

# ***PETROLEUM REFINING IN BRAZIL: STATE DIVESTMENT AND COMPETITION ISSUES***

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## **Overview**

The Brazilian refining market is made up of 17 refineries, 13 of which are owned by state-controlled Petrobras and represent 99% of the country's oil products. These refining units output in 2017 was about 105 million cubic meters of oil products.

The objective of this work is to identify the possibilities for structural change in the midstream segment of the Brazilian oil industry, which go through the state divestment in the dominant company, its pricing policies and alternatives involving greenfields and imports. The aspects of energy security and competition fostering are observed in this analysis.

## **Methods**

The methodological procedure adopted consists of bibliographical and documentary research pertinent to the theme. Among the material researched, including international sources, are: specialized and academic papers, documents of the competition authority, press material and official sectoral data. The analysis of the information collected focused on the recent evolution of the market structure, the opportunities to foster competition, the risks associated with how structural changes can occur and the counterpoints related to energy security.

## **Results**

The opening of the national oil and natural gas sector to private capital in the late 1990s and Petrobras' IPO opened the expectation that market forces would begin to control domestic energy prices. However the direct intervention mechanisms were replaced by mechanisms of indirect price control, made possible by Petrobras' shareholding control by the state and by the company's quasi-monopoly role in the refining segment.

The lack of private investment in the refining segment and the recent reductions in Petrobras' investment levels suggest that the fuel price policy has been inefficient in creating structures to encourage investment in the refining activity. The segment has lower margins compared to other activities in the oil chain, due to the high degree of technological complexity and high costs. In this context of reduced refining margins, foreign players in Brazilian industry have opted either to export their production or to sell it to Petrobras at international prices.

In a context of profit margin squeeze, the recovery of Petrobras' investments in the refining segment, mainly after 2007, was aborted, with investments in Comperj being discontinued and the projects of Premium I and Premium II refineries canceled. Thus, the fuel pricing policy in Brazil has a predominant role in signaling investments in the oil chain, especially in the refining segment.

In October 2016, Petrobras adopted a new pricing policy for gasoline and diesel, with the following principles: import parity price (IPP), including internalization costs, plus a margin to compensate risks of the operation. The readjustments became monthly as a rule. After July 2017, the frequency of adjustments was increased (to even daily) in order to allow greater adherence of domestic prices to the international market in the short term and increase the company's agility and efficiency against competition in the domestic market. In fact, Petrobras' share of imported gasoline fell from 83.7 percent in 2015 to 21.4 percent in 2017. As for diesel, the reduction in the same period was even more pronounced: from 84.2 percent to 4.3 percent, respectively.

In the case of liquefied petroleum gas (LPG), in June 2017, Petrobras approved a new pricing policy for LPG distributors for residential use in cylinders with capacity up to 13 kilograms (P13). This policy determined that LPG P13 prices at the producer/importer delivery points would be calculated from the monthly average of butane and propane prices on the European market, converted into Real (Brazilian currency) by the daily average of the dollar's selling prices, plus a 5 percent margin. In addition, the company announcement indicated that the price readjustments would be monthly. In December 2017, Petrobras issued another communication stating that after assessing the results of the pricing policy for LPG P-13, the methodology would be reviewed once again. In the following month, the new criteria were published, which included: quarterly rather than monthly periodicity, introduction of a 12-month moving average for calculation of international prices and exchange rates, rules for the transition period. The objective was to soften the pass-through of price volatility in the international market to the domestic price, and at the same time maintain the provisions of Resolution 4/2005 of the National Energy Policy Council, which recognizes as interest of national energy policy the practice of differentiated prices for the commercialization of residential LPG.

## **Conclusions**

In the recent period, there was an increase in contestability in the gasoline and diesel markets, through the greater participation of private agents in the import of these fuels. This can be evidenced by the decrease of Petrobras' participation in the supply of these products and the greater convergence of domestic and international prices.

In the LPG market the same has not been observed. Petrobras remains practically the only importer and producer of the liquefied gas in Brazil. The price differentiation by consumer profile and the more complex logistics – as compared to the liquid fuels – appear as limiting factors to the entry of private players in the import activity.

To date, no private investor contribution has been made to new refining projects and no disinvestment action on existing refining assets has been achieved by Petrobras, despite the announcements and the expectations generated.

The results on the Brazilian midstream's competitive environment of the entry of new private investors in the refining activity – whether by buying existing assets or via capacity increasing projects – depend essentially on the way in which this entry would occur and the consequent contractual relations. They tend to be positive as they reduce the concentration in a given relevant market (in its geographical and product dimensions). The verticalization of the agents along the chain must also be analyzed. There are risks for the competition if divestments occur in the way Petrobras designed and announced, as: acquisition may result in regional monopolies; and reminiscent shareholding by Petrobras may allow sensitive information exchange and stimulate collusion.

The net effects on consumers, particularly in terms of price – as product quality is subject to regulation – depend not only on competitive results but also on the effects on the industry's level of efficiency. This, in turn, can be stimulated by the entry of private competitors, however, can be reduced due to economies of scale and scope.

By the other hand, the strategical role of petroleum products in both Brazilian economy and national transport matrix poses relevant questions on relying in imports or foreign capital to secure domestic fuel supply. The energy security is commonly a main issue in the political agenda, which gains even more attention in this particular moment of federal government transition in Brazil.