 with considerable popular support and despite fierce opposition by the political establishment (De la Cruz, 2004). It is important to highlight that the initial strategy for decentralization was conceived in three gradual steps in the following order: political, administrative and fiscal (Lalander, 2006).

In 1989, the Decentralization Law and Transfer of Responsibilities (known as *Ley Orgánica de Descentralización* or LOD)[7]and the Municipal Law (known as *Ley Orgánica de Régimen Municipal*) were approved. They covered the main provisions for the distribution of responsibilities for public services delivery among the central government, the states and the municipalities. In general, these laws assigned to the central government those responsibilities

[5] "El Pacto de Punto Fijo" was a political pact between representatives of Venezuela's three main political parties in 1958: AD, COPEI and URD, for the acceptance of the 1958 presidential elections, and the preservation of democracy.

[6] This date is known in Venezuela's history as Black Friday.

[7] This law was formally known as *Ley Orgánica De Descentralización, Delimitación Y Transferencia De Competencias Del Poder Público*.

that were considered to have externalities (or considered "strategic" by the government), while states and municipalities were given the responsibility of delivering basic local services.

According to the LOD, to request that a concurrent service[8] such as education or health be transferred to a state, the governor first had to obtain the state's legislative approval, then the central government would transfer the service following approval by the senate. This process guaranteed that the transfers were thoroughly negotiated among key political actors. In fiscal terms, the LOD stipulated that, with each concurrent or exclusive service transferred to the states by the central government, the resources allocated in the national budget for that service would also be transferred to the states. However, there were no operational provisions for the calculations of these transfers, and they were very volatile because they depended on variable fiscal revenues.

The LOD also stated that the central government could propose, with prior approval of the senate, transfers of concurrent public service to the states. In the case of exclusive responsibilities, states could request them, with previous authorization by the states' legislative assemblies. One problem of these laws was that they did not specify clearly which parts of the services the different government levels should deliver. This led to confusion, asymmetries, and the need for constant negotiations among the central government, the states and the municipalities. However, the decentralization process took off. During the 1989-1993 period, the first term for newly elected governors and mayors, 12 services came under concurrent competency while states governments were granted eighteen exclusive competencies. By the end of 1992, negotiations were taking place to transfer from the central government 83 concurrent and thirty-two exclusive competencies (De la Cruz, 2004).

In 1993, in response to the shortcomings of the above-mentioned laws, several coordination mechanisms were created to facilitate the decentralization process. To coordinate public policies, the Territorial Council of Governments (*Consejo Territorial de Gobierno*) and the Council of Governments of Caracas (*Consejo de Gobierno del Area Metropolitana de Caracas*) were created. Also, an intergovernmental decentralization fund (FIDES) was formed with the participation of all levels of government to finance projects of mutual interest. This fund was mainly financed by a VAT co-sharing mechanism.

[8] Concurrent services are those that are provided by more than one level of government (i.e., central and municipal). Typical examples are health and education. In contrast, exclusive services are provided by only one level of government.

After 1994 the decentralization process experienced a slowdown. Rafael Caldera was elected president, supported by a myriad of small political parties. Caldera's government did not have a majority in Congress and little local representation, which resulted in the refusal of most requests for transfer of responsibilities from the central government to states and municipalities. In addition, transfers to the FIDES were reduced. During the presidency of Hugo Chávez, decentralization suffered further setbacks with a new Constitution, drafted by a national assembly and approved by popular vote in 1999. Although it maintained the notion of a federation made up of the republic (federal government), 23 states, a capital district, and 335 municipalities, contains several articles that curtailed the autonomy of states and municipalities.

The Constitution of 1999 abolished the Senate, suppressing the equal representation of the states in the legislature. In addition, the central government has the power to regulate public services provided by states and municipalities. Another important change was the power of the executive to shape local institutions such as legislative assemblies. Furthermore, several services that were previously decentralized such as the administration of ports, airports and highways, were recentralized. There are also pressures to recentralize services in the areas of health, education and security. These policies seem to give preference to a process of de-concentration directed from the central government, undermining the power of governors and mayors, and giving more responsibilities to other civil society organizations such as communal councils. (Delgado, 2008).

4. Transfers to Sub-national Governments

Transfers from the central government are the main source of financing of local governments in Venezuela. In 2010, budgeted [9] central government transfers totaled USD 7.550 million, equivalent to 20.3 percent of the official budget[10] and to 4.2 percent of GDP. Transfers are more important for states than for municipalities. States receive 81 percent of total transfers, while municipalities receive 19 percent, as shown in Table 9. While municipalities are the more

[9] Throughout this paper we use state and municipal income data from the National Budget Office (ONAPRE). This data refers to budgeted income accumulated by ONAPRE yearly from all states and municipalities. Actual income could differ from budgeted income for a given local government in a given year, but changes are usually small.

[10] We use the term "official budget" to refer to government expenditures included in the central government budget and additional credits, but excluding expenditures made through extra-budgetary investment funds. The amount of money and the investments made by these funds are not publicly available.

important legal entity in the Constitution,[11] states receive much greater contributions from the central government. However, as will be analyzed later, this is partly compensated by the fact that municipalities have the autonomy to collect taxes.[12]

Table 9. Transfers to Local Governments 2010			
Local Government	**States**	**Municipalities**	**Total**
Millions Bs.F.	26,256	6,208	32,464
Millions USD (official)	6,106	1,444	7,550
% Total Transfers	81%	19%	100%
% Official Budget	16.5%	3.9%	20.4%
% GDP	3.4%	0.8%	4.2%
Source: ONAPRE, Finance Ministry, Central Bank.			

A significant amount of transfers to sub-national governments can be expected in a country where half of the government revenues are generated by oil, and there are strong pressures to distribute those resources. However, the instability of oil prices, which makes central government revenues very volatile, also transmits a high degree of volatility to local governments' revenues. This section aims to describe transfers, as they are defined in Venezuelan legislation, and explores some of the implications of the transfer mechanisms, including the impact of volatility.

4.1 Fixed Transfers

Fixed transfers are established in amount and percentage in the Constitution and other pieces of legislation. There are basically two sources in Venezuela, the *Situado Constitucional* and the FCI.

4.1.1 Situado Constitucional

The *Situado Constitucional* is defined[13] as a maximum of 20 percent of ordinary revenues[14] included in the central government budget to be allocated to sub-national governments (SNGs).

[11] Article 17 of the Constitution guarantees municipal autonomy, while Article 16 defines states only as political divisions of the territory.
[12] Additionally to transfers to states and municipalities, in recent years the central government has transferred resources to communal councils to invest in community projects. However, there is no official data to allow us to measure the size of these contributions.
[13] Article 167 of the Constitution.

Of the total, 80 percent is assigned to states, while municipalities receive 20 percent. The *Situado Constitucional* is distributed among states and municipalities considering two criteria: equality and population. Of the 80 percent destined for states, 30 percent is divided equally among all 23 states, while the remaining 70 percent is divided according to states' population. Similarly, of the 20 percent destined for municipalities, 30 percent is divided in equal parts among all 335 municipalities, while the remaining 70 percent is divided on the basis of municipalities' population.[15]

In practice, there are almost no restrictions to how the *Situado Constitucional* is spent by SNGs. The Constitution stipulates that at least 50 percent of funds from the *Situado Constitucional* have to be spent on capital investment, but this is not enforced. The *Situado Constitucional* mainly finances current expenditures, mostly payroll, and is the most important source of financing for all states and for most municipalities. Since 1989 it has represented an average of 70 percent of state's revenues. Table 10 shows the average distribution of state and municipal transfers in 2010.

Table 10. Sub-National Government Transfers 2010

Transfer Concept	% of State Transfers	% of State Revenues	% of Municipal Transfers	% of Municipal Revenues
Situado Constitucional	70.8	64.6	63.0	22.9
LAEE[16]	6.6	6.0	15.3	5.6
FIDES[17]	9.5	8.7	20.3	7.4
Special Transfers	7.3	6.7	1.4	0.5
Health Decentralization Transfers	3.4	3.1	-	-
Grants and Other Transfers	2.5	2.3	-	-

Source: ONAPRE.

The *Situado Constitucional* is also a source of political frictions between the central and sub-national governments. Since it is calculated considering ordinary revenues in the national budget, the size of the budget is a very important determinant of the amount of resources to be

[14] Ordinary income excludes debt financing.
[15] Article 167 of the Constitution.
[16] Now part of the FCI.
[17] Now part of the FCI.

transferred. Since the Constitution does not specify clearly what to do with windfall revenues, the central government has consistently underestimated revenues in the budget, opening the window for the discretionary use of the extra resources. As can be expected, governments holding a parliamentary majority tend to have more leeway in this regard.

The main mechanism to underestimate fiscal revenues is to forecast oil prices well below market expectations. In this way, ordinary fiscal revenues are underestimated and therefore mandatory transfers are below what they would be otherwise. If oil prices are above what is forecast in the budget, which is the case most of the time, the central government receives a windfall. The extra resources have historically been used through additional credits that are incorporated into the budget. However, in recent years some revenues have not even been added to the budget, but gone straight to off-budget funds that are administered independently by the central government.[18] Most recently a law was approved stating that up to 95 percent of the extraordinary resources are to be transferred to the National Development Fund (FONDEN), the largest of these funds.[19]

4.1.2. Fondo de Compensación Interterritorial (Inter-territorial Compensation Fund

The FCI, a fund administered by the Federal Government Council (CFG),[20] is mainly intended to finance investment initiatives executed by SNGs. Although envisaged in the 1999 Constitution, this fund was only established in 2010 with the approval of a new Law of the Federal Government Council. The FCI was officially formed in 2011.

The fund is financed from two sources. First and foremost is the FIDES,[21] which receives 20 percent of the revenues generated by the Value Added Tax (IVA). Second is the LAEE, which distributes 5 percent of revenues generated from oil taxes among the few oil-producing states and municipalities (50 percent) and the many non-oil producing states and municipalities (50 percent).

[18] Rangel (2007) and Rachadel (2006) describe the creation of several such funds including the Social and Economic Development Fund (FONDESPA), the National Development Fund (FONDEN) and the PDVSA Social Fund.
[19] The Extraordinary Oil Price Contribution Law was promulgated in May 2011.
[20] *Consejo Federal de Gobierno* (CFG): a regional council chaired by the country's Vice-president that includes all Governors and some representatives of Mayors. It was created in the 1999 Constitution to plan and coordinate regional policies.
[21] FIDES was created in 1993 to secure political support for the creation of a Value Added Tax (IVA). All of its resources were to be spent on capital investment.

In 2011, the CFG decided to distribute the FCI funds in the following manner: 35 percent for communal councils (*consejos comunales*), 37 percent for states and 28 percent for municipalities. The 65 percent for states and municipalities is distributed considering population and a relative development index (IDR) that takes into account poverty, human development, and income per capita. Historically, FIDES and LAEE have represented close to 15 percent of total revenues for states (see Table 10); however, as the FCI started distributing 35 percent of its revenues to communal councils, this share is expected to decrease.

In order to receive resources from these funds, states, municipalities and communal councils are required to present projects for approval to the CFG. Through this mechanism, the CFG aims to guarantee that all projects are aligned with the national plan of the central government, and that they have clear and measurable objectives. Complying with these requirements is generally difficult for smaller municipalities and communal councils with weak institutional capacity.

4.2. Discretionary Transfers

Discretionary transfers are assigned by the central government to SNGs without a specific legal mandate. Rather, these transfers come from agreements between ministries and SNGs to create or expand national public policies with the support of SNGs.

Because of their nature, these transfers are evidently influenced by political dynamics. Anecdotally, it is known that the government favors elected officials from its own party, working with them to execute national programs and invest in marquee national projects in their territories. However, the fact that most of these transfers are not planned in advance for them to be included into SNGs budgets (but are later included as additional credits), make it difficult to prove this statistically.

4.2.1. Transfers to Support National Plans

These are transfers for national programs sometimes administered through local governments. For example, in recent years some local governments have directly administered social programs such as *Misión Barrio Adentro*.[22] These transfers are usually recurrent for the duration of the program.

[22] *Misión Barrio Adentro* is a national primary health program that built small dispensaries in the heart of the poorest communities.

4.2.2. Transfers to Support Decentralized Concurrent Services

These are transfers to help support services decentralized by the central government to states and municipalities. The most common examples are transfers from the health and education ministries to help funding hospitals and schools that were previously decentralized to states. These are commonly recurrent.

4.2.3. Transfers to Help Finance Projects of National Interest

These are transfers to partially or completely finance local projects that are considered by the central government to have regional or national importance. These are typically large infrastructure projects such as highways, local roads, hospitals, and aqueducts. Transfers for these projects are not recurrent.

The size of these transfers have varied through the years depending on different strategies and programs that the central government has adopted and implemented, but on average they have represented up to 10 percent of total budgeted revenues of states.

