Oil and Gas in Federal Systems

Black Auditorium
The World Bank, Washington, D.C.
March 3rd and 4th, 2010

Organized by the World Bank and the Forum of Federations, with sponsorship from NORAD

Oil Fueled Centralization: The Case of Venezuela

Osmel Manzano, Francisco Monaldi, Jose Manuel Puente, and Stefania Vitale

The Forum of Federations is undertaking a study of the factors that affect the management of petroleum resources in federal systems, of which this draft paper is part. This paper is an informal document which publication is intended to provide reference material for the Conference on Oil and Gas in Federal Systems, organized by the World Bank to further the dialogue on development and public finance issues that are common to federal and decentralized petroleum-producing countries. A revised version of this paper will be included in a publication by the Forum of Federations which is expected to be completed by June 2010. The manuscript of this paper has not been prepared in accordance with the procedures appropriate to formally edited texts. Some sources cited in this paper may be informal documents that are not readily available.

The findings, interpretations, and conclusions expressed herein are those of the author(s) and do not necessarily reflect the views of the International Bank for Reconstruction and Development or the World Bank or of the Forum of Federations and their affiliated organizations, or those of the executive directors of the World Bank or the governments they represent. The World Bank and the Forum of Federations do not guarantee the accuracy of the data included in this work.

Draft not for citation without authors’ permission
1. Overview

Oil production has constituted the leading economic sector in the Venezuelan economy and for more than eighty years. The sector represents more than 80% of exports, thus making it the largest source of foreign currency. It represents 40% to 60% of the government revenue and in the past this figure reached as high as 70%. It is thus the biggest source of fiscal income. Finally, it comprises more than 20% of GDP.

Since the 1920s the country has been oil dependent. Just a few years before oil became relevant; the country was fully centralized by the dictatorship of Gen. Juan Vicente Gomez. As a result oil revenues have always been firmly and undoubtedly in the hands of the national government and regions have only received them through revenue sharing. Moreover, except for a brief period in 1989-1999, when decentralization had a significant impulse, the country has always been formally federal, but in reality it has been highly centralized. Governors and mayors have been elected since 1989, but after President Chavez came into power in 1999 there has been a strong move to recentralize power in the national executive.

The strong tensions between oil producing regions and the central government that have characterized other oil producing federations have been relatively absent in Venezuela. The oil sector has been in the center of political conflict, but the most significant dimensions of quarrel have not been centered on regional conflicts, but more on social and ideological conflicts. The oil producing areas (or regions) have not been leading beneficiaries of their geological fortune. Two states concentrate 85% of the oil production but this has not necessarily translated in higher per capita income.

All the same, oil has played a very significant role in the type of federalism that has taken root in Venezuela. One characterized by some significant degree of revenue sharing, but with a lack of effective decentralization. The power of the purse of the national executive, which concentrates oil revenues, is such that all sub-national authorities are dependent on the president and have very little autonomy. Moreover, the Chavez administration has used a variety of tricks to reduce revenue sharing of the oil windfall. Still, the few political spaces that the political opposition controls are in some regional governments, and revenue sharing in general is a highly contested political issue, but there is no significant cleavage between producing and non-producing states. A truly democratic federal republic would require strong institutions to limit the power of the national executive and guarantee the resources and authority of the sub national authorities.

2. Historical and regional context of the petroleum industry

Venezuela became a relevant oil producer in the 1920s with the development of the Lake of Maracaibo oil fields. Using data on oil exports, Manzano (2009a) identifies five booms and two collapses of oil exports between 1920 and 2006. That paper also studies whether price or quantity drove the change in exports and whether these cycles were explained by internal factors or by the market. Table 1 presents the summary of those cycles.
Table 1: Cycles of Venezuelan Oil Exports (1920-2006)

<table>
<thead>
<tr>
<th>Period</th>
<th>Type of cycle</th>
<th>Driver</th>
<th>Possible explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1922-1930</td>
<td>Boom</td>
<td>Quantity</td>
<td>Comparative Advantage</td>
</tr>
<tr>
<td>1933-1935</td>
<td>Boom</td>
<td>Both</td>
<td>Market Expansion</td>
</tr>
<tr>
<td>1944-1949</td>
<td>Boom</td>
<td>Quantity</td>
<td>Comparative Advantage</td>
</tr>
<tr>
<td>1964-1970</td>
<td>Collapse</td>
<td>Both</td>
<td>Own Collapse</td>
</tr>
<tr>
<td>1972-1975</td>
<td>Boom</td>
<td>Price</td>
<td>Market Expansion</td>
</tr>
<tr>
<td>1981-1987</td>
<td>Collapse</td>
<td>Price</td>
<td>Own Collapse</td>
</tr>
<tr>
<td>2004-2006</td>
<td>Boom</td>
<td>Price</td>
<td>Market Expansion</td>
</tr>
</tbody>
</table>

Source: Manzano (2009a)

The first three booms were related to the beginnings of the oil sector and its expansions. As seen from the table, these were mostly driven by quantity and explained by domestic factors. This period was characterized by the biggest expansion in oil production in Venezuela. In the late 1920s oil production became the leading economic activity surpassing cocoa and coffee, and Venezuela beat Mexico to become the world’s largest crude exporter.

The main reasons behind this expansion were, obviously, the presence of important resources and the closeness to the main market for oil, the United States. However, it was also important that between 1908 and 1935 Venezuela was ruled by Juan Vicente Gomez. In the nineteenth century, Venezuela was characterized by a long civil war and in general by high political instability. Gomez, though a fierce dictator, managed to pacify and stabilize the country. That offered foreign investors a relatively stable environment in which to invest.1

In the thirties production stopped increasing, due to the world recession and the institutional uncertainty that surrounded the country after Gomez’s death. This changed with the passing of the Hydrocarbons Law of 1943 which reduced the uncertainty about concession periods and fiscal rules for oil companies. The perceived legal stability and the recovery of the postwar period, helped to increase production further.2

With the advent of democracy in 1958 an important principle began to guide oil policy: preservation. The preservation principle was based on the notion that oil is a scarce resource of great value and therefore Venezuela must minimize its extraction in order to save it for the future.3 The preservation principle resulted in two types of policies. First, the government increased substantially the government take.4 The second policy was the “no more concessions” policy. These policies led to the first bust in oil exports, due to lower investment and therefore slower production growth.

1 Moreover, Gomez quickly realized the importance of oil fiscal revenue and used it to consolidate power.
2 Additionally, as part of the negotiation of the law, oil firms were forced to invest in oil refining capacity. This led to the construction of the two largest refineries in the country. The crude refined locally went from 62 thousand barrels a day (TDB) in 1943 to 315 TDB in 1950 and 884 TDB in 1960.
3 Juan Pablo Perez Alfonzo is recognized as the main ideologue behind the preservation principle. See, for example, Perez Alfonzo (1962). Perez Alfonzo was one of the founders of OPEC and energy minister of the first administration of the democratic era.
4 The argument was that since oil is such a valuable commodity of limited availability, the government, as the owner of the resource, should maximize its share of the rents generated from it. This goal was achieved through royalties and the levying of income tax. Monaldi (2005) and Manzano and Monaldi (2009) show how the increase in government take also had two pragmatic origins: the lack of progressivity of the tax system and the opportunistic expropriation of the high sunken investments.
The period between 1971 and 1988 is less simple. In the Table 1 we see that there is a price boom driven by the oil market, and a later a price fall, but the export collapse can be largely explained by internal factors. Between 1971 and 1988 production fell, for two reasons. First, as was explained above, the policy of the previous period clearly induced a decline in investments. In 1975, the actions against the foreign oil companies were carried even further, leading to the full nationalization of the oil industry. The second factor that explains this production decline is the quotas set by OPEC starting in 1982.

After 1986, with the change in OPEC’s policy, an effort was made to increase oil production. However, fiscal income was falling and the oil industry was state-owned. This led to an on-going conflict between the goal of increased production and fiscal needs, because any attempt to increase production would, ultimately, have to be financed by the government. A first approach was to let the national oil company, PDVSA, issue debt to finance its production plans. However, this debt was considered public debt, which generated competition between the government and PDVSA in the financial markets. Moreover, interest payments and amortizations started reducing PDVSA funds available to the government and the tensions returned. A clear second option was to let private companies back into the country to develop the sector. Venezuela did that through a set of small reforms in the institutional framework. These reforms were targeted at the areas in which future production would be concentrated: marginal fields, the extra-heavy oil fields of the Orinoco Belt, and the exploration of new fields. These efforts led to an increase in production, but not enough to lead to an export boom.

