Policy Brief



What policy strategy should countries use to boost their oil sector, increasing their revenue from exports while reducing their oil dependency? The Latin American experience offers useful lessons learned for countries evaluating their investment policy options.

OIL INDUSTRY INVESTMENT **POLICIES**



SUMMARY

This Brief presents a concise overview of the context of the Latin American (LA) oil industry and its performance. It analyses the advantages and disadvantages of the three main investment models followed, focusing primarily on the policy experience of Argentina, Brazil, Colombia, Peru, and Venezuela. Finally, it presents evidence and analysis suggesting that the state-private competitive model seems to have had the best performance in the current regional context.

THE NEED FOR PARALLEL DEVELOPMENT OF THE ECONOMY AND THE OIL SECTOR

Developing the oil sector to achieve economic growth is one of the key challenges for Latin American, Asian and African countries. Oil in itself is a valuable commodity that generates export earnings, while an increasing energy supply is needed to foster growth, in particular in emerging economic powers such as Brazil, India and South Africa.

LA growth has been accompanied by important investments in the oil sector. Brazil is a good example; it has reached a better import-export balance by raising its oil reserves and production to cover its domestic consumption (Table 1). The investment experience of LA can serve as a useful example for African and South Asian states as they consider how to use investment policy to boost their oil sector.

KFY **LESSONS LEARNED**

The state-private model, with a dominant state role in an open market, seems to be the most economically successful and politically stable model in LA.

For this model to be successful, however, governments need to directly invest in the state oil company to improve its technical, financial and institutional performance.

DIFFERENT POLICY CHOICES, COMMON GOAL

To develop their oil sector, LA countries generally selected from one of three main policy models: state-led, privatisation and state-private competitive.

The State-Led Model: In this model, countries maintain the pre-eminence of their state oil company, with little to no opening to the private sector. Venezuela and Ecuador have opened only a marginal space for foreign investment, while in Mexico, oil production remains a state monopoly with no foreign investment, as the state controls both upstream (exploration and extraction) and downstream (transport and commercialisation) operations.

In terms of economic performance, the model has not been

able to increase production. Venezuela and Ecuador did increase reserves, but failed to increase production, and in the context of increasing consumption, their import-export balance has therefore worsened (Tables 1 and 3). Mexican production and reserves decreased, while consumption has not changed significantly, meaning its import-export balance has worsened.

Experts that are critical of this model consider that poor productive performance, especially despite increased reserves, is due to state-owned companies' administrative and political mismanagement, including poor accounts transparency and administrative efficiency. On the other hand, experts supporting the model argue that well-run state companies could be efficient and thus should not have to share oil profits with private companies.

Table 1: Evolution of Oil Production and Consumption in Selected LA countries

Model	Country	Thousand barrels per day	2005	2010	Change 2010 over 2005 (%)
	Ecuador	Production	532.76	485.59	-8.85
State-Led Model		Consumption	159.41	188.00	17.93
		Production - Consumption	373.35	297.59	-20.29
	Mexico	Production	3784.07	2982.94	-21.17
		Consumption	2116.99	2140.50	1.11
		Production - Consumption	1667.08	842.44	-49.47
	Venezuela	Production	2866.93	2374.95	-17.16
		Consumption	583.15	746.00	27.92
		Production - Consumption	2283.78	1456.95	-36.20
Privatisation Model	Argentina	Production	798.05	763.61	-4.32
		Consumption	483.01	618.00	27.95
		Production - Consumption	315.04	118.61	-62.35
	Peru	Production	111.00	157.00	41.44
		Consumption	152.00	184.00	21.05
		Production - Consumption	-41.00	-27.00	36.58
State-Private Model	Brazil	Production	2038.42	2745.80	34.70
		Consumption	2206.22	2599.00	17.80
		Production - Consumption	-167.80	146.80	187.48
	Colombia	Production	540.27	800.12	48.10
		Consumption	270.71	289.00	6.76
		Production - Consumption	269.56	511.55	89.77

Own elaboration.