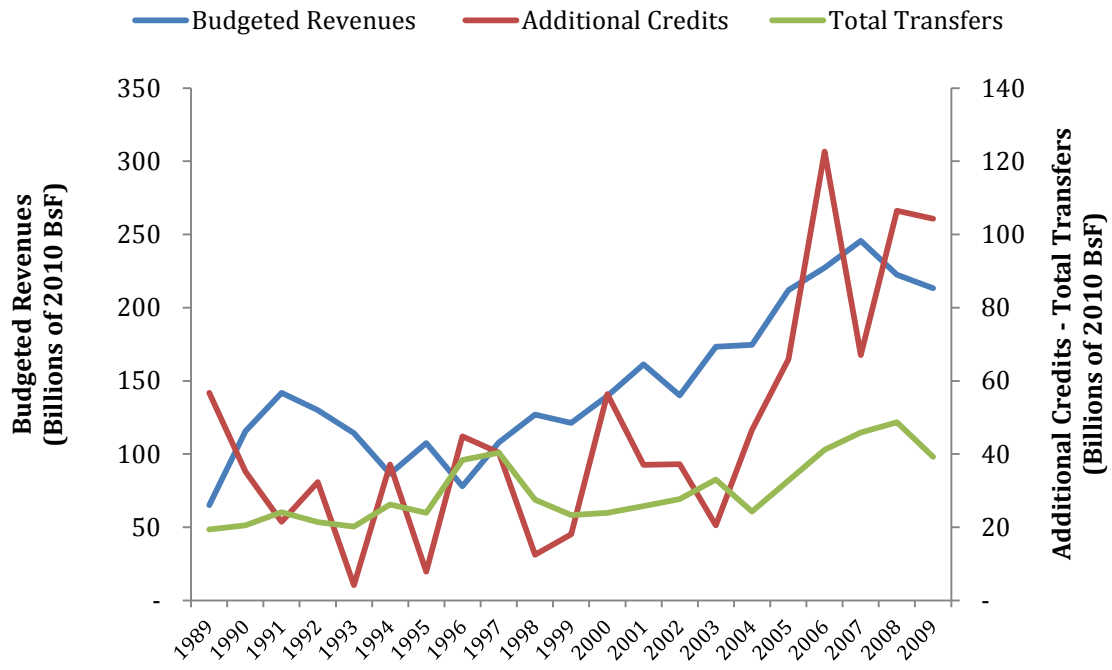
4.3. Volatility of Transfers

As mentioned before, one of the defining characteristics of the Venezuelan central government's fiscal management is its volatility, a consequence of its dependence on oil production and prices. In this sub-section we explore how this volatility is transferred to SNGs.

Analysing the volatility of SNGs is important because, as in the central government case, it affects both the type and the quality of the provision of local public goods and services. The uncertainty and volatility of revenues usually lead to lower levels of capital investment and fewer long-term sustainable projects.

The volatility of the central government`s revenue can be seen in Figure 3. Budgeted revenues have increased substantially in the period of study, with great variability (they have a coefficient of variation of 35 percent). However, what really affects the volatility of national expenditures are *Créditos Adicionales*, essentially additional expenditures approved during the year by the national assembly due to higher-than-expected oil prices. The *Créditos Adicionales* increase the coefficient of variation of total expenditures to 0.39.

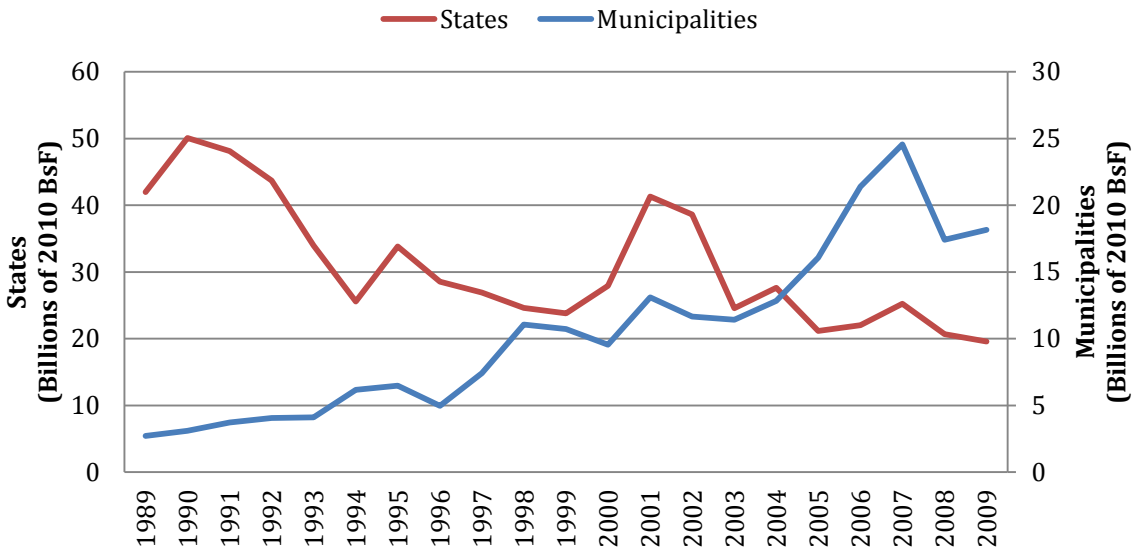
Figure 3. Transfers to Local Governments and National Budgeted Revenues (Billions of 2010 BsF)



Source: ONAPRE.

Moreover, transfers to local governments are positively correlated with the national budget (0.77 correlation coefficient), therefore the volatility is transferred to local governments. Figure 4 shows state and municipal real revenues since 1989. As can be seen, states' real revenues has varied considerably in the period, initially decreasing by 53 percent from 1990 to 1999, briefly increasing by 73 percent during 2000 and 2001, and declining again in 2010 to less than half the 1989 values.

Figure 4. States and Municipalities' Revenues 1989-2010 (Billions of 2010 BsF)

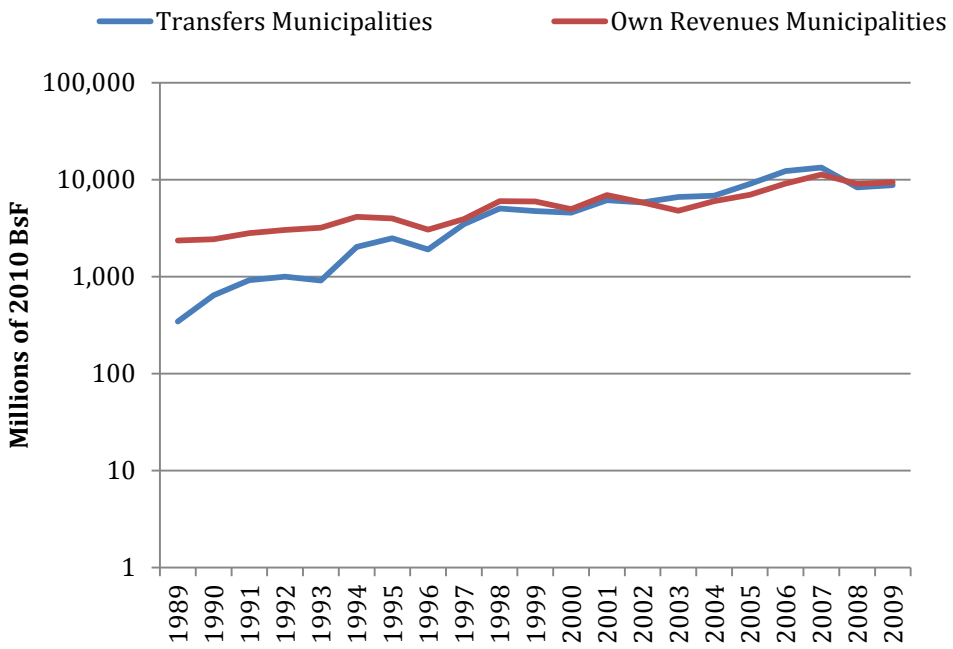


Source: ONAPRE.

Figure 4 shows that municipalities' revenues are more volatile than states' revenues. From 1989 to 2008 there was a sustained increase in revenues, until it fell quickly back to 2005 levels in the period 2009-2010. Transfers from the central government and own revenues caused variability in municipalities' revenues. As can be seen in Figure 5, which presents transfers and municipal own-revenues on a logarithmic scale, the greatest source of volatility are transfers (coefficient of variation of 76 percent), although own income is also quite volatile (coefficient of variation of 47 percent). They are both much more volatile than transfers to states.

This could be explained by an analysis of the transfers' two components: mandatory and non-mandatory transfers. The mandatory or "legal" transfers, until recently, were first transferred to the states and then redirected to municipalities. This additional administrative process caused lags and inefficiencies, making "legal" transfers to municipalities much more volatile than those to states. Furthermore, municipalities do not receive as many discretionary transfers as states do, such as support for decentralized concurrent services. Therefore non-mandatory transfers are also much more volatile.

Figure 5. Transfers and Municipal Own Revenues (Millions of 2010 BsF)



Source: ONAPRE and authors' calculations.

In sum, as expected, the volatility of central government revenues has been transferred to local governments. However, two other features of local revenues volatility are worth noting: i) municipal own revenues have also been quite volatile, and ii) transfers to municipalities have been more volatile than transfers to states. This latter issue, and the fact that the correlation between the national budget and transfers is not perfect, are consequences of the government's discretion in being able to underestimate the national budget's revenues.

5. Local Government Own Revenues

Own-revenues are the other source of revenue for SNGs. Own-revenues represent a small proportion of total revenues for all states and most municipalities, but they are very important for the top third of municipalities that collect considerable taxes. Table 11 shows that total sub-national own revenues amounted to 1.7 percent of GDP in 2010, equivalent to 8 percent of central government budgeted revenues.

Table 11. Own Revenues by Local Government Entity 2010			
Local Government	**States**	**Municipalities**	**Total**
MM Bs.F.	1,188	11,621	12,809
MM USD (official)	276	2,702	2,978
% Own Revenue	9.0%	91.0%	100%
% Official Budget	0.8%	7.3%	8.0%
% GDP	0.2%	1.5%	1.7%
Source: ONAPRE, Finance Ministry, Central Bank.			

Own revenues in Venezuela come mainly from three sources: service fees, taxes on land, property and economic activities, and return on investments. These concepts are defined in general terms in the Constitution[23] but further developed and detailed in national laws or local ordinances.

As shown in Table 12, in general, the most important of these own revenues are taxes, followed by fees. In the case of municipalities, taxes represent 51.5 percent of revenues, a significant amount, as they are able to tax economic activities and property. For states, fees remain the most important type (excluding treasury reserves) of their negligible own revenues.

Table 12. Importance of Own Revenue by Type 2010				
Own-Revenues Concept	**% of State Own-Revenues**	**% of State Revenues**	**% of Municipal Own-Revenues**	**% of Municipal Revenues**
Taxes	6.0%	0.3%	78.9%	51.5%
Fees	29.6%	1.3%	4.8%	3.2%
Sale of Goods and Services	3.3%	0.1%	0.7%	0.5%
Property Income	12.7%	0.6%	1.6%	1.0%
Others	48.4%	2.1%	9.9%	6.5%
Source: ONAPRE.				

In this section we will describe each of these categories, analyze them in light of the literature, and examine the efficiency with which they are collected and their potential for improvement.

[23] Articles 167 and 179.

5.1. Taxes

The 1999 Constitution reserves for the central government all taxes on incomes, leaving for SNGs taxes on assets and economic activities. Municipalities have the authority to collect several types of taxes, the most important of which are taxes on economic activities, land and property. On the other hand, states have constitutionally broader possibilities to collect taxes, but this depends on the approval of individual national laws to collect each specific tax. However, for more than 20 years no national laws have been passed to allow states to tax additional activities, and the only law that currently exists allows states to tax mines of non-metallic non-precious minerals.[24] Therefore, states collect very little tax.

Table 13 presents the importance of different taxes for Miranda state and Sucre municipality.[25] As can be seen, municipal taxes on economic activities by far surpass all others, with taxes on land and property coming in a distant second.

Table 13. Tax Concepts for Miranda State and Sucre Municipality 2010

Own Revenue Concept	% of Miranda State Taxes	% of Miranda State Revenues	% of Sucre Municipal Taxes	% of Sucre Municipal Revenues
Economic activities	-	-	96.2%	60.1%
Vehicles	-	-	0.2%	0.1%
Public Entertainment	-	-	0.5%	0.3%
Lawful Betting and Gaming	-	-	0.0%	0.0%
Commercial advertising	-	-	0.8%	0.5%
Increased property values generated by changes in use or intensity of exploitation	-	-	-	-
Land and property	-	-	2.3%	1.4%
Exploitation of non-metallic minerals	100%	0.7%	-	-

Source: Miranda state 2010 budget, Sucre municipality 2010 budget.

[24] These include marble, sand, slate, clay and limestone.

[25] We present Sucre and Miranda as examples because data from ONAPRE that cover all states and municipalities are not detailed enough. Taxes are mostly homogenous between states, making Miranda a good representation. However, tax collection is heterogeneous across municipalities. Sucre represents municipalities in the upper echelon of tax collection.

Current legal conditions make the political economy associated with increasing tax revenues different for states and municipalities. States need specific national laws to assign them new tax bases. Thus, they first need to get support at the national level from the central government and the national assembly, which requires broader alliances of governors and their parties. Then, they must negotiate rates and other details within their respective regional legislative councils. On the other hand, municipalities have ample and captive tax bases, and they can increase tax revenues both by boosting their collection efficiency and by increasing tax rates and other features. Only the latter need to be negotiated with local councils.

Finally, it is important to note that these taxes have advantages and disadvantages, on the basis of their characteristics (Table 14). In general, the most important taxes collected by SNGs fall into the category of Turnover Taxes (TT). Taxes of this type of taxes have good revenue potential but tend to be very unevenly distributed and sensitive to the economic cycle.