As we will detail below, the collapse of oil revenues and the breakdown of the party system, led to the election of President Hugo Chavez in 1998 and a new Constitution was approved in 1999. The government progressively took over the oil sector, through increases in taxes and changes in the law making mandatory to have a government majority in any joint venture with private participation. These changes have not been free of conflict, but most international oil companies have remained in Venezuela in spite of these changes, reflecting the profitability of the sector and the fact that investments had already been sunk. Nevertheless, oil production has been affected. Even if official figures are used, oil production has decreased. Still, due to favorable market conditions, the country experienced a price driven boom from 2003 to 2006.

In the last few years, Venezuelan oil production has been between 2.4 and 2.8 million barrels per day (2006-2008), according to different international sources. It is the second largest oil producer in Latin America and the 10th largest global producer. Venezuela has the largest hydrocarbon reserves in Latin America (87 billion barrels), even without the Orinoco Belt. Extra-heavy oil reserves in the Orinoco Belt are under a certification process (the current government estimate is 235 billion barrels).

---

5 The government even had to eliminate a special tax the “fiscal value over exports,” to provide the company some needed cash flow.
6 Historically, most of oil production in Venezuela came from sizeable fields of light and medium crude (about 70% of cumulative production had been of those types of crude). However, most of these fields were in the declining phase. Consequently, new oil production had to come from fields that require higher investments in technology.
7 See Manzano and Monaldi (2009) for a complete description of these changes.
8 See Manzano and Monaldi (2009) for a complete description of the renegotiation of oil contracts in Venezuela.
In terms of downstream, Venezuela refines around a million barrels a day. The internal market is around 600 thousand barrels a day. Domestic prices are well below international prices. For example, on average the domestic barrel was sold at approximately US$ 10 in 2008.

Natural gas reserves are second in size in the Americas. However 90% of gas reserves are associated with oil. Therefore, its production has been and continues to be related to oil production. Furthermore, there has not been any significant development of the gas sector. Around 50% of the gas produced is either vented or re-injected. Only 27% of the gas produced is actually sold to third parties for other uses. The rest is used by the State-controlled refining and petrochemical sectors.

Given the size of oil sector it has had a significant impact on the economy. When commercial oil production started, Venezuela was one of the poorest countries in the region. When oil exports peaked in the 1970, it had become one of the richest countries in the region.9 There has been a high correlation between oil revenues and GDP. The collapse in oil revenues per capita during the 1980s and 1990s was followed by a large decline in GDP per capita.

In an analysis of the evolution of the Venezuelan economy, Hausmann (2003) argues that the collapse in the economy is largely due to the collapse in oil revenues combined with inadequate institutions to solve the conflicts associated with a declining rent.10 The other side of this history is the lack of a developed non-oil sector. Before the discovery of oil, Venezuela was mostly a rural country that exported cocoa and coffee. The discovery of oil and the appreciation of the exchange rate clearly had a negative impact on those sectors. On the other hand, oil was generally seen as a “temporary” activity. This led for calls for a policy of “sowing the oil”. For the first autocratic governments, “sowing the oil” implied building infrastructure. Later, in the fifties and sixties, the policy mix also included import substitution policies. Therefore, a new “industrial” sector began to appear, but mostly geared towards the domestic markets. With the advent of democracy, “sowing the oil” also implied investing in health and education.

By 1986, the non-oil sector was small and non-competitive. Nevertheless, it was not different from other oil producing countries. Non-oil exports per capita were similar to those of Mexico and higher than those of Ecuador, Indonesia or Algeria. It is after 1986, that the performance of the non-oil sector has been dismal, compared to these countries. This fact might be explained by the lack of institutions capable of managing the conflict generated by the collapse of the oil rents and of reaching a basic agreement on development strategies to overcome this collapse (Hausmann, 2003; Monaldi and Penfold, 2006).

**Oil in the regional context**

Regionally, oil is produced in 8 of the 23 states. Two states, Monagas and Zulia, represent 85% of the production. A third state, Anzoátegui, represents an additional 11%. Therefore, the other 5 states have only a very small share. Oil producing states

---

9 See Rodriguez and Sachs (1999).
10 Venezuela's GDP collapses are among the longest and deepest collapses of GDP in the world between 1980 and 2000.
represent 32% of the country’s population, but states vary widely in their population shares. Therefore, there are important disparities in oil production per capita. Monagas has 47% of the oil production and only 3% of the population, while Zulia has 38% of the production and 13% of the population. The disparities are reflected in the distribution of income across states, as seen in Figure 1.\footnote{This figure is made using households surveys. It represents the average household income for each state. Since Venezuela still lacks GDP figures by region, this indicator is used as a proxy.} We see that Monagas has the highest oil production per capita and is an outlier. Nevertheless, other oil producing states do not perform well in terms of income per capita, including Zulia, the state with the second highest production. In conclusion, there exist important disparities in terms of oil distribution and its impact on income.

A second element is that refining capacity is not necessarily installed in oil producing states. Refining capacity is largely installed in only 3 states, Anzoátegui, Carabobo and Falcon. For that reason, Monagas and Zulia, in spite of being “crude exporters”, have to import their products. On the other hand, given that Carabobo is not an oil producer and that Falcon is a modest producer, they are net importers of crude, but the biggest exporters of products. Finally, there is the interesting case of Anzoátegui that is next exporter of both, crude and products. Until very recently, there has been insignificant oil and gas activity off-shore. The Lake of Maracaibo shallow exploitation is considered on-shore. Mostly, there has been only some offshore exploration. However, there are great expectations of finding gas reserves off-shore.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Oil production per capita and mean household income per capita in Venezuelan states}
\end{figure}
3. The Federal context and powers over the petroleum industry

Since independence, Venezuela was a confederation of regional caudillos in constant turmoil, until in the early 20th century political and economic power was fully centralized. Ever since, even though it continued being formally a federal country, in practice it has been a de facto centralized/unitary country with some limited effective federal features, which only rose to relevance in the 1990s.

Power was centralized under the dictatorships of Generals Castro and Gomez (1899-1935). A professional national army was created, and for the first time regional caudillos were fully defeated. The national treasury fully centralized all tax revenue collection (including oil and mining) and set revenue sharing with the states. This happened just before oil became a relevant source of income. Venezuela was the first formally federal country in Latin America to recentralize revenue collection, the other three Argentina, Brazil and Mexico did it later and only partially. This fact is crucial because it meant that later on, when oil production became significant, the central government was able to obtain total control of all oil revenues. Oil revenues thus significantly reinforced centralization. Venezuela’s federal history would have been significantly different if oil revenues had been initially collected by the states, as would have happened during the previous era of the caudillos.

In 1959 Venezuela’s democracy was established. The democratic Constitution of 1961 confirmed the federal structure of the country with a territorial legislative chamber (Senate) and revenue sharing to the states and municipalities. The political regime remained presidential, with separation of powers in the U.S. format, as has been the regional norm. The electoral system, based on proportional representation with closed and blocked lists, promoted strong centralized parties, deliberately minimizing the power of regional leaders. The political system was designed to have strong parties and relatively weak presidents. Before 1989 the effective number of parties was generally below three and there were no relevant regional parties. Compared to other countries in the region the Venezuelan president had the least formal powers. In practice, the control over oil revenues gave the executive more informal power, especially when the price of oil was high (Monaldi et al., 2007).

In the 1961 Constitution, revenue collection from most relevant sources, including oil and mines, was once again firmly set in the hands of the national government. Moreover, until 1989 governors were appointed and freely removed by the president and the position of mayor did not exist. Thus municipal governments had little political salience. As a result, even though it continued being a de jure federal republic in practice the democratic republic was as centralized as the previous authoritarian regimes. For all practical purposes, the national government decided the allocation of

---

12 The move towards a centralized fiscal bargain was initiated in 1881 when the central government negotiated with regional caudillos and obtained control of the customs and mining taxes in exchange for significant revenue sharing. The process was finally consolidated under President Gomez when regional caudillos were finally defeated and lost most of their power. Venezuela moved towards fiscal centralization earlier and deeper than the other federations in the region (Diaz Cayeros, 2006).

