COST DISTORTIONS AND FINANCIAL CONSTRAINTS: THE CASE OF PDVSA

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Section 1: (Overview)

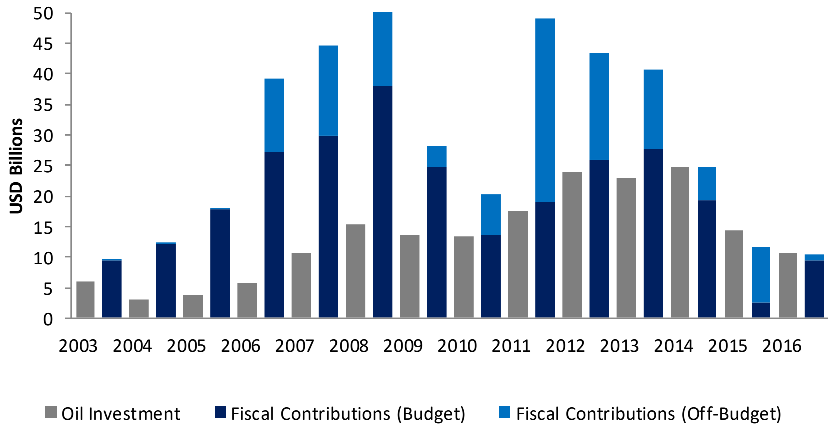
In a highly inflationary context with exchange controls, the cost of operations in Venezuela has increased over recent years. In addition, deviation of resources from Petroleos de Venezuela (PDVSA), the National Oil Company, for non-commercial purposes, has constrained investment in oil operations and reduced production capacity. Moreover, fuel subsidies have also imposed a constraint on the capacity of revenue generation of PDVSA, which has led to a dramatic increase in the financing from the Central Bank, leading to hyperinflation. This paper examines the effect of some of these distortions on investment levels and oil production for PDVSA over the period 2003-2015.

Section 2: Context and model

This paper calibrates a model of the operation of a National Oil Company (NOC), developed by Hartley and Medlock (2007) to simulate the path of oil production in PDVSA, over recent years. The model incorporates the competing priorites of profitability and other non-commercial objectives imposed by government, in the form of fuel subsidies. It also includes non-commercial expendtitures in order to capture the constraints on investment. A discussion on the effects of debt accumulation is also included as to illustrate the reduction in operational cash flow. As observed from PDVSA financial statements and annual reports, fuel subsidies represent an important share of revenues for the company, while non-commercial expenditures (including off-budget transfers to the Central Government), exceeded the amount of investments during the period of high oil prices, which implied a mass deviation of resources away from building production capacity.

MM US$	2010	2011	2012	2013	2014	2015	2016
Gasoline Subsidy	8,239	11,779	12,692	12,175	11,270	6,151	3,355
Diesel Subsidy	3,355	4,275	4,228	4,777	4,336	5,013	4,394
PDVSA reported domestic revenues	1,400	1,675	1,743	1,497	2,690	435	549
PDVSA reported total revenues	95,348	125,519	127,611	134,326	128,439	88,554	48,002

Source: PDVSA Financial Statements, PDVSA Annual Report and own calculations



Source: PDVSA Financial Statements

Section 3: Insights

Results show that domestic subsidies and the deviation of resources to fund government spending has negatively affected the financing of the oil operations and explains the decrease in production. This could be modelled as higher weight on the consumer surplus from fuel consumption, and leads to a severe decline in investment levels, that ultimately affects production through given a higher decline rate. Looking at the possible implications for cash flows, the appreciation in the exchange rate, together with hyperinflation leads to a dramatic rise in operational costs. Even if operational costs are all covered in foreign currency, the reduced investment from PDVSA as ultimately affected production levels and imposes a capacity constraint for the next years.

Section 4: Conclusions

Extraction of rents by the Central Government from the oil sector has led to a sustained decline in production, and having PDVSA as a majority partner in all upstream projects imposes a burden on the company that prevents from increasing production capacity, and to observe further declines in production. Given the structure of State ownership in upstream activities, in the absence of policy reforms, this will lead to further problems in the operation of the oil industry in Venezuela and further accelerates the macroeconomic distortions for the country.

References

Hartley, P. & Medlock, K., 2008. A model of the operation and development of a National Oil Company. Energy Economics. 30. 2459–2485

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