Table 14. Characteristics of Sub-National Taxes

	Revenue Potential	Mobility of Tax Base	Potential Efficiency Costs	Sensitivity to Cycle	Even Distribution of Tax Base	Costs of Administration	Compliance Costs
CIT	M	H	H	H	L	H	M/H
Excises	M	M	M/H	M	L	M	L
Property Taxes	M	L	L	L	L/M	H	M
Royalties	H	L	L	H	L	M/H	M
Turnover Tax	H	M	M/H	M	L	M	M
User Fees	M	L/M	L	L	M	M	M

H: High M: Medium L: Low
Source: Authors' compilation based on IDB (2011).

5.1.1. Municipal Taxes

Economic Activities in Industry, Commerce, Services, or Similar (Turnover Tax). These are taxes on production of goods and services by private firms located in a given municipality. They are calculated on the basis of the total revenues a firm receives from selling goods or services produced in the municipality. Different products usually have different rates, which are specified in the municipal ordinance. It is important to notice that these taxes are levied on both final and intermediate goods, which causes cascading effects that reduce efficiency.

This is the most important tax collected by municipalities because it has a large tax base, particularly in urban areas, and it is relatively simple to collect. Enforcement is reasonably

effective because: i) businesses are fairly easy to locate; ii) they could be closed down for failing to comply (with their consequent economic losses); and iii) there are comparatively fewer taxpayers to tax (than property owners, for example). Additionally, larger firms have high mobility costs, particularly in industry, which tends to make the tax base less volatile.

A disadvantage of the tax on economic activities for municipalities is its positive correlation with, and relatively high sensitivity to, the economic cycle. A further major disadvantage is the very uneven distribution of its base. Also, the relative impact that one large company can have on municipal revenues can lead municipalities to compete for lower taxes, particularly in cities that have several municipalities, such as Caracas and Valencia.

Land and Property (Property Tax). These are taxes on land and property ownership located in the municipality, calculated on the basis of size, location and land and property use. Municipalities have exclusive responsibility for the cadastre, the basic source of this information.

Unlike in most advanced countries, in the case of Venezuela—as in other developing countries—this tax is not a very important source of revenues for municipalities. This is due to several factors: i) high administration costs, ii) limited enforcement mechanisms, and iii) lack of tax payment culture. The number of taxpayers is significantly larger than for taxes on economic activities, and each one pays relatively small amounts. Moreover, it is not legally possible to evict taxpayers from their homes if they do not comply with their tax obligations. All this combines to create a challenging environment in which to collect, and a tradition of paying only when selling the property.

The greatest advantage of this tax is its low sensitivity to the economic cycle and the low mobility of its tax base. Also, because of the size of its tax base and the enormous prevailing evasion, [26] this tax probably has the greatest potential for increasing revenues for the municipalities. However, large investments are needed to improve the cadastre and to keep it up to date. Moreover, this tax, being very visible to taxpayers and collected once a year, is more unpopular than the one on industrial and commercial activities

Vehicles (Property Tax). Taxes on vehicles are defined as annual levies on the ownership of a car. This tax is generally related to the type of car and its age, according to local

[26] Chacao municipality, probably the country's most institutionally advanced, estimates the extent of land and property tax evasion at greater than 80 percent.

ordinances. Municipalities have exclusive control over this tax base, assigned to them by the Constitution.

This is another greatly underexploited tax for Venezuelan municipalities, with rampant evasion. Reasons for this include the same as land and property tax (high administration costs, limited enforcement mechanisms and lack of a tax culture) plus a vague legal framework for establishing exactly which municipality is responsible for the collection. For example, in a city such as Caracas, with five municipalities, taxpayers could choose to pay taxes where they live, where they bought the car, where they work, or where they spend most of their time. Once again, there is a culture of paying only when cars are sold.

While these taxes have comparatively a much lower revenue potential than land and property, they are not negligible.

Lawful Betting and Gaming (Excise Taxes). These are taxes on gambling. Tax rates are typically very high, and dependent on the size of the gaming parlor. The advantages of these taxes are low administration costs, and high compliance rates. Legal gaming parlors are usually highly visible and public. However, the taxable base has remained relatively low because lawful betting has been allowed and prohibited on and off through recent years, and the sector is underdeveloped. Currently, several forms of lawful gaming, such as casinos, are prohibited by a national decree. Another advantage is the relatively low political cost of implementation and the possibility of using them to tackle gambling as a public health issue.

One disadvantage is that taxes on lawful betting and gaming are unevenly distributed between municipalities. The greatest potential lies in municipalities in touristic areas (principally free ports) where there is an established industry.

Commercial Advertising (Excise Taxes). These are taxes on permanent or temporary advertising in the municipality. They are generally related to the size and the time the advertisement is shown.

The greatest advantage of this tax is that by definition advertisement should be easy to locate and tax, particularly permanent advertisement. However, administration costs are high, especially for non-permanent advertisement. This tax does not have a sizable tax base, and it tends to be more important in urban centers.

Increased Property Values Generated by Changes in Use or Intensity of Exploitation (Betterment Levies). These are taxes paid by owners whose property value has increased as a result of public investments in nearby areas. These taxes are rarely collected because the process of proving the increase in property value is difficult and cumbersome. They have a somewhat small base, but considering the legal restriction on issuing public debt, they represent an alternative for financing urban investment projects.

Public Entertainment. These are taxes on entertainment events occurring in the municipality. They are calculated on a per-attendee basis. They do not represent a substantial tax base. As in advertisement, their greatest advantage is that events are usually well publicized and easy to identify. These taxes are important in municipalities with large sporting arenas and conference centers, generally in larger cities or touristic destinations.

5.1.2. State Taxes

The only notable taxes under state control are royalties on the mining of non-metallic and non-precious minerals such as marble, sand, slate, clay and limestone. They do not represent a large tax base, but it is the only one states are legally assigned. The biggest advantage of this tax is the very low mobility of the tax base. Disadvantages include high sensitivity to the economic cycle and a very uneven distribution of the tax base among states.

5.2. Fees

Fees are collected for services delivered by SNGs. The types of fees collected will depend on the particular characteristics of SNGs and the services they deliver. Amounts for fees will vary among SNGs and depend on local legislation.

Table 15 contains the most important fees collected by SNGs, and their relative importance. They are shown for a sample of one state (Carabobo) and one municipality (Chacao). It shows that municipalities can collect fees on several more bases than states, given their broader set of competencies. For instance, municipalities have the responsibility of providing several public services such as waste collection and water management, allowing them to receive fees for these activities. A relatively important source of fee revenues for municipalities is the issuing of construction permits for urban development. On the other hand, states depend mostly on stamped paper, as tolls and port and airport fees have been restricted in recent years.

Table 15. Main Fees Collected by Carabobo State and Chacao Municipality				
Own-Revenue Concept	**% of Carabobo Fees, 2010**	**% of Carabobo Revenues, 2010**	**% of Chacao Fees, 2009**	**% of Chacao Revenue, 2009**
Parking Fees	-	-	2.8%	-
Document Copies	-	-	10.2%	-
Municipal Permits for Construction	-	-	41.6%	-
Certifications and Clearances	-	-	14.8%	-
Trash Collection	-	-	11.3%	-
Municipal Market	-	-	16.5%	-
Other Fees	50.6%	0.8%	2.9%	-
Port and Airport Fees	9.4%	0.1%	-	-
Tolls	0.0%	0.0%	-	-
Stamped Paper and Stamps	40.0%	0.6%	-	-
Fines and Surcharges	0.0%	0.0%	-	-
Fines and Penalties	0.0%	0.0%	-	-
Source: ONAPRE and Informe de Gestión Anual, Municipio Chacao.				

5.2.1. Copies and Certifications

Fees are collected for registering official documents, issuing copies of them, and selling stamped paper and stamps. For municipalities this is not a negligible source of revenues because they have responsibilities over the official cadastre, engineering, municipal tax collection and the civil registrar. States issue stamps and stamped paper.

5.2.2. Traffic Fees

These include road tolls and parking fees. Parking fees are uncommon, and not a large source of revenues since the government imposed price controls on public parking. Tolls, on the other hand, were common and significant for states until 2008 when a decree prohibited charging tolls altogether.

5.2.3. Ports and Airport Fees

These are fees for the use of ports and airports. They were very important for several states, mainly in the north of the country. However, a 2008 decree centralized the management of

public ports and airports, transferring their administration and revenues to the Ministry of Infrastructure.

5.2.4. Public Services Fees

These are fees for public services provided by SNGs. Few public services are actually provided by municipalities, and them by states (aside from education, health and police). The most important municipal service provided is waste collection and disposal. This service was delivered through private concessions in the 1990s, but has come to be increasingly provided directly by municipalities as the price for the service was frozen by decree in 2002. Very few municipalities also deliver water to parts of their territories and collect user fees. Most water, natural gas and electricity services are provided directly by the central government.

5.2.5. Construction and Development Fees

This is an important source of revenues for municipalities. These are fees paid by private real estate companies to construct on land suitable for development. Usually they depend on the value of the land being developed, and are significant in urban centres.

5.2.6. Fines and Penalties

These include charges for violations of tax responsibilities or local regulations on traffic, construction, and public services among others. They are more common for municipalities than for states.

5.2.7. Other Fees

Other fees include but are not necessarily restricted to those on the use of public spaces (squares, parks, or streets).

5.3. Sale of Goods and Services

Sales of goods and services are uncommon, but significant when they occur. In general, they are related to the sale of local government owned lands and/or buildings for private development. Sometimes they are *"egidos"* or empty municipal lots that must be allocated to municipalities when new areas are developed. They could also consist of buildings that go unused. All sales of this type need approval from the legislature. Sales of services are rare.

5.4. Property Revenues

These are revenues that results from owning assets. The two most common cases are interest payments on bank deposits, and rent on municipal property.

5.5. Other Sources

One common resource is the use of treasury reserves. They are essentially resources that were not spent in previous fiscal years that can be incorporated into the new budget. Reserves can be significant, and they depend on a local government's ability to successfully implement a given budget. With regards to debt, while constitutionally legal, it is practically not allowed for SNGs, as any private or public, foreign or domestic debt issuance needs approval by the central government and the national assembly. However, local governments do borrow from suppliers (floating debt) and even sometimes from employees (by withholding the payment of benefits).

5.6. Own-Revenue Efficiency

As mentioned before, municipal revenues present a very significant horizontal imbalance: there are municipalities that collect almost 90 percent of their total revenues, whereas others do not collect own revenues at all. In order to better understand the reasons for such large disparities, we used a stochastic frontier model adapting the stochastic frontier production function proposed by Battese and Coelli (1992).

Due to the lack of data at the municipal level it is not possible to estimate a panel model; instead cross-section regressions for 2001 were used. The year 2001 is chosen because the last Venezuelan census was carried out that year, and there are household income data available at the municipal level.

We follow a macroeconomic approach methodology to assess the revenue collection ability of municipal governments as described in Yilmaz (2009), where only one aggregate variable is used as a proxy for the tax base, in this case household income data from the 2001 census. We estimated a stochastic frontier production function for 2001 using municipalities own revenues in nominal terms as the dependent variable; and the sum of all households' income of each municipality and a dummy variable for oil-producing municipalities as the independent variables:

$$Y_i = \beta_0 + X_i\beta_1 + D_i\beta_2 + (V_i - U_i)$$

where: Y_i = Own revenue collection in year t for municipality I; X_i = Total household income in municipality i; D_i = Oil producer dummy variable; V_i= random variables assumed to be iid N(0, σ_v^2), and independent; and Ui are non-negative random variables which are assumed to account for technical inefficiency in production to be iid as truncations at zero of the N(μ,σ_U^2) distribution. We utilize the parameterization of Battese and Corra (1977) who replace σ_V^2 and σ_U^2 with $\sigma^2=\sigma_V^2+\sigma_U^2$ and $\gamma=\sigma_U^2/(\sigma_V^2+\sigma_U^2)$. This is done with the calculation of the maximum likelihood estimates in mind.

We followed a three-step procedure for estimating the maximum likelihood estimates of the parameters of the stochastic frontier for revenue collection. The three steps were the following:

1. Ordinary Least Squares (OLS) estimates of the function were obtained. All estimators, with the exception of the intercept, are unbiased.
2. A two-phase grid search of γ was conducted, with the β parameters (with the exception of β_0) set to the OLS values and the β_0 and σ^2 parameters adjusted according to the corrected ordinary least squares formula presented in Coelli (1995).
3. The values selected in the grid search were used as starting values in an iterative procedure (using the Davidon-Fletcher-Powell Quasi-Newton method) to obtain the final maximum likelihood estimates. For more information refer to Himmelblau (1972).

Results of the estimations are presented in Tables 16, 17 and 18.

Table 16. OLS Estimates

	Coefficient	Standard-error	t-ratio
Constant	-8.3	1.7	-5.0
Household income	1.4	0.2	7.7
Oil dummy	0.4	0.3	1.2
Sigma-squared	4.2		

Source: Authors' calculations.