13 Proportional representation with closed lists promoted discipline. The lists were decided by the National Committees of the political parties. The full concurrent elections between President and Congress, and the lack of regional elections, maximized presidential coattails and minimized the potential of regional parties. For a discussion of how the system prior to 1989 was designed for centralization see Monaldi et al. (2007).
most of the budget obtained by the states through revenue sharing. Thus revenue sharing was largely irrelevant.\textsuperscript{14}

A protracted economic crisis in the 1980s, largely a result of oil revenue decline, forced the opening of the political system; significant reforms were implemented in 1989 establishing direct election of governors and mayors. This resulted in an increasing decentralization of expenditures and decision-making, both through legal revenue sharing and transfers for the provision of education and health care (a concurrent jurisdiction). Municipalities which had some revenue generating powers started being more active in using them. However, states were never given any significant powers over revenue collection. During the 1990s, partly as a result of the move towards political decentralization, the political system fragmented and regional parties became relevant players. In the most significant states, in terms of population and GDP, Carabobo, Miranda and Zulia, regional parties have dominated the political landscape ever since.\textsuperscript{15} Sub-national authorities, for the first time, played a significant role in the national legislature, pushing further expenditure decentralization (Monaldi, et al., 2007). The decade from 1989-1999 was thus the period were Venezuela’s federal features were more relevant.

The fall of the traditional party system brought, Hugo Chavez, an outsider coming from the military, to power. The collapse of the parties can be attributed mainly to two factors, the economic decline and the institutional reforms described above, which weakened the national parties (Monaldi et al., 2007). Venezuela had the worst growth performance in Latin America in 1978-1998 (with exception of Nicaragua), to a large extent this was a result of the decline in oil revenues (Villasmil et al, 2007). He had led a failed military coup attempt in 1992, but won the presidency in competitive elections in 1998. Chavez convoked a Constitutional Assembly which drafted a new Constitution in 1999. The new Constitution once again formally reaffirmed the federal structure of the country, with three levels, national, state and municipal.\textsuperscript{16} Nevertheless, the Constitution eliminated the territorial chamber and increased the president’s power. In general, presidentialism was strengthened and federalism weakened.\textsuperscript{17}

After 2006 the movement towards the centralization of power in the hands of the president and the weakening the authority of regional governments has been much more radical. As will be shown in the following section, the government has used a variety of mechanisms to minimize the revenue shared with the sub national governments. Moreover, in 2007 the government presented a Constitutional reform proposal limiting the power of the elected governors and mayors, and creating two new levels of

---

\textsuperscript{14} Still democratic governments had a higher level of revenue sharing than previous authoritarian governments and a higher level of compliance with legal revenue sharing allocations.
\textsuperscript{15} Proyecto Carabobo has held the governorship of Carabobo in all but four years since 1989. Primero Justicia has controlled the largest municipalities in Miranda and currently also the governorship. Un Nuevo Tiempo has been the leading party in Zulia. All these parties are opponents to President Chavez and sometimes form a loose opposition alliance in national politics. In part decentralization has contributed to the fragmentation of the opposition. In the case of the government party president Chavez exercises and iron grip, with very few autonomous local leaders.
\textsuperscript{16} “The Bolivarian Republic of Venezuela is a decentralized Federal State ...”... is and shall always be democratic...decentralized...”. “Public Power is distributed among Municipal Power, State Power, and National Power.” (Constitution of 1999).
\textsuperscript{17} The 1999 Constitution also established a centrally controlled Federal Council and a Fund of Interregional Compensation, with regional governments’ representation. However, these structures have never been implemented.
government controlled by the national executive: above governors, presidentially appointed regional authorities, and below municipalities, communal councils financed directly by the presidency. Despite the fact that the constitutional reform proposal was narrowly defeated in a referendum, the government has continued advancing these recentralizing reforms using regular laws. Including the approval in 2009 of a law that reduces the states’ control over assets and the provision of key services. The Supreme Tribunal, controlled by the president, has not accepted challenges to the recentralizing laws on constitutional grounds.

As in Putin’s Russia, Chavez’s move towards recentralization has been highly successful. Not only has the president been able to bypass the law and the constitution with the aim of reducing legal and constitutional revenue sharing, but he has taken control over some of the governors’ and mayors’ jurisdictions. For example, the central government has recentralized infrastructure, including ports, airports, and major highways, as well other concurrent jurisdictions (e.g. some health services). Similarly, the government is transferring resources that were part of the revenue sharing to the sub national governments, to communal councils which are discretionarily financed by the presidency.

Who owns oil and gas and who operates the oil industry?

Historically from colonial times all mines have been State property. In its beginnings, in the early 20th century, oil exploitation was regulated by the mining laws which established State ownership of the resources, as has been ever since. According to the Constitution of 1999 (art. 12), all oil and gas reservoirs are the property of the national government. The 2001 Hydrocarbons Law also reasserts that hydrocarbon reservoirs belong to the State (art. 3). States and municipalities do not have any property rights over the resources. The ownership and jurisdiction by the national government over the oil reservoirs apply both to the onshore and offshore resources; there is no relevant distinction between the two.

Furthermore, the Constitution clearly establishes the dominance of the Venezuelan State over the oil industry (art. 302) and determines that the Hydrocarbon Law would specify the conditions in which the State “reserves” for itself oil activity. The Constitution also establishes that the petroleum industry is strategic and that PDVSA has to remain fully state-owned. However, it leaves room for private investment in oil production. The

---

18 Transfers have increased during the oil boom, but much less than they would have if the government had not implemented the off budget mechanisms, see below.

19 In the 2008 regional elections the president’s party won 18 state governorships (of 23) and the overwhelming majority of the majorities. Very few of these sub national authorities can claim to have won with their own base of support. The president campaigned restlessly for his candidates and withdrew his support to most of the incumbents who had shown some degree of autonomy. Not one of his party dissidents won a governorship. There is only one government supported governor who clearly won without the need of the president’s support (Henry Falcon in Lara state). In sum, pro-government governors and mayors have limited leeway. The opposition controls 5 states and a few cities, but those states concentrate close to a majority of the population. As a result, the president has been minimizing their authority.

20 There were initially some rights for the landowner, but by the first Petroleum Law of 1920 all property rights were firmly set in the hands of the national power (Manzano & Monaldi, 2009).

21 Article 12 of the 1999 Constitution states: “mineral and hydrocarbon deposits of any nature that exist within the territory of the nation, beneath the territorial sea bed, within the exclusive economic zone and on the continental shelf, are the property of the Republic, are of public domain, and therefore inalienable and not transferable.”
2001 Hydrocarbons Law gives full operational control over oil production to PDVSA and the private participation in oil primary activities is possible only through joint-ventures with a state-equity participation of “more than 50%.”

States and municipalities have no jurisdiction over the assignment of oil fields to operation by PDVSA or the joint ventures. It is firmly under the jurisdiction of the National Executive through the Ministry of Energy and Oil and when necessary with the approval of the National Assembly.

Before the current legal regime was set in place in 1999-2001, contracts for private operation of oil fields were signed in the 1990s. The two most relevant were the service contracts and the privately controlled strategic joint ventures for the exploitation and upgrading of the extra-heavy oil in the Orinoco Belt. By 2004 these operations produced 45% of the country’s production. These contracts were cancelled and nationalized in 2006-2007. Almost all contracts migrated to the new joint-ventures determined by the 2001 Law, and just a few were assumed fully by PDVSA. The joint ventures created from this migration process are controlled by PDVSA with at stake of at least 60%. The natural gas activities are not reserved to the State and there are private operators exploiting non-associated gas licenses. Hydrocarbon refining and distribution are not reserved to the State, but in practice there are no private refiners because the domestic price of products is well below market prices.

According to the constitution, only the national government can tax revenues from oil production (art. 156). States and municipalities cannot tax oil activities. However, municipalities can tax contractors to the oil industry as any other commercial activity. The extent and significance of the municipal taxation to oil contractors cannot be accurately assessed due to the lack of detailed data at the municipal level.