Sources: US Energy Information Administration, BP Statistical review of World Energy 2011

The Full Privatisation Model: In this model, formerly stateowned oil companies are fully privatised, including both upstream and downstream operations.

In Peru, PETROPERU went through a 'fragmented' privatisation: the government divided the company into different business sections and sold them separately to different investors. In Argentina, the state-owned company YPF was privatised as a 'vertically integrated company' by selling upstream and downstream operations to one investor, REPSOL. In both cases, privatisation was enacted in phases, and at its conclusion, foreign companies emerged with a dominant position in the oil sector.

In terms of economic performance, privatisation did not bring significant increases in either reserves or production. In both Argentina and Peru, reserves declined, and though oil production did increase, it was far less than was expected.

What accounts for this poor economic performance? Some specialists argue that private companies naturally show more risk aversion, so they only invest in exploration if they believe it will be financially profitable. In contrast, the state will risk more, since it seeks not only financial benefits, but also energy sovereignty. This likely explains why reserves did not increase, even when production increased, as in Peru. However, other

specialists argue that poor results in oil exploration in these cases are just a matter of bad luck in finding new reserves.

In terms of political performance, the model has tended to be politically unstable, as the extent of the privatisation processes in both countries triggered concerns about corruption and energy sovereignty. In a context of political instability and rising oil prices, private extractive companies are easy political targets. Protests against private, foreign control over natural resources have been frequent in the last decade, affecting the sector's performance and in turn the arrival of more investments.

In Argentina, for example, the 2001 economic crisis created tension between the government and foreign firms. Although companies were not nationalised and so privatisation was maintained, the post-crisis regime did reach an agreement with oil producers to control price increases. This political context has prevented new foreign investments, despite the state continuing to offer investment incentives.

Overall, the privatisation model in LA attracted significant foreign investments in the short-term, but failed to fulfil production expectations and was vulnerable to political criticism and public backlash, giving it negative results in the long-term.

Table 2: Characteristics of the Three Main Investment Models

	Ecuador	State company dominates the sector. Private companies have a marginal market share.		
State-Led Model	Mexico	State company controls both downstream and upstream operations (state monopoly case).		
	Venezuela	State company dominates the sector. Private companies have a marginal market share.		
	Common characteristics	Full government control over state companies' administration and accounts; no significant incentives for foreign investment		
Privatisation Model	Argentina	One foreign private company controls most upstream and downstream operations. Note: Recently the state increased its regulatory role amidst political turmoil.		
	Peru	Several private and state foreign companies control most upstream and downstream operations.		
	Common characteristics	Private, foreign control over both upstream and downstream operations. Incentives for foreign investment.		
State-Private Model	Brazil	State-controlled company, with mix of state and private shares, is the dominant actor in upstream and downstream operations. Incentives for foreign investment.		
	Colombia	State-controlled company, with mix of state and private shares, is the dominant actor in upstream operations; private companies dominate downstream operations. Incentives for foreign investment.		
	Common characteristics	State-controlled companies, though with private shares and administration, are key players in an open market and compete with foreign private companies. Incentives for foreign investment in both state company shares and the sector as a whole.		

Own elaboration





The State-Private Competitive Model: In this model, state-owned companies that previously enjoyed a monopoly were not privatised, but were forced to compete in an open market. In Brazil, the state company maintains its dominant position as the largest producer and investor, while in Colombia, the private sector has in comparison a larger share in both upstream and downstream operations.

Brazil and Colombia also allowed foreign investments and private management in their state-owned companies in order to improve their market and environmental performance. Thus, ECOPETROL in Colombia, and PETROBRAS in Brazil, are state-controlled companies but with a mix of state-private shares that participate in joint venture initiatives with private companies.