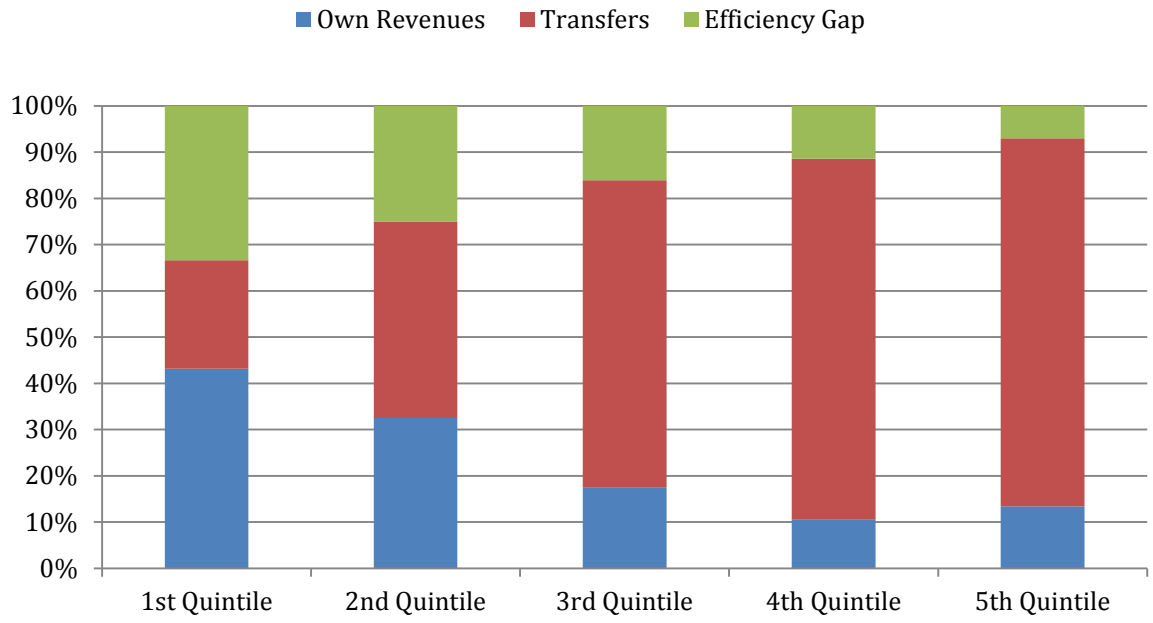
Table 17. Grid Search Estimates	
	Coefficient
Constant	-5.8
Household income	1.4
Oil dummy	0.4
Sigma-squared	10.6
Gamma	0.95
Source: Authors' calculations.	

Table 18. Final MLE Estimates			
	Coefficient	**Standard-error**	**t-ratio**
Constant	-3.1	0.8	-3.7
Household income	1.0	0.1	11.8
Oil dummy	0.4	0.2	2.3
Sigma-squared	7.8	0.6	12.3
Gamma	0.99	0.0	272.0
Source: Authors' calculations.			

After the revenue collection frontier was calculated for each municipality we compared the observed value with the frontier value and expressed in percentage the efficiency achieved, where 100 percent efficiency occurs when the observed and frontier value are equal.

The oil dummy coefficient found by the regressions is positive which means that being an oil-producing municipality increases actual and potential revenues. We also found a very weak positive correlation of 0.16 between the tax bases and the efficiency calculated for their respective municipalities. This suggests that municipalities where there exists a large tax base are generally more efficient. To analyze the results, we classified municipalities by total revenues, from high to low, in quintiles. We considered two ways to measure the effects that improvements in efficiency could bring about. The first is the effect on total revenues. Clearly, achieving 100 percent efficiency in small municipalities would not have a large impact on total revenues because it would increase total revenues of the fifth quintile by only 16 percent, while the estimated impact of a similar achievement in the first quintile would be over 47 percent. However, if we analyze the impact on own revenue sources we estimate an increase of 240 percent for the fifth quintile and 73 percent for the first. These results are presented in Figure 6.

Figure 6. Municipalities' Revenue Composition (High to Low)



Source: INE, ONAPRE, authors' calculations.

An analysis of the per-capita sources of revenues reveals that transfers reduce revenue disparities across municipalities by reducing the coefficient of variation from 2.41 to 1.05 in 2001. However, there is room for improvement. For example if municipalities could achieve 100 percent efficiency in own revenue collection, the coefficient of variation could instead decline to 0.93.

Finally, the efficient frontier can give us some insight regarding the transfers made by the central government. We found that there is a negative relationship between own revenues per capita and transfers per capita, and that the relation is even stronger if we use the revenue collection at 100 percent efficiency; the value of the correlation, however, is relatively small (see Table 19).

Table 19. Correlations between Transfers and Own Revenues		
	Transfers vs. Own revenues	**Transfers vs. Frontier**
1st Quintile 2001	-0.18	-0.22
5th Quintile 2001	-0.58	-0.6
2001	-0.3	-0.34
Source: Authors' calculations.		

Furthermore, achieving 100 percent efficiency would generate sufficient additional resources that slightly surpass the amount transferred by the central government, either relieving some of the weight of redistribution mechanisms on the central government, or increasing municipalities' total revenues for provision of public services. The distribution of these additional resources should depend on which level of government could use them more efficiently (see Table 20).

Table 20. General Government Structure with Municipalities Operating at 100% Efficiency (USD Billion)			
	2001	**% Total**	**% GDP**
2001 Level of efficiency			
Public Sector	27.18	100%	22%
Central Government	25.55	94%	21%
States	0.25	1%	0%
Municipalities	1.38	5%	1%
Municipalities operating at 100% efficiency			
Public Sector	28.39	100%	23%
Central Government	25.55	90%	21%
States	0.25	1%	0%
Municipalities	2.59	9%	2%
After transfers	**Assuming that municipalities' transfers remain constant**		
Central Government	18.51	65%	15%
States	6.07	21%	5%
Municipalities	3.81	13%	3%
After transfers	**Assuming that municipalities' revenues after transfers do not change; and the reduction on transfers remains under central government control**		
Central Government	19.72	69%	16%
States	6.07	21%	5%
Municipalities	2.60	9%	2%
Source: ONAPRE and authors' calculations.			

In summary, the estimated stochastic frontier of revenue collection and its comparison with the observed values strongly suggests that there is room for improvement without introducing new revenue sources, judging by the approximately 40 percent average efficiency in revenue collection. If municipalities were able to increase their efficiency in revenue collection, the horizontal imbalance and fiscal dependence across municipalities could greatly improve.

6. Fiscal Dependence of Local Governments

The previous two sections explained the different sources of revenue that Venezuelan local governments receive, including those transferred from the central government and those collected as own-revenues. Raising own revenues is important for local governments because it gives them a degree of budgetary independence. Those revenues are also important for the central government because they reduce the pressure to transfer their scarce resources to local governments. However, from a political economy standpoint the central government may have incentives to use the transfer mechanisms as a political leverage tool to control sub-national governments. This section quantifies the important difference between transfers and own revenues, using the concept of Fiscal Dependence (FD), and attempts to determine the variables that explain a local government's FD.

We define FD as the share of revenues received by a local government from the central government (transfers) to its total revenues. In this sense, FD has to be a number between 1 and 0, where the higher the number, the greater the dependence of the local government on transfers. A government with a FD of 1 will receive all its revenues through transfers, while a FD of 0 means the local government raises them all. In order to determine the FD, we obtained data on revenues by type for the period 1989-2010 from the central government's budget office (ONAPRE), which depends from the Ministry of Finance. These data are collected yearly by ONAPRE from the official budgets approved by every state and municipality and published in statistical yearbooks.[27]

[27] Using data from budgets has the problem of not necessarily being exactly what happened at the end of the fiscal year, but it is what is available. The closing numbers have to be published by local governments in final reports (*Informes de Gestion Annual)*, but they are not required to be sent to ONAPRE. However, differences are not expected to over or underestimate any concept consistently, and they probably even out over time. Another potential problem is the presence of autonomous institutes and foundations ascribed to states and municipalities that collect fees on their own but are not added to these figures. They were created to serve specific purposes and to have more autonomy to manage the money they collect.

Revenue data in Venezuela (as well as expenditure data) are easily aggregated because there is a standardized budget classifier authored by ONAPRE that defines a code, standard name and full description for every source of revenues contained in Venezuelan budget laws. It is required by law to follow this classification, or face sanctions. These data for states and municipalities are detailed by type of tax, source, name and other characteristics. However, since FD only requires two groups, own revenues and transfers, we classify all concepts into these two groups. Table 21 shows all the types of revenue that fall into each group for both levels of government.

Table 21. Types of Income and Classification, States and Municipalities

Local Government	Transfers	Own Revenues
States	*Situado Constitucional* LAEE FIDES Capital Subsidy Special Regime Subsidy Transfers to States for Service Transfers Transfers for Health Decentralization Transfers for Education Decentralization	Sale of stamped paper and stamps Property Tax Concessions of Goods and Services Interest from financial assets Other revenues
Municipalities	*Situado Constitucional* LAEE FIDES Special Transfers	Indirect Taxes Non-tax revenues Diverse revenues Sale of goods and services Revenues on property Sale of Assets Others

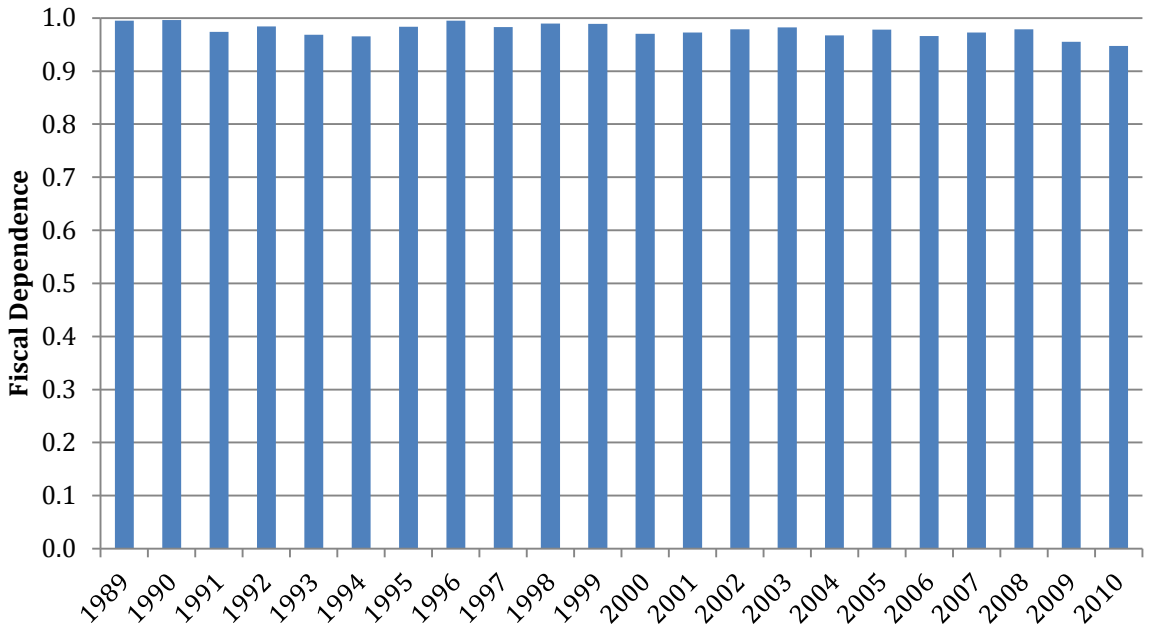
Source: Authors' classification based on ONAPRE data.

The basic results of the calculation of the FD are that 1) it is very large for the average local government in Venezuela, and 2) it differs greatly among states and municipalities (especially within municipalities). The rest of this section will discuss this in more detail.

6.1. States' Fiscal Dependence

As was described above, the largest sources of revenue for states is the *Situado Constitucional* and the *Fondo de Compensacion Interterritorial*, both transfers, which leads to large average FD. The average FD for a Venezuelan state for the whole period of study (1989-2010) is 0.98. This fact is as true now as it has been since the beginning of decentralization. As can be seen in Figure 7, the average FD has not varied much during the entire period, always being close to 1. The largest FD registered was 0.99 in 1990, while the lowest FD was 0.91 in 2010.

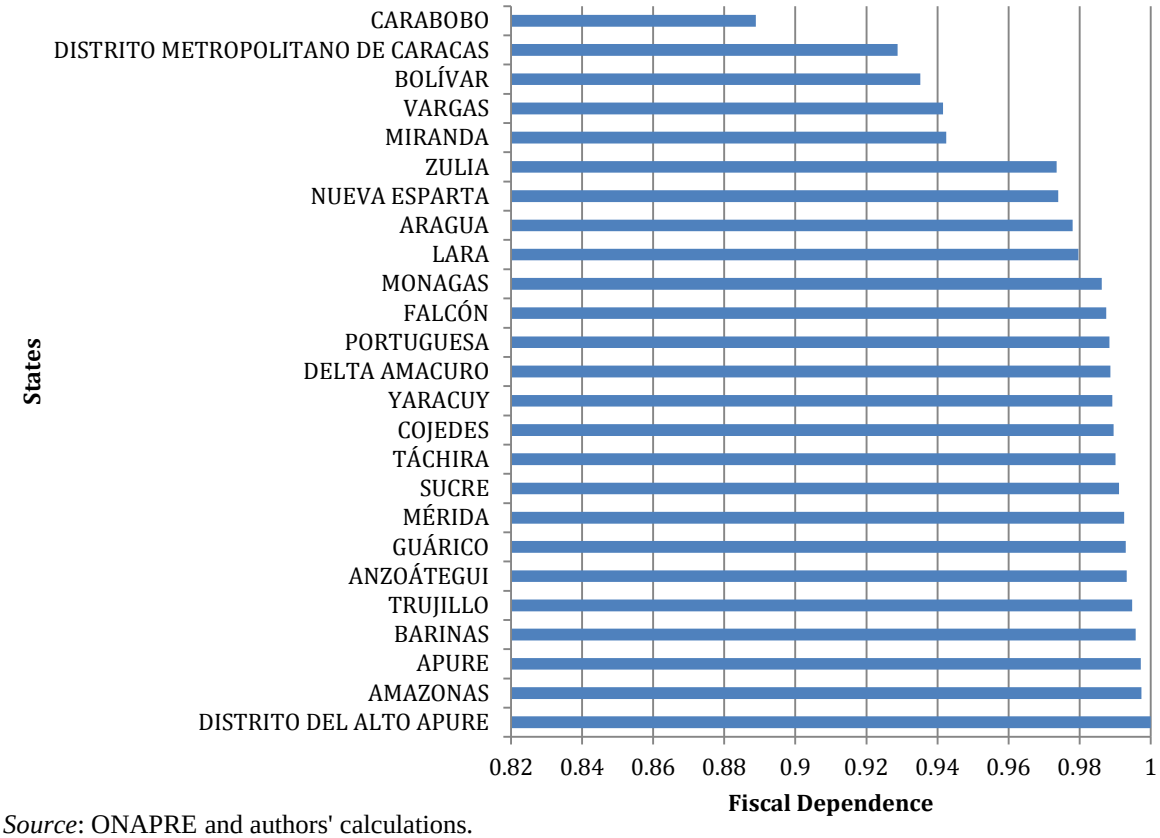
Figure 7. Unweighted Average FD for Venezuelan States (1989-2010)



Source: ONAPRE and authors' calculations.