---

22 The entitlement process for a joint venture involves: 1) A decree by the National Executive assigning the area where activities will be performed and a decree granting the right to carry out extractive activities. 2) A granting contract subject to certain minimum conditions. 3) Approval by the National Assembly. The minimum conditions for the granting contract are: 1) a 25-year limit, renewable for a maximum of 15 years. 2) Description of the location and extension of the area. 3) Reversion of assets and land to the nation.

23 The 2001 Hydrocarbons Law generally does not apply to the Natural Gas sector, which has a separate law (approved in 1999), but has implications for the natural gas associated to oil. There are a few off-shore exploration projects, which have found relevant reserves, and could enter production soon. However, the legal uncertainties in the sector make them very risky ventures.

24 “Is the jurisdiction of the National Public Power... (12) The creation, organization, collection, administration and control of taxes on income,...hydrocarbons and mines, duties on the importing and exporting of products and services...and any other taxes... not expressly assigned by this Constitution and the law to the States and Municipalities.”

25 In practice, this implied that municipalities started taxing the operators of the operational service contracts approved in the 1990s. They were able to get around the prohibition of taxing oil production because the contracts defined the operators as simple contractors in order to avoid having to change the Nationalization Law of 1975. With the migration to joint ventures under the 2001 Law, municipalities cannot tax these new joint ventures. This issue has been a source of conflict since a few municipalities lost an important source of revenue.

26 There is wide variation in the percentage of own-collected revenues among oil producing municipalities. From the available data it is not possible to distinguish between tax revenues from oil contractors and revenues from other activities. However, from personal communications we conclude that the contractor’s revenues are quite significant for some oil municipalities. Particularly, given that they cannot directly tax oil production which is typically their largest economic activity.
Recent debates over oil policy

Given the importance of oil production in the Venezuelan economy it has always been a salient issue in the political debate. In recent decades the more significant points of contention have been: the proper use of the recent oil windfall, the role of private operators in oil production, the proper relationship between PDVSA and the state, the debate over oil strategy with respect to the level of production and government-take, and the related issue of the role of Venezuela in OPEC.

In comparison with other federal oil producers the salience of issues relating to the taxation and distribution of oil rents among regions has been remarkably limited. Only during the 1990s, when decentralization was at its high point and governors had significant influence over the national policymaking, the distribution of oil rents to the regions became a relevant political issue, leading to the approval of a law (LAEE, see section 4) which provided some additional distribution of oil revenues to the oil producing states. However, in order to pass it through the legislature, non-oil producing states also received a portion. Since production is concentrated in only two states; it is quite difficult to construct a majority in favor of more federalism in the taxation or distribution of oil revenues.  

After the oil opening of the 1990s, President Chavez imposed a dramatic change in oil policy and in the structure of the oil sector. His push towards getting political control over the national oil company, PDVSA, led to an oil strike in which he fired 18,000 managers and workers, almost half of the workforce (in 2003). After taking complete control over the company he transformed it into a completely different organization in charge of implementing social programs and development policy. He eliminated its autonomy and took discretionary control over all its revenues. Until 2004, the government respected contracts with private operators but starting in 2005, taking advantage of the favorable oil market conditions, the government initiated an offensive to renegotiate the contracts of the oil opening and take a majority stake in all oil joint ventures.

Who regulates the oil industry?

The Ministry of Energy and Oil is in charge of oil policy formulation, assigning oil fields, collecting the oil royalties and setting product prices. In the 1990s PDVSA had assumed some of the roles of regulator due to the weak technical capacity of the ministry. The NOC had become an independent powerful political actor. Chavez campaigned against this situation arguing that PDVSA had become “a state within the state.”

During the Chavez administration, the president’s direct control over PDVSA has translated into a discretionary use of its financial resources for government spending.  

27 Only in the oil rich and otherwise economically powerful Zulia state an insignificant political group has promoted separatism, but mainstream politicians from all political parties have distanced themselves from this idea. It is worthwhile to mention that during the 10 years of Chavez’s rule this state has been one of the few opposition strongholds, which is relevant given Chavez move to recentralization. In addition, the opposition’s presidential candidate in 2006 was the governor of Zulia, whose main campaign proposal was distributing a share of oil revenues directly to every citizen, but not to the oil producing states.

28 PDVSA was created in 1976 with oil nationalization. It was structured to have significant operational and financial autonomy. In 2002-2003 the conflicts between President Chavez and PDVSA, as part of the
Moreover, the Ministry and PDVSA have almost fused into one entity, guaranteeing the political control over the company’s management. In addition, the minister is also the president of the company, and many company directors and top managers are also in top ministry positions.\footnote{29}

Since 2003, the company has become one of the main mechanisms for rent distribution, openly aligned with the government and the president’s party, implementing social policy and serving as a source of patronage and political mobilization.\footnote{30} Besides an oil company, it is in charge of other activities including: food distribution, electricity, infrastructure, residential construction, manufacturing, and logistics. PDVSA implements some of these programs directly from its operating budget and others are funded with the resources it provides to a discretionary fund controlled by the executive (FONDEN, see section 4).

4. Petroleum revenue arrangements in context of federal fiscal regime

The tax regime of the oil industry has three main components: the royalty, the income tax, and the windfall special contribution.\footnote{31} The regime foundation is a 30% royalty over revenues.\footnote{32} There also exists an exploitation tax that in practice increases the royalty to 33.33%.\footnote{33} Non-associated natural gas production pays a 20% royalty. The income tax rate for oil production is 50%, which is higher than the non-oil corporate tax rate which is set at 34%. Non-associated natural gas pays the regular 34% income tax rate.\footnote{34} Royalties and the income tax go to the National Budget, states or municipalities cannot charge royalties or taxes on oil production.\footnote{35}

A windfall special contribution was approved in 2008. It operates as a surcharge royalty for revenues above a cutoff price.\footnote{36} The windfall contribution has a very relevant effect...
on the federal revenue sharing system, because it can be discounted from the income tax as any other royalty, but contrary to the regular royalties it does not count for the constitutional revenue sharing formula. As a result, this mechanism implies that the national government appropriates most of an oil windfall without redistributing to the states. The windfall contribution, goes to the off budget fund: FONDEN.

The main source of funding for states and municipalities is the National Budget, through the revenue sharing mechanisms discussed below. Budget revenues are classified as ordinary or extraordinary. Ordinary revenues come from taxation of oil and other mineral activities and the non oil tax collection. Extraordinary revenues come basically from domestic or international debt. In the decade from 1997 to 2007, nearly 80% of the National Budget executed (actually spent at the end of each year) came from ordinary revenues, of which close to 50% came from the oil sector. Of those oil fiscal revenues, 58% were collected from Royalties and 28% from the Oil Income Tax. The non-oil half of ordinary revenues came mainly from the Value Added Tax (45%), followed by the non-oil Income Tax (21%), Customs (11%), and the rest from a variety of taxes and others legal instruments. For example, in 2007, ordinary revenues were US$ 66 billion, of which 51% came from oil activities.

In addition to the National Budget that is approved and supervised by the national legislature, an increasingly significant proportion of the oil revenues controlled by the government are channeled and spent through off-budget mechanisms. Expenditures using these mechanisms do not require legislative approval or supervision. This issue is extremely relevant for the sub national authorities, because off-budget revenues are not used for the calculation of revenue sharing. So if the executive is able to move revenues out of the National Budget it benefits at the expense of states and municipalities. In the period 2003-2008, the off budget oil revenues have been the equivalent of 19% of the budget’s ordinary revenues and 14% of the sum of ordinary revenues and off budget oil revenues. The off budget oil revenues have dramatically increased from the equivalent of 1% of ordinary revenues in 2003 to 42% in 2006.

