Preferences and information: The role of distance in the propensity to pay for wine quality

(Abstract)

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SUMMARY

Some authors often refer to wine as an experience good (Storchmann, 2012). So they can only be assessed once tested. However, quality is not only an intangible attribute, but also subjective. Therefore, once a wine is tasted there may be differences in evaluation. That is why mediators or experts have emerged in this market who offer public evaluations and who, in addition to eliminating the previous asymmetry, also guide the subsequent evaluations of consumers and their propensity to pay for it. The previous statement is based on numerous works that show that the consumer does not have the knowledge or skills to know quality (Oyinseye et al. 2022).

In this context, the quantity and quality of information about the product both to make the purchase decision and to assess its quality are of great relevance and will determine the propensity to pay at least for the quality or for other attributes. In fact, the elements of quality and reputation are information, and this is lost with distance, understood here as a broad concept and not restricted to spatial or physical distance. However, there are instruments that can amplify these quality elements throughout their transmission, so that this loss is as small as possible. For example, the existence of international critics, identified as such in the global market, or instruments for transmitting experiences, such as international evaluation websites or Apps, can make these elements persist or even amplify in space. On the contrary, those others who do not manage to stay at a distance will be lost. It is evident that the loss of information with physical distance can be moderated if there are other elements of connection between the places of origin of the wine, where the maximum information is usually found, and the sale market: cultural relation or connection or same tradition in wine consumption, in general or a certain type of wine.

This paper aims to establish a relationship between the estimated propensities to pay for a broad set of Spanish wine attributes in 26 international markets and various distance measures. For this, previous estimates of hedonic price functions are used from data obtained from WINESEARCHER contained in Núñez, Martín-Barroso and Velázquez (2024). In these functions, log-linear expressions of the price against 17 different attributes are estimated for all markets, of which four correspond to quality elements (the appellation, the winery, the brand and the vintage). To avoid collinearity problems between the attributes, for each market, all possible combinations of the attributes are estimated (including or excluding each of the remaining ones). This means having more than 1,700,000 potential semi-elasticities for each attribute for all the markets.

From these values, internal meta-analyses are carried out for each of the attributes where these elasticities are regressed against different distance indicators and characteristics of the markets - in addition to the traditional variables of the internal meta-analyses following the methodology proposed by De la Peña et al. (2016)-.

Regarding distance indicators, five different ones are used: physical, transportation cost, genetic, cultural and related to the tradition of wine consumption. Physical distance is usually used to evaluate the cost of information transmission or transportation, especially in gravity functions. This measure is close to the measure made by CEPII (Mayer and Zignago, 2011).

The cost of transportation is a corrective measure of physical distance. For its construction, information from the rates of all UPS international services is used. To do this, certain assumptions are made about the quantities transported in each of the services, according to their availability.

To calculate cultural distance, microdata from nearly a hundred homogeneous questions between the countries considered and longitudinally from the Integrated Value Survey are used. With them, a methodology based on optimal multidimensional

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scaling is carried out in two stages solving the problems of differences in the samples between countries and creating a distance measure.

Genetic distance may be an alternative way to measure cultural distance, but it may also reflect different types of present or past interrelationships between populations or countries. To do this, the measures proposed by Spolaore and Wacziarg (2018) are used, based on research on the human genome carried out by Pemberton et al. (2013) who measure genetic distances for 267 population groups from 645 genetic microsatellite loci together with information on the ethnic composition of the different countries from Alesina et al. (2003).

The influence of traditional aromas and flavors on wine consumers in each country also determines a distance between the different markets that can favor or hinder the entry of foreign wines. To approximate this distance, an original measure is constructed based on information from the last two decades on the cultivated areas in each country by type of grape from Anderson and Nelgen (2021), aggregate production, export and import data in quantities of each country by Anderson and Pinilla (2020). In addition, imported quantities are included, given that some large wine consumers are not producers, extracted from the United Nations COMTRADE Database.

The results found show that the quality elements of greater amplitude - amplified - are those that seem to increase their influence in determining the propensity to pay for wine. Thus, the magnitude of this influence ranges from the quality of the vintage, brand, winery and denomination. This seems to allude to the need to concentrate quality elements in the most distant markets and concentrate sales on a small number of products. This strategy can be relaxed with greater closeness. Among the five distances considered, the one that works best is the one related to wine tastes and clearly the ones that seem to show the most erratic behavior are those related to physics and genetics. On the other hand, varied results are obtained in terms of the remaining objective attributes.

References:

Alesina, A.; Deuleeschauwer, A.; Easterly, W.; Kurlat, S. and Wacziarg, R. (2003): Fractionalization, Journal of Economic Growth, 8(2), 155-194.

Anderson, K. and Nelgen, S. (2021): *Database of Regional, National and Global Winegrape Bearing Areas by Variety, 1960 to 2016*, Wine Economics Research Centre, University of Adelaide, September 2020 (slightly revised May 2021).

Anderson, K. and Pinilla, V. (2021): Annual Database of Global Wine Markets, 1835 to 2019, freely available in Excel at the University of Adelaide's Wine Economics Research Centre.

De la Peña, M.R.; Núñez-Serrano, J.A.; Turrión, J.; and Velázquez, F.J. (2016): "Are innovations relevant for consumers in the hospitality industry? A hedonic approach for Cuban hotels", Tourism Management, 55, 184-196

Mayer, T. and Zignago, S. (2011): Notes on CEPII's distances measures: The geodist database, CEPII working paper 25.

Núñez,J.; Martín-Barroso, D. and Velázquez, F.J. (2024): Are the preferences of that distant country different? Differences and similarities in the propensities to pay for different attributes of Spanish wine in various markets, mimeo.

Oyinseye, P.; Suárez, A.; Saldaña, E.; Fernández-Zurbano, P.; Valentín, D. and Sáenz-Navaja, M.P. (2022): Multidimensional representation of wine drinking experience: Effects of the level of consumers' expertise and involvement, Food Quality and Preference, 98, junio, 104536.

Pemberton, T.L.; de Giorgio, M. and Rosenberg, N.A. (2013): Population structure in a comprehensive genomic data set on human microsatellite variation, G3: Genes, Genomes, Genetics, 3(5), 891-907.

Spolaore, E. and Wacziarg, R. (2018): Ancestry and development: New evidence, Journal of Applied Econometrics, 33(5), 748-762.

Storchmann, K. (2012): Wine Economics, Journal of Wine Economics, 7(1), 1-33.