States' limited capacity to tax also reduces the dispersion of the FD between them. Since most of their revenues are defined by transfer rules based on population, there are few ways for governments in economically active states to take advantage of their large potential tax bases and separate themselves from the rest. All states have an average FD between 0.99 (Amazonas) and 0.89 (Carabobo) for the whole period, and no state in any year has a lower FD than 0.85. Figure 8 shows states ordered by their average FD for the period 1989-2010.

Figure 8. States' Average Fiscal Dependence (1989-2010)

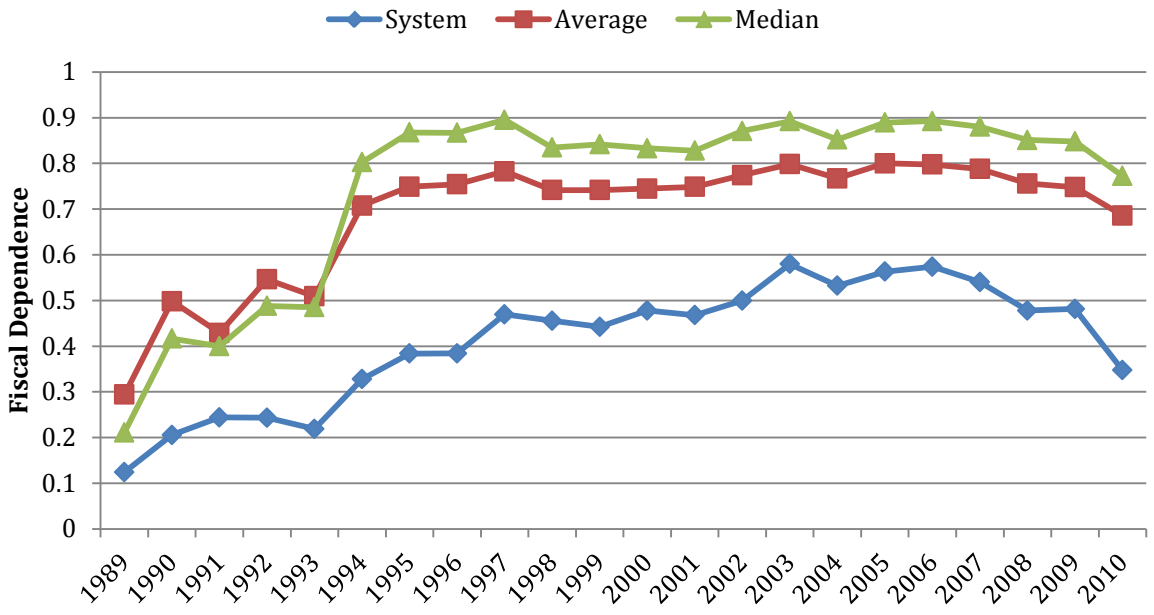


Source: ONAPRE and authors' calculations.

6.2. Municipalities' Fiscal Dependence

In addition to transfers, municipalities have several other important sources of revenues, including municipal taxes and service fees. This difference explains why municipalities have a lower FD than states, for the study period. The average FD for a municipality is 0.76, 0.22 points lower than states. What is interesting though is the much greater variance that this measure has shown both in time and across municipalities. First, the average municipal FD changed from 0.5 in 1990, up to 0.8 in 2006, and down again to 0.69 in 2010. As explained before, this has to do both with volatility in transfers and the revenues buffer represented by own-revenues generation. Average municipal FD for the whole period can be observed in Figure 9.

Figure 9. Municipalities' Average, Median and System FD (1989-2010)



Source: ONAPRE and authors' calculations.

It is interesting to note that average, median and system[28] FD differ greatly, indicating large differences among municipalities. From 1994 on, the FD of municipalities in the 50th percentile is consistently close to 0.1 points higher than the average municipality, reaching more than 0.9 in several years. On the other hand, the FD for the whole system averages 0.41 and is consistently significantly lower than the average. The explanation for this is that there are municipalities that collect large amounts of own revenues, with very low FD. This drives the system down, but the great majority of municipalities have a very large FD that drives the median up. In what follows these differences are explained.

6.2.1. Explaining Municipal Revenues Independence

The differences in municipal FD described above are very important to understand the role of transfers and own-revenue generation in the financing of local governments in Venezuela. While a few municipalities are very successful in raising own revenue and reducing their dependence

[28] The FD of the system is defined as the ratio of the sum of all transfers and the sum of all revenues of the 335 municipalities.

on the central government, most municipalities are still highly dependent on central government transfers. This section tries to look for the variables or conditions that help explain these differences by running both a cross-section regression and a panel data regression.

In order to explain the degrees of revenue dependence across municipalities we used the average FD for the whole period and a series of time-invariant characteristics inherent to each municipality as explanatory variables. The first explanatory variable is a dummy for oil production presence. We ran this regression considering two aspects: the importance of oil in the Venezuelan economy, and the existence of LAEE to compensate oil-producing local governments. We obtain this variable from the Ministry of Energy Statistics Yearbook (PODE). The second explanatory variable we included is population density, as a proxy for urban municipalities. It was constructed using the National Statistics Institute (INE)'s municipal population and area of territory. The expectation is that more urban areas will tend to have larger tax bases. The final explanatory variable used is a household income index that compares the average household income of each municipality with the average Venezuelan household income. However, this variable is only available for 2001, which is the year when the last census was carried out.

The regression we ran is least squares with consistent coefficients in order to control for heteroskedasticity across municipalities. Regression results were in line with what was expected. First, a municipality where oil is produced is associated with a 12 percent lower average FD. This is explained by higher own revenues that more than compensate larger than average LAEE transfers. This is interesting because it means that the effect of raising taxes from oil production is larger than the effect of the designed institutional compensation scheme.

Second, higher average household income significantly decreases a municipality's FD; an income twice the national average is associated with a 42 percent reduction in FD. Essentially, higher income is linked to a greater presence of large companies, larger and richer residents, and more capacity to pay higher taxes and service fees. This is by far the most important variable explaining FD, and it highlights the importance of tax collections for total revenues of municipalities.

Finally, higher population density is also linked with lower FD; the results indicate that 1,000 more people per square kilometer is associated with a 5 percent decrease in FD. Population

density is associated with urban regions and to some extent to income. However, as the results show, this is not the most important variable.

When analyzing municipal FD, it is important to group municipalities into well-defined groups with different levels of dependence on transfers from the central government. Aggregating municipalities into these groups has the advantage of allowing exploring in greater detail the way different variables influence their FD. The average municipal FD defines groups for the whole period. Municipalities with more than ⅔ of FD make up Group 1, those between ⅓ and ⅔ make up Group 2, while municipalities with less than ⅓ of FD compose group 3. Table 22, presents the number of municipalities in each group, as well as the distribution of their sources of revenues.

Table 22. Municipal Group Characteristics

	# of Municipalities	Average FD	Own Revenues 2010 (USD Millions)	Transfers 2010 (USD Millions)
Group 1	243	0.88	1.2	3.9
Group 2	72	0.51	16.1	8.8
Group 3	20	0.25	1,600.3	287.1

Source: ONAPRE and authors' calculations.

Group 1 contains the largest number of municipalities, with a very large FD, and very little own-revenues. Group 2 is medium sized, with medium FD and medium revenues. Finally, Group 3 contains less than 10 percent of municipalities, very low dependency on transfers, and a very high generation of own revenues (more than 90 percent). Using these groups we ran a series of panel regressions correcting for autocorrelation and heteroskedasticity when present. The regressions use the real growth of total revenues as the dependent variable, and the real growth of GDP, one year lagged GDP, and total expenditures in the national budget as explanatory variables. We control for population density, FD, and average growth of each municipality.

Table 23 summarizes the results of these panel regressions. These results suggest that the lower the FD in a municipality, the more closely its total revenue correlated is with GDP, while the correlation with expenditures in the national budget diminishes.

Table 23. Panel Data Results for Real Growth of Revenues Controlling for Heteroskedasticity				
	Panel	**Group 1**	**Group 2**	**Group 3**
GDP	0.47	0.37	0.39	0.61
National Budget	0.17	0.30	0.25	0.11
Lagged GDP	0.97	0.97	1.01	1.00
Source: Authors' calculations.				
* All coefficients are statistically significant at 1%.				

These results suggest that municipalities should strive to reduce their FD so they depend more on GDP, which in Venezuela is much more stable than expenditures in the national budget. This reduction in volatility should improve the quality of the public goods provided by municipalities, and should also allow for better planning for municipal investment projects.

7. Potential Taxes

In previous sections we have described the fiscal revenues of Venezuelan local governments. In general we characterized them as: i) having high fiscal dependence; ii) facing high volatility, similar to the central government; iii) collecting taxes that are sensitive to the economic cycle; and iv) inefficient, given that the taxes they do have are not collected up to their potential.

In particular, states are very homogenous in having the least autonomy, as they all receive almost all their revenues from transfers. They can do very little to collect more resources and therefore receive all the volatility from the central government transfers. Municipalities, on the other hand, display great heterogeneity, some being very autonomous and collecting large own-revenues, and others very dependent on transfers. They have problems collecting up to their potential, but at least they have tax bases assigned.

In this context, proposed policies to increase SNGs' resource mobilization must try to reduce dependence on transfers, decrease volatility and sensitivity to the economic cycle, and expand the tax base. In this section we propose new taxes and public policies to try achieving these goals, and discuss their potential impact, advantages and disadvantages. Table 24 summarizes these problems and presents some possible solutions.

Table 24. Problems Identified and Proposed Solutions			
Problem	**States**	**Municipalities**	**Proposed Solution**
Fiscal Dependence on CG Transfers	Yes	Partially	States: gasoline tax, electricity tax, piggy-backing on national income tax Municipalities: increase tax collection efficiency
Revenue Volatility	Yes	Yes	States: gasoline tax, electricity tax, new transfer mechanisms Municipalities: new transfer mechanisms, increase tax collection efficiency
Sensitivity to the Economic Cycle	Yes	Yes	States: gasoline tax, electricity tax, new transfer mechanisms Municipalities: new transfer mechanisms, increase tax collection efficiency
Tax Evasion	No (but potentially)	Yes	States and municipalities: increase tax collection efficiency
Heterogeneity	No (but potentially)	Yes	States and municipalities: new transfer mechanisms
Source: Authors' compilation.			

7.1. Tax on Gasoline Consumption

The first proposal we explore is a state tax on gasoline consumption. This is a tax that already exists at the national level, but it is negligible. It is a very common tax throughout the world, commonly used as part of government's environmental policies. We perform an exercise to determine the potential revenues that could have been raised through a tax on consumption of gasoline during the period 1989-2006.[29]

We use two variables from the *Petróleo y Otros Datos Estadísticos* (PODE),[30] average price of gasoline per liter, and the number of liters sold per state per year. The final consumer price of gasoline per liter sold at the pump is divided into three concepts: the supply source price, the marketing margin, and central government taxes (see Table 25). Our proposal would only tax the first two components.

[29] With the exception of the period from 1999 to 2002, for which data are not available.
[30] Published on an annual basis by the Ministry of Energy and Oil.

Table 25. Taxes and Prices of Refined Products in the Domestic Market in USD ¢ per liter				
	Supply Price	**Central Government Tax**	**Marketing Margin**	**Final Consumer Price**
91 octane unleaded gasoline	1.03	0.97	1.24	3.25
95 octane unleaded gasoline	1.91	1.35	1.24	4.51

Source: PODE 2006.

We simulate establishing a tax on gasoline consumption in 2006, the most recent year for which we have data. We test three different tax rates per liter defined in Unidades Tributarias: 0.05 percent UT, 0.1 percent UT and 0.2 percent UT.[31] Tax rates were chosen discretionarily, considering local and international prices. We assume that demand is not affected by the imposition of the tax. Considering how extremely low prices are currently set, we believe this is not an extreme assumption.

These results indicate that a tax on gasoline consumption has great potential to generate significant revenues for Venezuelan states. Establishing the tax in 2006 at a 0.05 percent UT tax rate would have generated US$280 MM or 6.6 percent of their total revenues. Table 26 presents the results.