Table 2: Off Budget Expenditures by PDVSA as a percentage of the company’s net income (before deducting taxes, royalties, and off budget expenditures)

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Programs</td>
<td>2%</td>
<td>6%</td>
<td>21%</td>
<td>34%</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>FONDEN</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>14%</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2%</strong></td>
<td><strong>6%</strong></td>
<td><strong>21%</strong></td>
<td><strong>34%</strong></td>
<td><strong>30%</strong></td>
<td><strong>28%</strong></td>
</tr>
</tbody>
</table>


In addition to the oil off-budget revenues, the government has implemented two other less significant strategies to reduce the revenue sharing with the states and municipalities. The first is the transfer of some of the sub national revenue sharing to a new entity: the Communal Councils. The second strategy is the underestimation of the budget presented to the legislature, which will be discussed below.

---

windfall tax for the first time created some progressivity in the tax structure for prices above US$ 70, i.e. the government-take on profits increases as the price increases. For prices below US$ 70 the tax regime keeps being highly regressive, with a marginal rate of 67% for all price levels below that trigger price.
Off-Budget Revenues

The oil industry contributes off budget to government projects through two mechanisms. One is the National Development Fund (FONDEN), a discretionary fund that finances development projects and it is controlled by the President. The fund resources come from the oil windfall contribution paid by PDVSA (and the joint-ventures with private partners) and any additional transfer that the executive demands directly from PDVSA.\textsuperscript{37} In addition, the FONDEN gets funding from the central bank’s international reserves (when they exceed a certain legally set level considered “sufficient”). The amount paid by PDVSA has been highly discretionary and does not follow a predictable rule (except for the part that comes from the windfall contribution that started in 2008).\textsuperscript{38}

Table 3: PDVSA Income and Government-Take, 2008
(Billion US$)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Revenues</strong></td>
<td>126.4</td>
</tr>
<tr>
<td>Oil and products bought for resale</td>
<td>40.2</td>
</tr>
<tr>
<td>Revenues from own production</td>
<td>86.2</td>
</tr>
<tr>
<td>Costs and expenses</td>
<td>34.1</td>
</tr>
<tr>
<td><strong>Net Income before deducting the government take</strong></td>
<td>52.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Government-Take</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Off budget expenditures</td>
<td>14.7</td>
</tr>
<tr>
<td>Royalties and other oil taxes</td>
<td>23.4</td>
</tr>
<tr>
<td>Oil income tax</td>
<td>9.3</td>
</tr>
<tr>
<td><strong>Total Government Take over net income (%)</strong></td>
<td>91%</td>
</tr>
</tbody>
</table>


The second off-budget mechanism that has been increasingly used by the Chavez administration is to make the national oil company, PDVSA, directly spend on social

\textsuperscript{38} Even thought PDVSA started contributing to FONDEN in 2005, the 2008 PDVSA management report only shows contributions since 2007; dividing among 2007 and 2008 the contribution accumulated from 2005 until 2008. In the period 2007-2008, the total payments to FONDEN by PDVSA have been on average US$ 9.5 billion a year, which has represented 19% of PDVSA earnings, before royalties, taxes and off budget payments.
and infrastructure programs. These programs include: food production and subsidized food distribution, investments in electricity, investments in transportation infrastructure and housing, social and educational programs, among others. Before 2003 PDVSA’s non-oil social and infrastructure expenditures were very small. Since these expenditures are treated as a cost for tax purposes, the income tax payments of PDVSA are reduced proportionally and as a result the revenue sharing transfers to sub national governments are similarly diminished. The total off budget expenditures of PDVSA, including FONDEN and direct social expenditures amounted to the very significant total of US$66.2 billion in 2003-2008. As can be seen in Table 2, the relative size of off budget expenditures from oil increased dramatically during the oil boom, as a result the National Executive benefited disproportionally. In the last three years, the total oil off budget contributions has been, on average, the equivalent to 31% of PDVSA net income before deducting royalties, taxes, and off budget expenditures. Table 3 shows the net income of PDVSA in 2008 (after deducting oil bought for resale and costs and expenses) was US$52 billion. Payments of royalties and other minor oil taxes represented 45% of such net income, the oil income tax represented 18%, and off budget expenditures 28%. The total government take represented 91% of the net income of the company, leaving the company little for investment. The excessive use of off budget expenditures has been a leading cause of the lack of investment and consequent oil production decline in the last few years. Moreover, a significant portion of PDVSA’s investment is going to non-oil activities such as electricity and food distribution.

**Budget Underestimation**

It has been a common practice to underestimate the budget amount approved in the Budget Law. The amount actually spent has been significantly higher than the one budgeted. Since revenue sharing is based on the budget approved, additions to the budget take time to be transferred (usually in the last quarter of the year) and the rules to transfer the additions are not well defined. This underestimation is beneficial to the Central Government and makes more difficult planning at the sub national level. This is especially true when there are high levels of inflation as those that have prevailed in the last few years (above 20%). For example, in 2008 the National Assembly approved more than US$17 billion in budget additions, an amount 27% higher than the amount approved in the original budget.

**Other PDVSA Subsidies**

Another mechanism that reduces the potential amount of resources for revenue sharing is the gasoline and oil products subsidy in the domestic market, which represents a loss for PDVSA resulting in a lower oil income tax. If instead this subsidy was paid by the national treasury, oil revenues and revenues and revenue sharing would be higher. This implies that the sub national governments indirectly pay part of the subsidy. The gasoline price has been set for years at about US$ 8 per barrel, below production and distribution costs, and well below opportunity costs. Similarly, the less onerous

---

39 The key factor to underestimate the budget is the oil price assumption. For 2008, it was assumed at US$ 35 a barrel, compared against a yearly average of US$ 90. Even though it is difficult to predict the future price of oil, it is clear that no one in the government believed in such conservative estimate.

40 A similar behavior was observed in 2007, when the total amount of the budget additions was 24% higher than the amount originally approved (US$ 13 billion). In 2006, the additions were 47% above the original budget (equivalent to US$ 19 billion in additions).
subsidized sale of oil and products to allied countries in the Caribbean and Central America has the same effect.

**Revenue sharing and sub national sources of revenues**

In Venezuela states have very limited and residual revenue collection authority and have no borrowing authority. They cannot levy any taxes and as a result they strongly depend on the federal budget; thus, the country has one of the largest vertical imbalances among federations. According to the 1999 Constitution, the states can only raise revenues from “their property and the management of their assets.” Their budgets may come from: “(1) payments for the use of their goods and services, fines, and penalties; (2) proceeds from the sale of state owned commodities; and (3) the resources to which they are entitled by virtue of constitutional revenue share.” Municipalities have some limited tax authority, but with a few exceptions in rich cities, they typically also depend on the federal budget. The most important sources of municipal revenues are property taxes (urban real state) and industrial and commercial revenues. States and municipalities cannot tax oil activities. The only exception is that the joint-venture oil contracts establish a contribution of 2.22% of the total revenues that has to be paid to the municipality in which it operates and 1.11% has to be used to finance local development projects (these contributions are deductible from the exploitation tax). On the other hand, municipalities can tax non-oil contractors to the oil industry as any other commercial activity.

Sub-national governments obtain fiscal revenues indirectly through three revenue sharing mechanisms: 1) Constitutional Revenue Sharing (Situado Constitucional), 2) Special Allocations Law, which are related to oil production (LAEE), and 3) Intergovernmental Decentralization Fund (FIDES). In addition some states which have assumed some concurrent jurisdiction services such as health and education, receive some special contributions to cover such expenses.

The Constitutional Revenue Sharing represents 20% of the National Budget ordinary revenues. It is distributed 70% according to population and 30% equally among constituent units. The states receive 80% and municipalities 20%. Until 1994 this was the basic form of revenue sharing. With political decentralization in the 1990s states were able to push for two additional mechanisms of revenue sharing.

Starting in 1997, the LAEE redistributes 25% of the oil royalties to the states (deducting the Constitutional Revenue Sharing coming from those same royalties).

In practice it is 12.5% because the Oil Law of 2001 sets the royalty rate for the calculation of LAEE at 16.67% (as was before 2001), instead of the 33.33% that PDVSA and the joint ventures pay (Niculescu and Moreno, 2007).

The approval of this Law reflected the peak influence of the governors in the

---

41 Municipalities started taxing the operators of the service contracts approved in the 1990s, but with the migration of this legal figure to oil joint ventures, under the new contracts, the activity cannot be taxed by municipalities. This issue has been a source of conflict since some municipalities lost an important source of revenue. The implication is that municipalities are benefited when PDVSA or the joint-ventures outsource oil activities, and suffer when they do it in house.

