ECONOMETRIC ANALYSIS OF ARGENTINE BOTTLED WINE EXPORTS

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Abstract

With the advance of globalization a wine producing country like Argentina, in its ongoing quest for sustainability in the export business, has been increasingly exposed to competition from other producing countries mainly in the lower price segments.

The analysis of official export statistics for the period 2010/14 shows clearly that during the last five years the argentine grape-wine industry has experienced a significant loss of competitiveness as evidenced by the number of cases exported. The retraction of total export sales in 2014, when compared with the base year, amount to 1,293,531 (9-liters) cases, that is 6.5 % smaller than in 2010.

When export data is segmented by price ranges, the decrease in exports is felt much more strongly in the lower price range. Taking total exports of wines priced below u$s 30 per case, and comparing the average volume exported during the period 2012/14 against year 2010, the decrease will amount to 3,799,774 cases or 31.3 % less than in 2010.

Given this situation and in order to generate information useful both for exporters and for public policy makers dealing with the definition of priorities and specific objectives of export promotion programs, it is strategically important to analyze the structure of the external market, the geographic distribution of the main countries of destination, volumes and prices of the exported product - in this case bottled wines - and to calculate the direct price and income elasticity ($\varepsilon_p$, $\varepsilon_I$) as they explain total wine exports.

The methodology followed to statistically estimate those elasticity was based on an econometric analysis to fit a demand function in which the dependent variables were the numbers of cases exported to the top 30 different importing countries of Argentinean bottled wine , and the explaining variables were FOB price per case of each exporting winery, per capita income and age structure of each importing country, and the Chilean average price of wine exported to the same destinations. Export data comprised 8,664 observations collected on a cross section yearly basis and disaggregated at the brand level of each exporting winery.

With the same data base, cross elasticity of Argentinean wine exports with respect to average price of Chilean exports ($\varepsilon_{A_{expo}} / P_{ch}$) and volume exported by Chile to the same countries ($\varepsilon_{A_{expo}} / Ch_{expo}$) were also calculated.

The results of this study are in line with the principles of microeconomic theory applied to consumer behavior, and show that the signs of the estimated parameters were negative for price elasticity ($\varepsilon_p < 0$) and positive for income
elasticity ($\varepsilon_i > 0$) which realizes the \textit{existence of substitution and income effects} respectively. They prove also that the Argentinean and Chilean wines behave as “\textit{substitutes goods}” ($\varepsilon_{pch} > 0$) when they compete in a given country on commercial brands basis, but as “\textit{complementary goods}” ($\varepsilon \frac{A_{expo}}{Ch_{expo}} > 0$) when they collectively compete with other Old World or New World wines countries.