Table 26. Revenues Collected through a Potential Tax on Gasoline Consumption 2006			
Tax Collected	**0.05% UT**	**0.1% UT**	**0.2% UT**
MM Bs.F.	301	603	1,205
MM USD	70	140	280
% GDP	0.1%	0.2%	0.3%
% Transfers to states	1.8%	3.5%	7.0%
% Total revenues	1.7%	3.3%	6.6%

Source: Authors' calculations.

[31] Initially we thought of establishing the tax in percentage terms, but had the problem of what would happen when the price of gasoline, which is exorbitantly low, eventually began to rise. While a 100 percent tax rate on gasoline would still be negligible at these prices, it would be unsustainably high at market prices. Another option was to establish a fixed nominal value for the tax. This had the opposite problem of becoming insignificantly low as gasoline (and general) prices increased. Thus we decided to establish it in *unidades tributarias*, a referential price that is adjusted annually considering inflation, thus keeping its value over time.

The results also indicate that a tax on gasoline consumption could be relatively stable, as demand does not seem to be greatly affected by the economic cycle. Table 27 presents the comparison of the tax for 2004, 2005 and 2006. The differences come from the *Unidad Tributaria* not completely accounting for inflation, but slightly less.

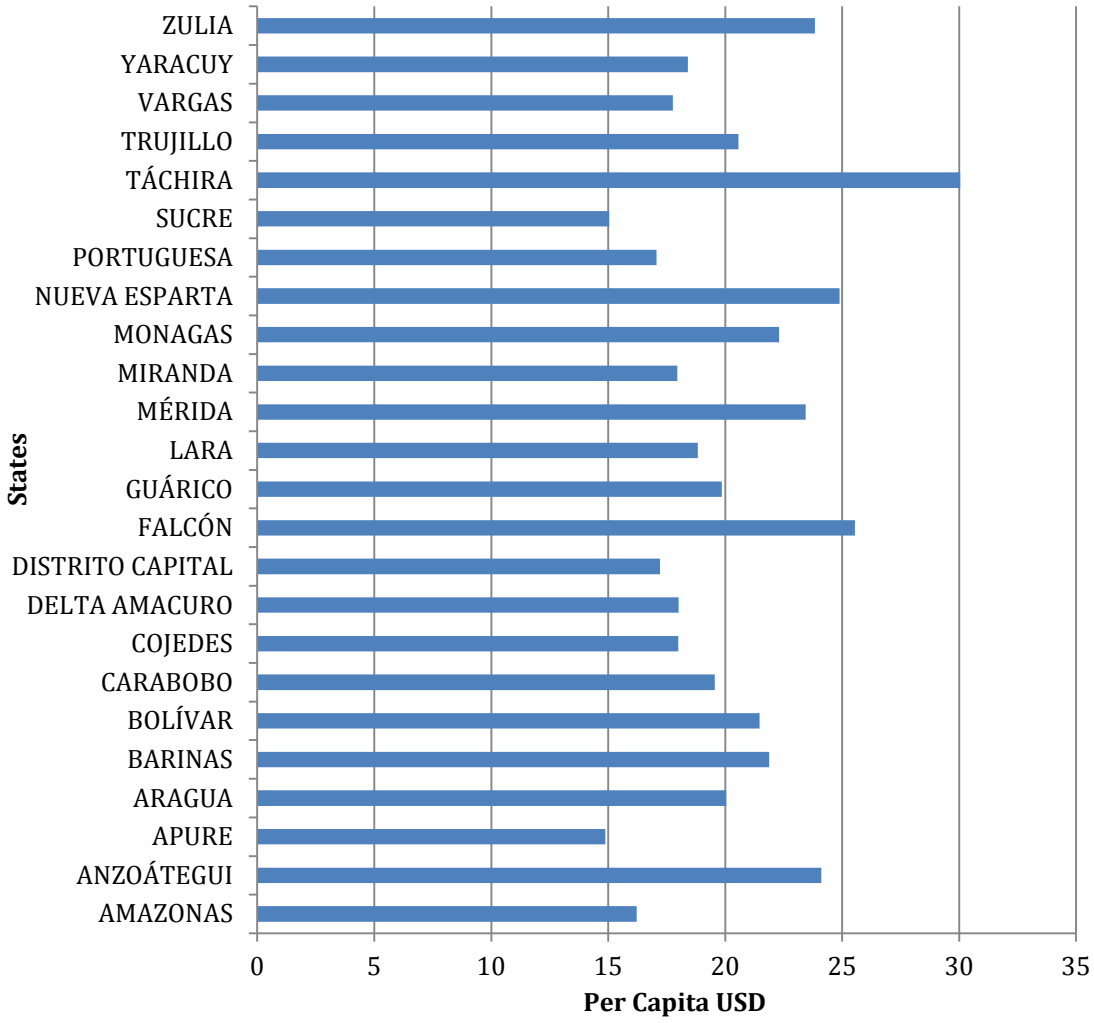
Table 27. Revenues Collected through Potential 0.2% UT Tax on Gasoline Consumption 2004-2006

Tax Collected	2004	2005	2006
MM Bs.F.	692	992	1,205
MM USD	161	231	280
% GDP	0.34%	0.3%	0.3%
% Transfers to states	9.3%	8.3%	7.06%
% Total revenues	8.9%	8.0%	6.65%

Source: Authors' calculations.

Finally, the results also indicate that the tax is relatively homogenous, with states collecting taxes in relation to their population. Tachira is an outlier in the sample because of large contraband of gasoline to Colombia due to price differentials. Figure 10 presents the per capita revenues potentially collected and concludes the figure is fairly similar for all states.

Figure 10. Tax Collected Per Capita with a 0.2% UT Tax by State 2006



Source: Authors' calculations.

From this exercise we take that a tax on gasoline consumption has multiple advantages that tackle several of the problems identified: i) high revenue potential; ii) stability; and iii) homogeneity. Also, it is very convenient because of low administration costs. Gasoline is sold at easily identified establishments by a limited number of companies, and sales can be monitored without too many complications.

However, there are also a number of disadvantages of establishing this tax, some of them inherent to the Venezuelan context: i) it is a very obvious tax for consumers to identify; ii) there is a history of political sensitivity to raising the price of fuels; and iii) this tax is legally difficult

to implement. The political sensitivity comes mainly from a 1989 episode in which a rise in the price of gasoline triggered riots in Caracas. Although prices have been raised once since, it still remains a critical issue. The legal implementation is also difficult because the Constitution reserves the taxing of oil production and consumption to the central government. Thus a constitutional change would be required.

7.2. Tax on Electric Consumption

The second proposal we explore is a state tax on electricity consumption. Like the gasoline tax, it is also a very common tax around the world, as it can complement other environmental policies. The exercise that we propose is to calculate how much could be collected through a tax on the consumption of electricity. Because of data availability, the chosen year for the simulation is 2007. For this exercise we used data from the 2007 Statistical Yearbook of the Venezuelan Chamber of Energy Companies (*Cámara Venezolana de la Industria Eléctrica*), and also from the quarterly reports of the Caracas Electricity Company (EDC), which were published until 2009. Variables include: average price, and electric consumption per-service and per-state.

Due to the wide range of prices and electricity tariffs (industrial, commercial, rural, urban, among others), for all the states we chose the average price charged by EDC until the third quarter of 2009 (latest quarterly report available), as shown in Table 28. This allows standardizing fees and projecting how much could be collected with the tax.

Table 28. Average Price of Electric Service 2007 (USD ¢ / KWh)

Type of service	Price
Residential	5.51
Commercial	5.48
Industrial	4.12
Others	5.66

Source: EDC.

We simulate establishing a tax on electrical consumption in 2007 per kilowatt consumed to residential consumers, commercial establishments, and industrial firms. We simulated with three different tax rates—30, 50 and 100 percent[32]—on the total price per-KWh. We assume that demand is not affected by the imposition of the tax. In this case we believe that prices could be high enough to matter and affect demand for electricity, however, as there is not enough available data to estimate price elasticities, we do the exercise as described, acknowledging that our results could be overestimated. It would also be desirable to allow for exemptions and reduced rates for low levels of energy consumption, but the aggregated data do not allow us to make these calculations.

The results indicate that tax collection could be significant, even larger than with the gasoline tax. Setting the tax in 2007 at 30 percent would have generated USD 605 million or 11.1 percent of states' total revenues. Table 29 presents the results.

Table 29. Revenues Collected through Potential Tax on Electrical Consumption 2007

Tax collected	30% Tax Rate	50% Tax Rate	100% Tax Rate
MM Bs.F.	2,600	4,333	8,665
MM USD	605	1,008	2,015
% GDP	0.5%	0.9%	1.8%
% Transfers to States	11.6%	19.3%	38.7%
% Total Revenues	11.1%	18.5%	36.9%

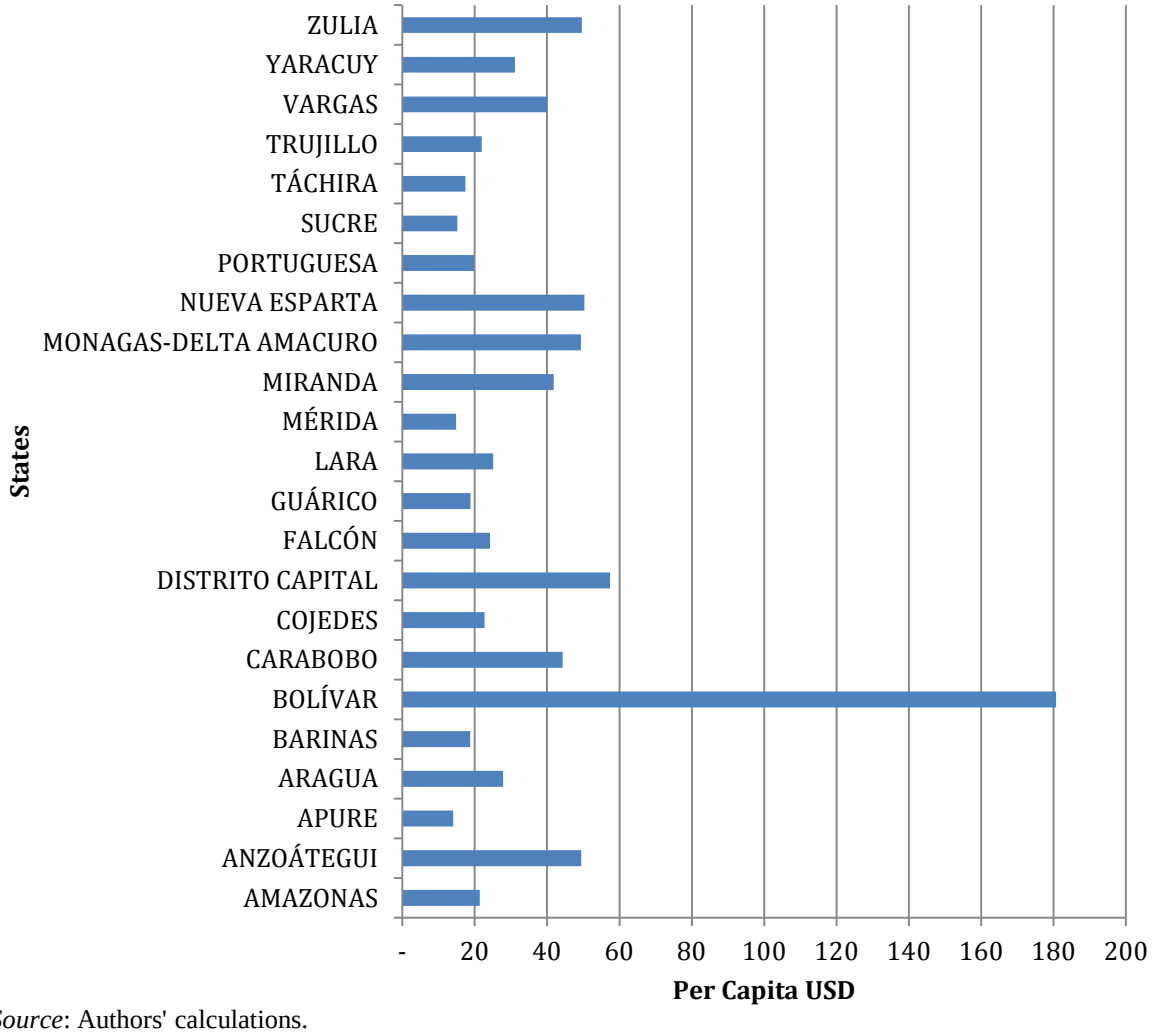
Source: Authors' calculations.

There is not enough data to assess stability, but international evidence shows that this tax could be a stable source of revenues, which is one of its advantages. Finally, the results also indicate that the tax is not as homogenous as the gasoline tax, with some states collecting significantly more revenues in relation to their population. This is because they have industries

[32] While these high tax rates may seem unrealistic, the price of electricity has been fixed for more than five years, with average yearly inflation of more than 25 percent. Therefore, even with a 100 percent tax, real prices would still be significantly lower than they were five years earlier. If this proposal were to be implemented it would be logical to increase electricity prices and establish a lower tax rate. However, high tax rates are more illustrative of potential state revenues from establishing these taxes.

that are intensive in electricity consumption, such as the steel industry in Bolivar state. Figure 11 shows the per capita revenues that could be potentially collected.

Figure 11. Revenues Collected Per Capita with 30 percent Tax Rate by State, 2007



Source: Authors' calculations.