42 In practice it is 12.5% because the Oil Law of 2001 sets the royalty rate for the calculation of LAEE at 16.67% (as was before 2001), instead of the 33.33% that PDVSA and the joint ventures pay (Niculescu and Moreno, 2007).

43 The 70% distributed to oil producing states according to: the level of oil production (70%), population (20%), territory size (5%), and refining (5%). The 30% to non-oil states according to: population (90%), territory (5%), and refining (5%).
national policymaking. In contrast, recently the government reformed the law to establish that the Communal Councils would get 30% of the resources from LAEE.

From the point of view of oil and federalism the approval of this law was very significant because for the first time oil producing regions benefited more than the rest from oil production. The two largest oil producing states Zulia and Monagas get about 60% of the revenues distributed (having 85% of the production).

Started 1996, FIDES has been a fund to finance investment projects in the regions. It is funded with 15% of the VAT collection. It represents about 3% of the ordinary revenues in the National Budget. The disbursement requires the approval of an investment project by a national agency, making it highly discretionary. The approval of this fund also exemplified the influence of governors in the legislative process, because the weak government of Caldera had to approve this revenue sharing in order to pass the VAT law.

In sum, according to the Constitution and the laws about 24% of the ordinary revenues are distributed automatically by formula and 3% with some discretion, for a total of 27% going to sub national governments. There are other additional transfers to specific states that have taken control over health and educational services on a negotiated framework (again these negotiations occurred in the 1990s).

Federal revenue sharing has been the main source of sub national expenditures. In the period 1998-2007, on average 90% of all sub national revenues were funded by federal transfers. Nevertheless, there are significant differences between states and municipalities in terms of vertical imbalance. Since the states cannot tax and have few sources of revenue, they fully depend on federal transfers. Only 2% of the states’ revenues came from own sources in 2003-2007. 98% came from the National level. Of the total federal transfers to states, 60% came from Constitutional Revenue Sharing, 11% from LAEE, 7% from FIDES, and the remainder from health and education transfers. In contrast, municipal governments do have significant sources of own revenue. In 2003-2007 almost half of the municipal revenues (47% on average) came from own sources.

5. Macro-economic challenges

Given the relative size of the oil sector in terms of exports, fiscal revenues and GDP, it should be expected that the macroeconomic challenges arising from the fluctuations of oil prices are significant. Figure 2 tells the basic story; it shows that fiscal revenues follow very closely oil exports, as expected. Yet, it also shows how fiscal expenditures

44 Heavy reliance of sub national governments on revenue sharing can create a wedge between local spending and local resources, and between benefits of government programs and the cost to local taxpayers, which may generate moral hazard. Moreover, the use of transfers might reduce accountability in expenditure management at the regional and local level of government.

45 There are huge differences in the percentage of own revenues generated by different municipalities. There are rich municipalities like Chacao (eastern part of Caracas) were 90% of expenditures are generated by own revenues. On the other extreme there are many poor municipalities were more than 90% of expenditures come from federal transfers. Among the oil municipalities there is also significant variation. There are rich oil municipalities in which a large proportion of expenditures come from own sources (Maracaibo, Maturin), while most others depend on federal transfers.
follow fiscal income. Therefore, there seems to be little or no fiscal smoothing. Expenditures are highly pro-cyclical.

**Figure 2: Oil Exports and Fiscal Performance**

Source: Budget Office of Venezuela (ONAPRE), Statistics Institute of Venezuela (INE), Central Bank of Venezuela (BCV) and International Monetary Fund (IMF).

Some studies have found a large elasticity of fiscal expenditure to oil exports. The consequent volatility of fiscal expenditure has had an important effect on macroeconomic activity. Different studies have also found that oil shocks have important effects on economic volatility. As Manzano (2002) argues, the “average” shock in Venezuela has a magnitude of 3.7% of GDP. In other words, in any given year GDP would on average contract or expand around trend by 3.7%. This volatility is also transmitted to sub national finances, given their dependency on federal revenues.

In the past, there have been some unsuccessful attempts to stabilize fiscal expenditures. In the middle of the boom in the seventies, the government created the Venezuelan Investment Fund (FIV), to which significant off budget resources were channeled. However, instead of sterilizing the windfall, the FIV ended up investing in Venezuela during the boom. It helped to create a set of energy-intensive industries, in a strategy to diversify from oil. These investments did not help to reduce volatility. 

---

46 See Videgaray (1998) and Bozzari and Rincon (2003). Videgaray did a panel of oil producer countries and found that Venezuela has one of the highest elasticities. Similarly, Bozzari and Rincon repeated Videgaray’s work with Venezuelan time series and found a similar elasticity. Furthermore, they found that the elasticity changed with different types of expenditure, capital expenditures being the more volatile.

47 Mendez (2007) uses a Bayesian VAR’s to estimate the impact of different exogenous shocks. Oil shocks explain 32% of GDP fluctuations and last 8 years.

48 Between 1972 and 1981, Venezuela exports went from US$ 3.2 billion to US$ 20.1 billion. In the period the government, either through direct capital transfers or through “financial acquisitions”, transferred US$ 30.5 billion to public sector enterprises. This was done mostly using the FIV, though as public enterprises became institutionalized the transfer went directly to them. Consequently, between 1972 and 1981, the FIV had only saved US$ 2.5 billion in the Central Bank.

49 Furthermore, most of these firms ended up being extremely inefficient and a source of recurrent expenditure for the central government. With the market oriented reforms of 1989, the FIV was then put in charge of selling states assets.
Later, in the late 1990’s a stabilization fund, the FIEM, was created during a period of low prices. The original design was relatively orthodox, with clear saving and spending rules, but quickly it was modified by the Chavez administration, making it less optimal and more discretionary. The FIEM was supposed to smooth fiscal expenditures both at the central and sub national levels, but it did not serve this purpose. In fact, it seems to have introduced more macroeconomic volatility. In fact, it was used as an instrument to control the regions, because the executive got discretion over the disbursement of funds saved by the states. The FIEM was made useless by the constant changes to its rules. Essentially, with the approval of each new budget law, a new change in the fund was approved. Therefore, the FIEM basically became inoperative to the point that from 2006 to 2008, in spite of the very high oil prices, there were practically no additional savings on it.

An additional difficulty for fiscal management is the significant rigidity in the formal budget. In fact, this is one of the reasons why the government has recently focused on setting as many revenues as possible off the formal budget. An important proportion of the public budget in Venezuela is made of legal entitlements and legal earmarks for specific purposes, including the sub national revenue sharing described before. Alone, revenue sharing to sub national governments represents about 27% of the ordinary budget. In addition, there are other components of rigidity given by salaries and debt service. Puente (2005) estimated that more than 50% of the ordinary budget is highly inflexible, thus about half of this rigidity is due to revenue sharing. These rigidities impose a considerable constraint on the central government’s overall fiscal effort.

As explained before, regional governments are not allowed to raise revenue from taxes, combined with the high fiscal dependence on oil revenues controlled by the central government, this has resulted in a very large vertical imbalance. Therefore, the flip side of the rigidities introduced by inflexible revenue sharing combined with the lack of effective fiscal stabilization mechanisms and the prohibition to sub national borrowing; is the transmission of fiscal volatility to the sub national finances.

The origin of the fiscal rigidities is rooted in the political economy of fiscal policy in the 1990s which was characterized by the capture of rents from the “common pool” of oil and other central revenues by pressure groups and regional governments. These actors were able to lock-in their shares through legal entitlements. The weakness of the executive and the fragmentation of the party system provided the appropriate scenario for this highly suboptimal arrangement to take place.