In terms of economic performance, oil sector indicators in Colombia and Brazil have been positive in recent years. Colombia enjoyed US\$ 15.15 billion and Brazil US\$ 6.15 billion in foreign investment between 2005 and 2010, numbers well above the regional average. Table 3 shows that proven reserves increased only in countries using the state-private

model. Finally, oil production increased in both Brazil and Colombia, and Brazil moved from being a net importer to covering domestic demand for the first time in its history.

The model has also proven to be politically stable, with neither Colombia nor Brazil seeing the kinds of protests and social conflict present in the privatisation countries.

Most experts attribute this model's strong performance to three factors. First, state-owned companies became more efficient not only because of the foreign investment, stateprivate joint ventures, and market competition, but also because governments made significant efforts and actual financial investments in improving their oil companies' institutional, technical, administrative and environmental capacities. For example, PETROBRAS is nowadays globally recognised as an efficient company and the best in offshore operations, with its own overseas investments. Second, governments also reshaped their whole extractive sectors, to strengthen professional capacities, in particular regarding regulation. Finally, governments actively promoted exploration, mainly through their state companies.

Table 3: Change in Production, Reserves and Import/Export Balance

		Change in Production	Change in Reserves	Change in Import/Export Balance	
		2005-2010	2005-2011	2005-2010	
State-Led Model	Ecuador	Decreased	No change	Remained medium exporter even as exports decreased	
	Mexico	Decreased	Decreased	Remained large exporter even as exports decreased	
	Venezuela	Decreased	Increased	Remained large exporter even as exports decreased	
Privatisation Model -	Argentina	Decreased	Decreased	Decreased from medium to small exporter	
	Peru	Increased	Decreased	Remained small importer even as imports decreased	
State-Private Model	Brazil	Increased	Increased	Grew from medium importer to medium exporter	
	Colombia	Increased	Increased	Grew from medium to large exporter	

Large exporter: >500 TBD; medium exporter: 100-500 TBD; small exporter: <100 TBD

Own elaboration.

Source: US Energy Information Administration, BP Statistical review of World Energy 2011.

CONTEXTUAL **FACTORS**

ENABLING SUCCESS OF LA OIL INVESTMENT POLICY



To understand the LA experience and think about how lessons learned can be applied in other regions, it is necessary to understand the underlying contextual and enabling factors accounting for both the choice of oil investment policy and the ultimate impact of that policy.

First, in the last decade, LA witnessed steady economic growth, mainly from primary exports, and economic modernisation, principally fostering the construction and services sectors. These interrelated processes dramatically increased oil demand as a source of both export revenue and energy supply that, with the steady rise in oil prices, gave countries a strong incentive to develop their oil sector.

Second, there is a relationship between countries' proven reserves, size of domestic demand, and choice of investment model. Net exporters with significant reserves chose the state-led model. Countries close to the net exporter/importer

line chose the state-private competitive model. Finally, net importer countries with poor oil reserves, like Peru, were more aggressive in attracting foreign capital by choosing privatisation. The exception is Argentina; despite being a net exporter with significant reserves, it decided to follow the privatisation model.

Third, the LA oil sector is particularly sensitive to political changes, with public pressure about energy sovereignty and private oil companies' huge profits affecting both the initial choice of policy and causing some states to alter their investment strategy in recent years.

Finally, high levels of corruption, especially in the state sector, and weak institutions continue to negatively impact sector performance. Despite some improvements, significant results in terms of transparency and accountability for the sector can still only be seen in a few cases, such as Brazil.

- A dominant state role in an open, competitive market has been both economically successful increasing both production and the import-export balance — and politically stable.
- However, for the model to be successful, governments must directly invest in the state company

to improve its technical, financial and institutional performance.

- Overall, promoting stronger institutions is a key factor for oil sector growth. State policies need to create the conditions for transparency and fair market competition.
- A balance between foreign investment and national control seems to be needed in order to achieve a politically stable environment.

CONTACT GRADE

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