From this exercise we conclude that a tax on electrical consumption could have multiple advantages that tackle some of the problems identified, particularly i) large revenue potential and ii) stability. Also, like the gasoline tax, this tax is very convenient because of its low administrative costs. Few companies sell electricity, and they do so with a straightforward way of setting prices. Regarding disadvantages, while it may be obvious rather visible tax, historically

it has not been as politically sensitive as the gasoline tax, and it does not require a change in the Constitution to be approved.

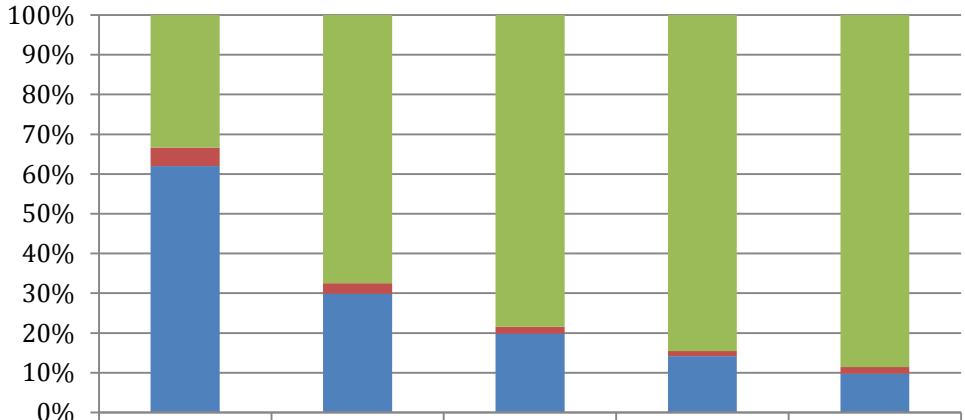
7.3 Personal Income Tax Surcharge

A personal income tax surcharge (PIT) could diminish fiscal dependence of small municipalities with serious problems of efficiency to collect taxes. We propose an income tax surcharge, which is set by each municipality in order to exploit the benefits of direct competition among them. Municipalities could help enforce the collection of the PIT by sharing information with the central government. Furthermore, citizens could benefit from the PIT surcharge because competition between municipalities could improve the quality of the public services they provide

To calculate the effects of the PIT we used 2001 household income census data. Using the income data of each municipality we estimated the tax base of the personal income tax as the sum of all incomes above 1,000 inflation-adjusted units (*Unidades Tributarias*) per year, to which the lowest tax bracket applies. As a result, the potential revenues of the proposed mechanism were 1 percent of the estimated tax base. It is important to note that, even though the rate would be equal for all tax brackets, the PIT as a whole would still be progressive.

Our estimations show that a 1 percent surcharge would have represented about USD 106 million in 2001, which would be equivalent to 4 percent of total revenues for all municipalities and 8 percent of own revenues. This measure could also have the potential of diminishing the fiscal dependence of low-revenues municipalities. In fact, for the fifth quintile the surcharge revenues could have accounted for 60 percent of own-revenues and 2 percent of total revenues. However, for the first quintile it could have represented 9 percent of own revenues and 4 percent of total revenues. It is important to note that the PIT surcharge would greatly benefit the higher-revenue municipalities. According to our estimations, the first quintile would have received around USD 91 million, which represents 88 percent of total PIT surcharge estimated collection (see Figure 12).

Figure 12. Composition of Municipal Revenues (USD Million)

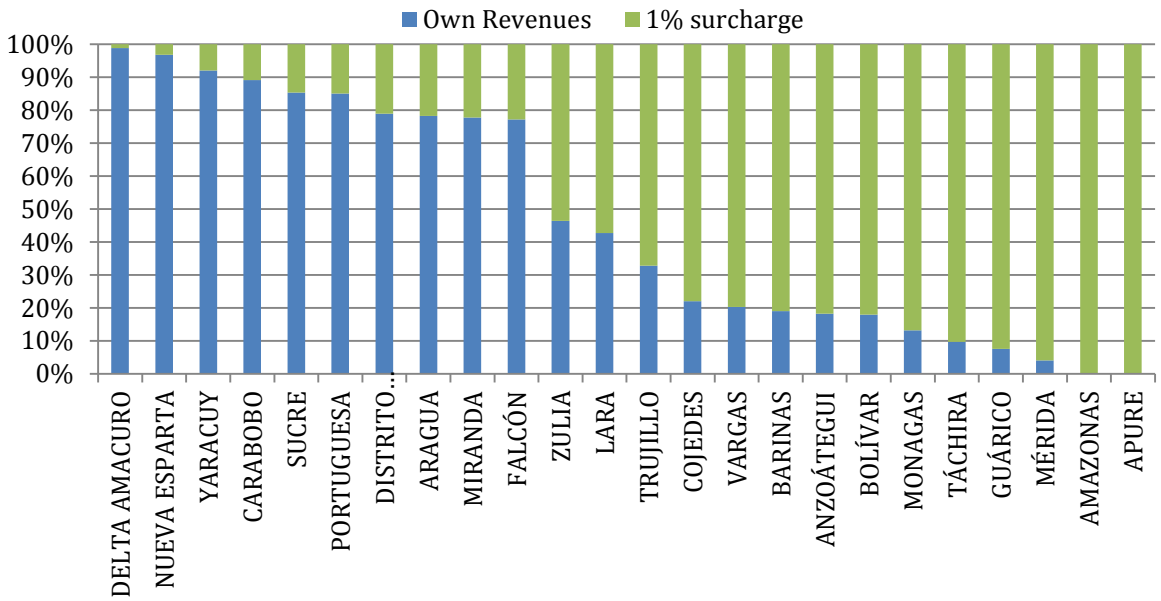


	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Transfers	654.7	236.7	150.0	105.8	65.8
PIT Surcharge 1%	90.9	9.4	3.5	1.7	1.3
Own Revenues	1,216.8	104.9	37.9	17.7	7.2

Source: Authors' calculations.

This exercise suggests that even a 1 percent PIT surcharge could have a substantial impact on municipal fiscal dependence; however, the effect on total revenues is relatively small. This surcharge could also be applied by states, and they could also benefit because of their very high fiscal dependence. According to our estimations, a 1 percent PIT surcharge could have increased the total revenues for all states by 2 percent in 2001. However, own revenues could have increased by 7 percent. As can be seen in Figure 13, this ranged from 1 percent for Delta Amacuro to 2,300 percent for Mérida. As with municipalities, the effect on total revenues is relatively small, but the impact on own revenues is considerable because states do not have the ability to levy taxes and their own revenues are negligible. Also, competition among states could benefit their inhabitants by improving goods and services.

Figure 13. Own Revenues Composition



Source: Authors' calculations.

7.4. VAT Surcharge

In this section we propose a regional surcharge on the Value Added Tax (VAT) collected by the federal government. This tax could have the advantage of improving fiscal autonomy and reducing revenue volatility, while being relatively easy to implement. It could also have the added advantage of improving information sharing between federal and local tax agencies, thus contributing to improving the collection of other taxes.

Regional VAT surcharges have often been dismissed because they are hard to implement, but the experience of Canada and Russia shows that they are not only manageable, but even desirable compared to other taxes (Bahl and Bird, 2008). In particular, Canada has had a long successful experience with the implementation of the Goods and Services Tax (GST) where provinces set different tax rates, and even in some cases use different tax bases (Bird and Gendron 2000).[33]

The value added tax in Venezuela (*Impuesto al Valor Agregado*, or IVA by its Spanish acronym), is collected by SENIAT. This tax was originally created in the mid-1990s as a way to

[33] There are concerns with the implementation of such a system in developing countries with weaker tax institutions, especially in light of the Brazil and Argentina experiences. For a more detailed discussion see Bird and Gendron (2000).

increase government revenues after a failed structural-adjustment in Venezuela. While it is strictly a federal tax, it had a regional aspect from its inception; in order to secure enough political support for its approval, 30 percent of IVA revenues were destined to funding regional investment projects,[34] as established in the 1999 Constitution.

Tax rates have varied over time. Starting at 10 percent in 1993, they have gone up and down in subsequent administrations. As of 2011, the IVA rate is 12 percent, among the lowest in Latin America. Given low non-oil taxation in Venezuela, there could be room to increase this tax through a surcharge destined to regional governments. Collection of IVA reached 6.4 percent of GDP in 2006 but had declined to 5.6 percent of GDP by 2010.

We believe that a VAT surcharge in Venezuela should have the following characteristics:

1. It should be set at the state level and not at the municipal level: the administrative complexities of handling 335 different tax rates for each municipality are substantial. In addition, states are the most dependent on transfers.
2. Every state should determine the rate: the taxing power (and autonomy) resides more on who determines the tax rate than on who collects the tax, (Bird, 2002). Experiences like the case of Canada have shown that a destination-based tax with different rates could be manageable.
3. SENIAT should collect the tax. It is most efficient and it already has the institutional infrastructure, making it quicker to implement. It is highly desirable to transfer both money and information to regional governments.

Using these characteristics we simulate the establishment of a 1 percent VAT surcharge for every state and analyze the potential effects on revenues, transfer dependence and heterogeneity for all states. To calculate the effects of the VAT surcharge we use 2010 collection data by states and municipalities obtained from SENIAT.

Our estimations show that a 1 percent VAT surcharge would have represented about USD 884 million in 2010, a significant increase of 13 percent of state revenues.[35] However, this

[34] Originally through FIDES, now FCI, see Section 4.1.2 above.
[35] To simplify, we assumed an elasticity of zero to a 1 percent increase in IVA. This would not be a plausible assumption with increases larger than 1 percent.

increase would be largely unequal, significantly favoring states with large urban populations over rural states. Table 30 presents these results.

Table 30. Potential Revenues from a VAT 1% Surcharge (USD Million)

State	Transfers	Own Revenues	Total Revenues	Revenues from 1% VAT surcharge	Surcharge % Increase in Own Revenues	Surcharge % Increase in Total Revenues
AMAZONAS	111	-	111	0.5	INF	0%
ANZOÁTEGUI	324	7.7	332	22.4	289%	7%
APURE	186	-	186	1.1	INF	1%
ARAGUA	290	11.9	302	25.6	216%	8%
BARINAS	180	1.4	181	5.9	423%	3%
BOLÍVAR	296	67.0	363	39.7	59%	11%
CARABOBO	452	220.7	673	97.4	44%	14%
COJEDES	117	0.1	117	0.5	374%	0%
DELTA AMACURO	105	0.3	105	0.3	115%	0%
DISTRITO CAPITAL	373	44.2	417	316.6	716%	76%
FALCÓN	207	5.0	212	6.7	133%	3%
GUÁRICO	178	4.0	182	3.9	97%	2%
LARA	379	31.1	410	41.7	134%	10%
MÉRIDA	185	1.8	187	9.7	526%	5%
MIRANDA	454	136.3	591	217.2	159%	37%
MONAGAS	325	16.0	341	8.3	52%	2%
NUEVA ESPARTA	130	11.6	142	1.6	14%	1%
PORTUGUESA	190	1.9	192	4.0	209%	2%
SUCRE	195	1.8	197	4.6	254%	2%
TÁCHIRA	285	22.7	308	22.4	99%	7%
TRUJILLO	172	0.6	172	4.2	647%	2%
VARGAS	133	0.0	133	1.5	12096%	1%
YARACUY	190	7.4	197	0.7	10%	0%
ZULIA	621	2.3	623	48.0	2064%	8%
Total	6,078	595.9	6,674	884.1	148%	13%

Source: SENIAT, ONAPRE and authors' calculations.

Revenues would have increased by 76 percent in Distrito Capital and 37 percent in Miranda, but only minimally in scarcely populated states such as Amazonas and Delta Amacuro. The median total revenue increase would have been of 3 percent, hardly a significant amount. These results mirror the unequal consumption patterns in Venezuelan states. Regarding fiscal dependence, the impact would also be significant but unequal.

Finally, we analyze the stability of the IVA and conclude that it would be a relatively stable source of revenues for states. The collection of this tax has fluctuated between 4.5 percent and 6.5 percent of GDP for the past 10 years, with changes responding mainly to rate variations. We could not evaluate changes in IVA collection among states because of lack of data, but we expect them to be very small.

A VAT surcharge thus presents great advantages but also important challenges. On one hand, it provides great revenue potential. A 1 percent surcharge would have raised states' 2010 revenues by 13 percent and decreased fiscal dependence by the same rate. With VAT rates on the lower end of the regional scale, even higher rate increases are not out of the question. It also presents the advantage of being relatively stable. On the other hand, these increased revenues would mostly come from states with large urban populations, particularly Distrito Capital and Miranda, where Caracas is located. Rural states would hardly benefit; this could be addressed, however, by using compensation mechanisms.

7.5. Improving Collection of Own Tax Revenues

An important cause for high dependence on central government transfers is that local agencies are inefficient collecting taxes, leading to high rates of tax evasion. Unofficial data from the Sucre municipality, one of the largest in the country, estimates the tax evasion rate at more than 45 percent. Anecdotal evidence suggests much larger rates in smaller and less institutionally developed municipalities. We believe that there are several improvements that can be achieved at the central government level, and even at the local government level, to improve this situation.

In general terms we have already discussed one potential reason for this problem, which is the great importance of central government transfers in municipal revenues. Several studies have documented this relationship in other contexts and have found that, holding everything else constant, increasing transfers discourage tax collection (Reeb and Tomson, 1985). While in most recent years transfers to municipalities have decreased, the historical trend has been for them to increase over time; thus without any effort, local governments have traditionally increased their revenue. While this lack of effort certainly explains part of the problem, in this section we will focus on other specific problems and possible solutions to improve local government tax collection.