---

50 Formally, Clemente et al (2002), using a general equilibrium model, found that the FIEM did not perform well in reducing volatility. Actually, the FIEM increased the volatility of most macroeconomic variables.  
51 In fact, the initial reform set a very low oil price as the trigger for the government to save. Therefore, the government, including the sub national levels, was forced to save in the fund when oil prices were low. Since the government had expenditure commitments it had to issue new debt to fulfill these commitments. Therefore, the government was getting indebted in order to save in the fund. The political economy rationale of this highly suboptimal arrangement was that it gave the executive more discretion over the use of resources.  
52 According to Central Bank figures, in December 2005 there were US$ 732 million on the FIEM. In December 2008 there were 828 million. To put this numbers in perspective, oil exports were US$ 39 billion in 2005 and US$ 87 billion in 2008.  
53 Other entitlements and earmarks include: the severance payment fund 1% of the ordinary budget, the Judicial Branch 2%, Social Security Fund 1.5 % of salaries in the public administration (Puente, 2005).  
54 Even though these latter two expenditure items are not officially legal entitlements, they are contractually and politically very costly to modify.
for this to happen. Under political pressure, based in part on widespread expectations about future oil revenues and on the increased power of governors and mayors in the national policymaking process, the authorities ignored reasonable standards for revenue sharing, and assigned them to states without adequate capacity, whilst the transfer of responsibilities to sub-national governments lagged far behind the transfer of revenues. In addition, earmarking has reduced the budgetary flexibility of the central government, locking-in spending increases during oil windfalls and forcing drastic cuts in operating expenditures during downswings.

The efforts to channel the oil windfall through off-budget vehicles and the attempts to increase central control of revenue sharing resources, can be understood then partly as a consequence of the excessive budget rigidities introduced during the previous decade. Any reasonable government in search of fiscal health should have attempted to provide some flexibility in the budget, save a large portion of the windfall, and introduce some order in the decentralization process. However, the institutional changes introduced by President Chavez have very different implications. No effective stabilization mechanism has been created. In fact FONDEN is repeating the mistakes made in the seventies with the FIV. Federalism is being significantly weakened and the off-budget resources are managed with very low levels of transparency and accountability (see below).

In terms of the direct impact from the oil industry activity on the regional economies, there is some recent research. A study using a general equilibrium model found a high multiplier effect. Nevertheless, recent research done using industrial surveys and local data has found some negative macroeconomic effects. Fuenmayor and Rivero (2002), using state level data, found that oil production increases have a negative effect on manufacturing firms by increasing the average wage of workers in the state. Also, Figueira and Padua (2004) found that local oil production swings are associated with credit booms and crunches and Suju and Velasco (2007) found that those booms and crunches affect investment decisions by manufacturing firms.

6. Environmental and Social Issues

The oil activity generates important social and environmental impacts, nevertheless, this is one of weakest points in the Venezuelan institutional setting. Firstly, Venezuela in general has poor environmental regulations. According to the World Economic Forum (2009), Venezuela ranks 91 out 130 countries in environmental sustainability. Looking at the components of this measure, Venezuela ranks 90th in terms of stringency of environmental regulation and 99th in the enforcement of that regulation. Policy decisions regarding the environment are generally centralized at the national level. States do not have the authority to regulate environmental issues. Also, there are no requirements on public consultations, nor special rights are given to groups such as indigenous people.

55 As explained before this situation was partially a result of the political decentralization reforms that weakened and fragmented national parties (Monaldi et al., 2007).
56 Peraza (1999)
57 There is an important concession though; indigenous people have 3 members in parliament, which do not affect the total number of legislators in the regions where they live.
There are few formal studies about the environmental impact of the sector. However, there is ample anecdotal evidence on its adverse effects. In particular, it is well known that the Maracaibo Lake has suffered significant ecological damage due to the effects of oil activity. This is mostly due to the fact that the initial oil activity took place here, before there were any environmental considerations. Furthermore, there have been conflicts between the local fishing communities and a Petrochemical plant on the lake. The public in producing regions feel shut out of decision-making.

Climate change is not a relevant part of the policy debate in Venezuela. Venezuela ratified the Kyoto Protocol only in 2004. After that, there has been no consequent change to the environmental regulation that takes this into account. Therefore, this issue is not part of the debate between the states and the central government.

Some of the classic novels of the Venezuelan literature deal with the problematic impact of oil activity. Nevertheless, there is little formal research. Recently, the availability of household surveys has allowed inquiring about the social impact of the sector. In particular Balducci (2003) and Badiola and Esquivar (2007) explore the effect of the oil sector on human capital accumulation. They find that increases in oil production reduce the secondary enrollment of municipalities that produce oil. This result is coherent with findings elsewhere in the literature on resource booms. Nevertheless, Balducci finds a weak effect of oil investment in primary enrollment. This might suggest that households realize that in order to work for the oil sector, some minimum level of human capital is needed and when they see investment in the sector, they prepare themselves.

In addition to these problems, there is little than the local governments can do, since all the decisions are made at the federal level. Only with the oil opening investments in the nineties, was there a concern with the impact of the expansion of the sector in the east of the country, since most of the new production came from this zone. A unit inside PDVSA was created to deal with social and environmental impact in local communities. This established a dialogue with the governors and mayors of the impacted areas to discuss strategies for local development. However, there were no formal procedures and all the decisions were at the end made by the central government.

7. Transparency and Accountability

The Venezuelan government and PDVSA have very low levels of transparency and accountability in the management of oil resources, according to studies by international

58 The oil industry has a very reputed research center caller INTEVEP (the initials for Venezuelan Institute of Oil Technology). This center produced important research on the environmental impact on the oil sector. However, most of it was geared towards reducing the environmental impact of the industry. Therefore, there is no formal study of the past effects of the sector.

59 These books presented the social issues around oil fields, where foreigners were living in camps “protected” from local communities, and all the conflicts and issues between them. Romulo Gallegos in Sobre la misma tierra (1943), also mention ethnic issues with the Guajirios. Furthermore, Miguel Otero Silva in his first book on the issue (Casas Muertas, 1955) also deals with the issue of the traditional agricultural communities that saw most of its population gone to oil producing areas.

60 The significance for the coefficient does not survive all the specifications she tested.

61 Anecdotic evidence from newspapers suggests that this entity became a place where governors and mayors went to lobby to attract projects for their regions. There were accusations that this unit was used for political purposes. However, there was not any formal court decision supporting this argument.
NGOs and multilaterals.\textsuperscript{62} In particular, the level of transparency and accountability in the budgetary process, and fundamentally in the allocation of the oil income, is very limited.\textsuperscript{63}

The Open Budget Index (OBI) \textsuperscript{2008}, measures the overall commitment of 85 countries to transparency and allows for comparisons among countries.\textsuperscript{64} The overall score of Venezuela is 35\%, ranking 52 out of 85 countries. Venezuela’s score shows that the government provides the public with minimal information on the government’s budget and financial activities throughout the budget year, making it difficult for the citizens to hold the government accountable. The index evaluates the quantity and type of information that governments make available to their publics in the eight key budget documents that should be issued during the budget year.

One of the most important documents is the Executive’s budget proposal. It should contain the Executive’s plans for the upcoming year along with the cost of the proposed activities. In Venezuela, the proposal provides some information to the public. However, the pre-budget statement is not published and the citizen’s budget is not produced, meaning citizens do not have a comprehensive picture of the government’s plans for taxation and spending for the upcoming year. Moreover, it is difficult to track spending, revenue collection and borrowing during the year. Although reports of revenue collections, including oil revenues are released for the current year, Venezuela does not publish detailed mid-year reviews. Publishing these documents would greatly strengthen public accountability, since they provide updates on how the budget is being implemented during the year.

It is also difficult to assess budget performance in Venezuela once the budget year is over. A year-end report is produced, allowing comparisons between what was budgeted and what was actually spent and collected, but it lacks some important details. Although Venezuela makes its audit report public, no information is provided on whether the audit report’s recommendations are successfully implemented. Access to the highly-detailed budget information needed to understand the government’s progress in undertaking a specific project or activity remains limited (OBI, 2008)

Likewise, in general the legislature does not hold hearings on the budget in which the public can participate. The independence of Venezuela’s audit office is somewhat limited. The Comptroller General does not have complete discretion to decide which audits to undertake. For instance, the comptroller cannot audit off-budget funds such as Fonden, Fondespa and Fondo Miranda. In addition, the audit office faces important budget and staffing constraints.

