Market power in the Argentine liquid fuels wholesale chain

M. T. Verónica Culós, M. Florencia Gabrielli

Marcos Herrera-Gómez[‡] Manuel Willington[§]

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1 Overview

The liquid fuels market is important for a variety of reasons. Its performance affects other markets and may condition a country's macroeconomic development. In recent years, Argentina became a net importer of crude oil and most of its by-products, according to the Energy Balance published by the National Energy Secretariat (Secretaría de Energia, 2016-2019). There are concerns about the sustainability of the current levels of fuel consumption, imports, and production.

This paper seeks to identify the magnitude of market power in the wholesale chain of fossil fuels in Argentina using the discrete choice approach, which models the aggregate demand for products as the probability of choosing a brand over all others if the characteristics associated with the product provide greater utility to the consumer. In this context, the wholesale chain is understood as the product purchase and sale relationship between the banners or companies that make up the market and the service stations that demand it for subsequent retail sale. This study is expected to contribute to the understanding of the economic mechanisms that guide the decisions of intervening actors and will enrich the discussion on energy policy and contract design in this particular sector. For this purpose, information corresponding to the period 2016-2019 will be used. The aim is to determine whether there is market power on the part of the companies in the sector as a consequence of the differentiation of products. This differentiation entails the strategies carried out by the companies in relation to after-sales services and the location of their points of sale, and to specific contractual supply clauses, among others.

^{*}Universidad Nacional de Cuyo, veronica.culs@gmail.com.

[†]Corresponding author. Universidad del Desarrollo, Av. Plaza 680, Las Condes, Chile. fgabrielli@udd.cl.

[‡]CONICET - Universidad Nacional de Río Cuarto, Argentina. mherreragomez@conicet.gov.ar.

[§]Universidad del Desarrallo, Chile. mwillington@udd.cl.

2 Methodology

In order to estimate the demand for different varieties of fossil fuels in Argentina, we will work under the structural approach of differentiated product markets, with discrete choice models of random coefficients, mainly following the work carried out by Berry (1994) and Berry, Levinsohn, and Pakes (1995). The objective is to detect the existence of elements of differentiation that have a significant influence on the pricing power, i.e., the market power of each company, if the latter is significant.

3 Expected results

The demand for the major products traded in the liquid fuels market in Argentina is clearly concentrated, and this concentration increases if local markets are considered. At the regional level, the number of companies operating is significantly reduced compared to nationally, where all firms are considered. This phenomenon intensifies as one moves away from the country's capital city.

4 Conclusions

We aim to provide new empirical evidence that quantifies market power across firms and regions and show that there are significant differences between markups estimated at regional levels, based both on different presence of the firms within each region and on price elasticity of demand of each region itself. Hopefully, this paper will enrich discussions about how prices are determined in the wholesale chain, and how that determination affects both the retail segment and the consumers.

References

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