While the problems are numerous, they can be grouped into three categories: i) estimation and payment obstacles; ii) inadequate coercive policies iii) low tax morale and culture.

7.5.1 Estimation and Payment Obstacles

The most essential tasks of tax agencies are calculating the tax bill and collecting it. Both are problems for Venezuelan local governments.

The first problem is that of estimation. For example, calculating the correct tax is particularly difficult in the case of land and property taxes, where cadastres are generally outdated. Keeping an up-to-date cadastre requires significant investments that most municipalities cannot afford. Cadastres in Venezuela are generally outdated, paper-based, and not automatically adjusted for inflation. Even in some of the largest municipalities, such as Maracaibo and Sucre, local authorities do not count with reliable information to calculate land taxes.[36] This makes it difficult to update land prices regularly, and therefore leads to underestimation of tax bills.

Also, while taxes on economic activities are fairly easier to calculate and keep updated, taxes on other concepts such as advertising and vehicles many times also require complex calculations that are not straightforward.

The second problem is related to the difficulties taxpayers face in paying taxes. In most municipalities payment is only received at tax offices, and in some at banks. Very few allow tax payments to be made over the Internet.[37] Research by Dev Sood (2001) and Ramachandriah (2003) have highlighted the importance of the use of Internet to increase tax collection in developing countries.

One of the reasons for all of these difficulties in determining and collecting taxes are found in local legislations. To have 335 municipalities and the same number of tax agencies and local legislative councils drafting local ordinances that determine details for tax collection can

[36] Between 2009 and 2011 CAF financed the Regional Program for the Update and Improvement of Local Management (PRAMEG) for selected Venezuelan municipalities. Among the six municipalities analyzed (San Cristobal, Naguanagua, Lechería, Piar, Cedeño and Sucre), the most common recommendation was the improvement of local cadastres and geographic information systems. Shared problems included outdated information, inadequate information-sharing within municipal offices, and very basic tax-collection information systems.

[37] A web survey by the authors found that only four of more than 60 municipalities from large and small cities offer the option of online payment.

lead to complex and non-operative legislation. Many of these agencies and councils lack the knowledge and support systems to avoid inadequate ordinances that are not strategic, make it difficult to collect and sometimes have significant loopholes.

7.5.2 Inadequate Coercive Policies

A second problem is insufficient local tax pressure. Tax agencies should be able to identify and sanction violators effectively to discourage evasion. It is complicated to discourage evasion on taxes on economic activities, advertisement and other taxes where sanctions exist, when in Venezuela local tax agencies generally underinvest in the number and the training of tax agents and auditors. Even those who do have enough personnel rarely use data and geo-location tools to efficiently identify violators. The institution of performance-based financial incentives for tax collectors, such as those recommended in Kahn, Silva and Ziliak (2001), is seldom used.

Also, sanctions are low. For property taxes, there does not exist the possibility of foreclosure or freezing other assets belonging to violators. For taxes on economic activities, businesses can be temporarily shut down for violations, but it is not possible for tax agencies to impound their assets. In general, financial penalties are also low.

Moreover, there are serious problems of corruption. Reasons for this include underfunded and politically controllable Audit Offices (*Contralorías)* as well as lack of public financing of political parties. Taxes are many times informally pardoned in exchange for political or personal donations.

7.5.3 Low Tax Morale and Culture

Several studies, such as Davis, Hecht and Perkins (2003), Trivedi, Shehata and Lynn (2003) and Snavely (1991), point to the importance of these variables in determining tax evasion.

As an oil-exporting country, Venezuela has traditionally lacked tax culture. As Karl (1977) argues, oil dependence leads to the idea that resources from hydrocarbon exports are enough to finance public services. While SENIAT has improved tax culture in recent years, as it has increased tax pressure, it is still rather poor. Also, the political polarization of recent years has not helped matters.

Areas for improvements include highlighting the relationship between taxes and public services, and using campaigns to improve the ethics and morality of citizens regarding tax

compliance. Some authors have emphasized the importance of enhancing and communicating the fairness of the tax system.

In light of these problems, we identify several options for improvements of tax institutions in order to raise local revenues.

1. *Investing in Local Cadastres*. The central government should get involved in this for several reasons:
    a. Cadastres require significant investments that are harder to finance by municipalities;
    b. It is an investment that has economies of scale;
    c. These are investments that can pay for themselves in a few years;
    d. There are advantages in having multiple cadastres use the same technology and have the same format; and
    e. Updated cadastres are important for local planning.

    This investment could be a direct subsidy, a partial financing or a loan. It could also be a system where a municipality could pay a fee for access to a centralized database and an information system.

2. *Creating a Local Tax Support Office*. This office could help in several ways:
    a. Create standardized tax ordinances that tax offices and legislatives can use, and give support to those who require help. This would help harmonize tax rates and procedures.
    b. Advise on using intelligence and data
    c. Provide training to tax collectors
    d. Share success stories
    e. Establish secure channels to share information between SENIAT and all municipalities.

3. *Allow for heavier sanctions*. Freeze assets and foreclosure homes.

In order to implement some of these measures it will be necessary to provide resources and training to municipalities. This could be done with the collaboration of the central government though the design and implementation of municipal interventions that could strengthen the institutional capacity of local entities. In this regard, multilateral development banks could play a role in supporting governments (central and local) with loans and technical cooperation.

7.6. Changes to the Intergovernmental Transfer System

As it has been discussed extensively in this paper, fiscal volatility is an important problem that sub-national governments face in Venezuela. The main source of volatility is central government transfers to sub-national governments. The most important and volatile transfer mechanism is the *Situado Constitucional*, which is calculated as a fixed percentage of ordinary revenues. Meanwhile the *FCI*, a smaller transfer mechanism funded mainly by VAT revenues, provides a somewhat more stable source of revenues.

In addition, local governments are not well prepared to deal with the volatility of transfers as well as of own-revenue fluctuations correlated to the business cycle. Clearly, this has negative effects on public service provision at the local level, and it makes the design and implementation of local development plans more difficult.

The volatility of central government revenues mainly comes from Venezuela's dependency on oil exports. Therefore, the most obvious way to reduce volatility would be to increase the importance of non-oil taxes as a proportion of total government revenues. In fact, notwithstanding the important efforts made by the tax administration (SENIAT) in recent years, non-oil revenue as a percentage of GDP is lower compared with international standards and one of the lowest in Latin America (Ríos, 2004).

This problem is aggravated because the central government does not have efficient and credible stabilization mechanisms at the macroeconomic level. The traditional literature on fiscal federalism gives the central government the task of macroeconomic stabilization (Oates, 1972). This is the case mainly because the central government has access to monetary policy, and in developing countries it usually has access to cheaper and more stable sources of financing as compared with sub-national governments. Also, it is harder for sub-national governments to have

stabilization mechanisms because of coordination problems, as well as borrowing and institutional constrains.

A first approach to reduce the volatility of transfers to sub-national governments would be to stabilize central government revenues. A common and proven solution is the use of a macroeconomic stabilization fund. However, since 1998 the rules for the existing macroeconomic stabilization fund have been changed several times to accommodate short-term fiscal difficulties. These changes have made the mechanism inoperative and non-credible. We believe the challenge is not to create a new mechanism, but to make the existing one work in a credible and transparent manner.

A second approach for the central government would be to design and implement transfer stabilization mechanisms. In this regard, there are some Latin American experiences worth discussing. (For example, see González et al., 2002). One clear alternative is to change the way in which transfers are calculated. Instead of using a formula that establishes a fixed proportion of ordinary revenues, which are very volatile, the central government could use a scheme in which transfers are fixed in real terms and based in the expenditure needs of sub-national governments. Transfers can also be calculated using moving averages. In the case of Venezuela, where transfers represent an important proportion of sub-national governments revenues it would be advisable that the central government and sub-national entities share the risks of a decrease in total revenues within certain limits. Establishing a floor for transfers could allow for this.

These rules could act as a buffer, preventing sub-national governments from increasing inflexible expenditures during boom times and giving the central government the responsibility of securing funding during downturns. Since the current transfer system is set forth in the Constitution of 1999, any changes would require enormous political will and the construction of consensus. However, new complementary rules could be easier to adopt.

Alternatively, a form of stabilization would be to allow sub-national governments to borrow. The easiest way would be to simply allow them to obtain funds from domestic banks and capital markets. However, this should be implemented carefully because some sub-national experiences have been disastrous. A limited degree of borrowing by sub-national governments subject to clear and strictly enforced rules should not create serious fiscal risks. Moreover, if the borrowing limits are set in relation to own revenues generation, it could also provide incentives to own revenue mobilization. Another alternative would be to create or use an existing regional

investment bank that could lend to sub-national governments if they comply with certain requirements such as a sound fiscal policy and well-designed and attainable investment plans.

At the sub-national level it could be costly and difficult to implement stabilization mechanisms, given institutional weaknesses; however some simple rules may help. Evidently, efforts to increase own revenues such as the options that have been described in previous sections of this paper could help to mitigate the dependency on transfers. Another alternative is to make expenditures more flexible, for example, by designing investment plans that can be adjusted over time, and not letting current expenditures such as salaries dominate sub-national budgets. Such flexibility could be implemented as expenditure rules at the sub-national level.

Sub-national governments could also establish saving funds, which could be used to save during boom times and to spend during downturns. There have been experiences of this kind in some Mexican and US states (González et al., 2002).

Finally, a strategy could be to treat the consequences of revenue volatility rather than volatility itself. One option would be to increase the share of transfers that go to the FCI relative to the *Situado Constitucional*. Some of the revenues generated by the proposals in previous sections could go directly to this more stable fund. Another option could be to make the public sector labor market more flexible, allowing local governments to more easily reduce their wages and salaries expenditures in times of revenue downturns.

All these measures taken individually may not be enough to mitigate the volatility brought about by the intergovernmental transfer system, but all together could help to improve the fiscal performance of both central and sub-national governments. An important prerequisite of any proposal at the local level to reduce volatility is to establish simple and clear rules, which minimize discretionary policymaking.

8. Conclusions and Recommendations

In Venezuela around 90 percent of total exports are oil products, and close to 50 percent of fiscal revenues are generated by hydrocarbon activities. This has resulted in high volatility in the main macroeconomic variables because of the variability of oil prices and the lack of stabilization mechanisms. The volatility of fiscal revenues is transmitted to sub-national finances, since around 70 percent of sub-national revenues come from transfers from the central government, and local authorities, as their central policymaker counterparts, do not have instruments to deal

with large variations in their revenues. As a matter of fact, one of the main sources of financing for governors and mayors is the *Situado Constitutional*, a transfer of 20 percent of ordinary fiscal revenues from the central government that is closely linked to highly volatile oil fiscal revenues.

An important characteristic of the Venezuelan economy is the very low level of non-oil taxation. In 2009 non-oil taxes reached 14 percent of GDP, while the average for Latin America is around 17 percent. This could be viewed as an opportunity because there is space to increase sub-national governments' resources through taxation. This could contribute to reducing revenue volatility for states and municipalities caused by their dependence on transfers from the central government, which in turn experience large fluctuations due to their dependence on oil revenues. This could also help to improve accountability because citizens will be willing to pay more taxes at the sub-national level, requesting better public services to local authorities.

The process of decentralization in Venezuela started as a political response to the loss of legitimacy of the political system brought about by the exhaustion of an economic model based on the distribution of oil revenues. Although from a political point of view the decentralization process advanced rather fast, beginning with direct election of governors and mayors in 1989, a similar process of fiscal decentralization did not accompany the political decentralization. This resulted in major challenges for local authorities given that several states and municipalities have spending responsibilities, mainly in education and health services, which were transferred by the central government with no clear funding mechanisms. Despite the fact that the central government has transferred resources previously included in the national budget to fund these responsibilities, there are not operative criteria to determine if those resources are enough to maintain levels of efficient services. In recent years there is evidence of a marked deterioration in the public services transferred to the states, due to lack of funding.

At the same time, sub-national governments face significant legal and institutional restrictions to obtaining fiscal revenues. By law, states cannot levy taxes independently and have no borrowing authority; therefore their budgets depend 90 percent on transfers from the central government budget. Municipalities, on the other hand, have some limited tax authority on urban property and industrial and commercial activities; therefore their dependency on transfers from the central government is less than 50 percent of their total budget. There nonetheless exists great heterogeneity among municipalities in this regard. Using the methodology of a stochastic frontier model we concluded that there are serious efficiency problems in the collection of existing

municipal taxes, which contribute to increasing disparities in the scope and quality of goods and services offered by municipalities. This suggests that there is room for improvement in the collection of existing taxes through the strengthening of institutional and administrative capacities of municipal governments.

For the states, we have proposed to give them tax authority, and we have suggested several resources-generating mechanisms. In particular we explored the impact of a tax on gasoline consumption and a state tax on electricity consumption. We also suggested a VAT piggy-backing mechanism. For municipalities, we suggested the introduction of a personal income tax surcharge that could also be implemented at the state level. There is also room to improve efficiency in the collection of existing taxes, and several measures in this regard have been suggested here. We concluded that these proposals could generate important resources for both states and municipalities, and contribute to decrease fiscal dependence from the central government, reduce the volatility of sub-national revenues and mitigate the negative impacts of the economic cycle. However, the disparities that could result from these changes should be addressed by making the transfer system more redistributive. It is also necessary to introduce changes to the transfer mechanism to reduce the volatility that sub-national governments face, and provide local authorities with tools that allow them to provide local services in an efficient manner that is not subject to the volatility of oil revenues.

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