\textsuperscript{64} This index is composed of 123 questions that cover the four phases of budget development—formulation, legislative approval, implementation, and audit—and help researchers evaluate the information that should be available in each phase and the other measures needed for effective legislative oversight and auditing of budgets. The Open Budget Index is based on calculating the averages of the responses to the 91 questions that evaluate public access to budget information. The remaining 32 questions on the Survey include information about opportunities for public participation in the budget process, legislative oversight, and independent auditing (OBI, 2008).
The Open Budget Index 2008 confirms also that countries that are dependent on oil and gas revenues tend to be less transparent and accountable. Lack of budget transparency is particularly serious in the 21 oil and gas producing countries. Their average score is 23%, which compares very poorly with both the overall average OBI score of 39% and with the average score of 44% for countries that depend on mineral resource revenues.

However, it is important to mention that the OBI results show that performance varies significantly, even among oil and gas producing countries. For example, Colombia, Norway, and Mexico all perform fairly strongly. This result supports suggestions that falling victim to the “resource curse” is not necessarily an inevitable consequence of hydrocarbon wealth.

Additionally, according to another study by Transparency International (TI, 2006), around two thirds of oil companies worldwide have middle or low revenue transparency. PDVSA is in the low transparency group, characterized by “relatively absent disclosure of payments and anti-corruption programs, in terms of policy, management or performance”. Among the eleven international oil companies evaluated operating in Venezuela, seven (64%) perform above the country average in this study.65

8. Conclusions

In the case of Venezuela oil has been a powerful tool to centralize power at the national level and limit the role of regional actors. Federalism was weakened and centralized in Venezuela earlier and more radically than in any of the other federal countries in the region (Argentina, Brazil, and Mexico). The centralizing bargain exchanging authority for resources was initiated in the late nineteenth century and consolidated by the fierce dictatorship of Juan Vicente Gomez (1909-1935). By the time oil wealth became a significant source of fiscal revenues in the 1920s centralization was complete and the concentration of oil revenues in the hands of the federal government reinforced the power of the national executive. Revenue sharing persisted but with little influence of the regional leadership in the definition of policies.

Oil being the largest source of exports and fiscal revenue for almost a century now, it has shaped the type of state that has developed, one in which the power of the purse at the federal level skewed all regimes, authoritarian and democratic, party centered and president centered, towards centralization. The lack of any significant ethno linguistic or religious cleavages also helped to avoid the regional conflicts that have plagued other oil federations. Regional oil wealth has not been necessarily correlated with high

65 The high-transparency group is characterized by disclosure of revenues, providing information about regulatory structure, and disclosure of anti-corruption programs and policies. National Oil Companies in the high transparency group are: China National Offshore Corporation (China), ONGC (India), PEMEX (Mexico), Petrobras (Brazil), PetroChina (China), Sinopec (China) and Statoil Hydro (Norway). The companies that make up the middle group are: Gazprom (Russia), KazMunaiGaz (Kazakhstan), National Iranian Oil Company (Iran), Nigerian National Petroleum Company (Nigeria), Petronas (Malaysia), Qatar Petroleum (Qatar), Rosneft (Russia), Sonatrach (Algeria). While the low transparency group is comprised of China National Petroleum Corporation (China), GEPetrol (Guinea Ecuatorial), Kuwait Petroleum Corporation (Kuwait), Pertamina (Indonesia), PDVSA (Venezuela), Nationale es Pétroles du Congo (Congo) and Sonangol (Angola).
income per capita in the oil extracting regions. In fact, there is evidence of some negative economic and social effects on the oil producing areas.

Democracy was established in 1959 and even though revenue sharing was increased, federalism was very limited by the lack of regional elections and an institutional framework favoring strong centralized parties (limiting the powers of the president). It was not until the economic and subsequent political crises of the 1980s and 1990s, when oil prices declined, that political reforms were implemented to decentralize power. The key reform was the popular election of governors and mayors in 1989. Economic decline and the weakening of the national party leaders brought up a period of relatively weak presidents and increasingly powerful governors. The regional leaders’ influence peaked in the mid nineties with the approval of two additional revenue sharing mechanisms, one of which was based on oil royalties. Decentralization advanced with some positive results, but macroeconomic management and governance were more chaotic. Fiscal management became more rigid as a result of inflexible revenue sharing, earmarks, and entitlements.

Venezuelan federalism has been characterized by some significant expenditure decentralization, above the regional average, but with a very high vertical imbalance. States have very limited powers of revenue collection and no borrowing authority. This institutional framework, characterized by the existence of a large common pool of oil revenues, introduces problems of moral hazard and transmits the fiscal volatility of the federal government to the regions. Despite these structural problems, Venezuela’s limited federalism has avoided the macroeconomic crises prompted by unruly provincial governments, as have occurred in Argentina and Brazil.

The rise to power of President Chavez was in part a reaction to the decline in governance in the nineties.66 The new Constitution of 1999, though still formally federal, centralized power in the president and weakened federalism. To a certain extent, the 1999 Constitution had provisions aimed at restoring governance and macroeconomic stability. However, many of those provisions were never implemented and instead a relentless drive to concentrate power in the hands of the president ensued. One key aspect of this power grab was the success in obtaining full political control of the formerly autonomous national oil company, PDVSA. The company is now a mix between a development corporation and partisan patronage tool.

The control of PDVSA and the legislature allowed for the approval of a variety of mechanisms that channel oil resources out of the formal budget and can be discretionarily controlled by the president. As a result, the regional governments have received significantly less of the oil boom through revenue sharing than they would have with the previous legal framework. Even thought, these off budget mechanism are useful at reducing the excessive fiscal rigidities introduced in the 1990s; their use lacks democratic accountability and transparency. Moreover, instead of promoting macroeconomic stability, they have hindered it by introducing highly pro cyclical discretionary expenditures. In fact, the more sensible, macroeconomic stabilization fund has been deactivated.

66 The decline in governance, in turn, was largely the result of the steep economic decline in 1978-1998, prompted by the fall in oil revenues; and the institutional reforms that weakened the party system.
Recentralization has been also aimed at reducing the remaining opposition strongholds on some states and mayoralties. Infrastructure and some health and police services have been recentralized. Moreover, the creation of centrally controlled Communal Councils and the appointment of some presidentially designated regional authorities have further weakened the federal structure. The institutional reforms implemented in the last decade constitute a threat to the limited federal elements present in the political structure and risk a breakdown of democratic governance.
References


Gallegos, Rómulo (1943). *Sobre la misma tierra.*


República Bolivariana de Venezuela. 2000. Ley que crea el Fondo Intergubernamental para la Descentralización.


República Bolivariana de Venezuela. 2001. Ley Orgánica de Hidrocarburos.


República Bolivariana de Venezuela. 2001. Decreto con Fuerza de Ley Orgánica de Hidrocarburos.


República Bolivariana de Venezuela. 2006. Ley de los Consejos Comunales.


República Bolivariana de Venezuela. 2006. Ley de Reforma Parcial de la Ley que Crea el Fondo Intergubernamental para la Descentralización (FIDES).


República Bolivariana de Venezuela. 2009. La Ley Orgánica de Descentralización, Delimitación y Transferencia de Competencias a los Estados.


República de Venezuela. 1999. Constitución de la República de Venezuela.

República de Venezuela. 1975. Ley Orgánica que Reserva al Estado la Industria y el Comercio de los Hidrocarburos.

República de Venezuela. 1983. Ley Orgánica para la Ordenación Del Territorio.


República de Venezuela. 1996. Ley de Asignaciones Económicas Especiales para los Estados Derivadas de Minas e Hidrocarburos.


ONAPRE. Leyes de Presupuesto. (1997-2007)

ONAPRE Exposición de Motivos de los Proyectos de Presupuesto 1999-2007

ONAPRE Estadísticas Municipales 1989-2005 (Ordenanzas de Presupuesto)


Petróleos de Venezuela. Operational and Financial Reports (some years 2006-2008)


Transparency International. Índice Latinoamericano de Transparencia Presupuestaria 2007


IMD. *World Competitiveness Yearbook* 2006.

---

i The authors acknowledge the useful comments, data, and advice from George Anderson, Armando Barrios and Silvia Salvato. They are also grateful to Sebastian Scrofina and Leonardo Maldonado for research assistance.

ii Universidad Católica Andrés Bello and IESA.

iii Hoover Institution, Stanford University and IESA.

iv IESA.

v IESA.