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Title

What factors explain price and quality of Italian and French wines on the American market?

I want to submit an abstract for:

Conference Presentation

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Keywords

Hedonic price, Italian wines, French wines, American market, sensory descriptors

Research Question

What factors explain price and quality of Italian and French wines on the American market?
Do the sensory descriptors affect price and quality of Italian and French wines

Methods

Hedonic price approach
Text mining process

Results

Region, quality and some relevant sensory descriptors plays a central role in defining Italian and French wine's price and quality in U.S. market.

Abstract

Introduction

Wine market represents an interesting case study from an economic perspective, as it has many peculiar qualities that make it significantly different from the market of other food products (Costanigro, Mccluskey and Mittelhammer 2007; Werdelmann 2014). Wine production is a very complex and highly competitive sector: wine is produced almost all over the world by wineries of various sizes, and there are a multitude of techniques and variables that contribute to determine the different qualities of the final product (Werdelmann 2014).

In countries with a long winemaking tradition as Italy and France, the wine sector is a driving force for the agro-food industry and a flagship in terms of production and international export. In the year 2017, 50.1 million hectoliters of wine were produced in Italy, of which 20.6 were exported, while in France, 43.5 million hectoliters were produced for a total of 14 million for export (OIV 2017). Due to the higher average price per liter of French

wines compared to the Italian ones, French wine exports are worth 8.2 billion while the Italian one is 5.6 (OIV 2017).

The global offer and demand are settling in countries that do not have a long tradition of wine production and/or consumption, but that recently have approached wine and yet they still consume substantial quantities and contribute to the expansion of international trade (McMillan 2018; Veseth 2014). Nowadays, the USA is the world's largest wine market and the largest wine importer (by value), and Asian markets are growing faster than ever (Veseth 2014; Jaeger and Storchmann 2011; OIV 2018).

New consumers are not familiar with foreign wines and their various qualities, and have different tastes and preferences compared to traditional consumers (Vecchio 2013; Chivu-Draghia and Antoce 2016; Hussain 2006). The growing importance of foreign markets and the approach to wine by new consumers underlines the importance of understanding how wineries can successfully seize the opportunities provided by the American market and how firms can deal with increased complexity, dynamism, competitive rivalry, and anticipated changing market requirements (Montgomery and Day 1999).

Wine is an experience good whose quality and therefore desirability can only be assessed after consumption, but the consumers must form an expectation of the quality of the wine before purchase. The consumers can source the measure of sensory quality from wine guide, to some extent, and reviews of wines act as opinion leadership (Oczkowski and Doucouliagos, (2015), and may influence wine consuming practices (Werdelmann 2014; Ling and Lockshin 2003).

Most of the papers analyzing the factors affecting the price of wines focused on wine quality as a multidimensional construct comprised of both extrinsic and intrinsic attributes. The extrinsic factors include the grape type, reputation, fault-free wine production, and marketing aspects. The intrinsic factors are aroma, appearance, and gustatory factors, which may be measurable through the sensory evaluation (Ferro and Amaro, 2018)

This research summarizes, using a hedonistic approach, the information that emerge from the Wine Spectator database about pricing and preferences for Italian and French wines on the American market. Using wine prices and scores reported on Wine Spectator archive as dependent variables of two hedonic models it is possible to identify which factors contribute to higher prices and which descriptors of wine are correlated with higher rating scores, which can be considered to be reflecting US consumer preferences. The novelty of the paper is mainly due to the measure of some taste and aroma descriptors. The article therefore aims to discuss some salient features of the wine sector, presenting new empirical evidence on the determinants of wine quality and price as they are perceived in the American market.

Data and method

Data used in this research were retrieved from the Wine spectator archive and includes over 55,000 reviews of Italian wines and 75,000 observations of French wines. Wines considered cover a period along of 75 years, from 1941 through 2016, but most of the wines are dated between 1995 through 2012. Using the score and the price of wine as dependent variables, the other variables considered in the two analyses are: the country of origin, the year, the volumes of wine produced, the region of origin, the consumption councils (defined as vocations for the aging or immediate consumption), the author of the review and the descriptors of taste and flavours used in the reviews. These descriptors were extracted through text mining process from the short review of the wine tasting by expert reviewers provided by Wine Spectator on the sheet of each wine in the database.

Previous research has shown that hedonic price equations would be essentially determined by the external attributes of the wine (region of origin, vintage, certifications, etc.), while quality hedonic equations (perceived by experts in the sector) would be more linked to the intrinsic characteristics (sensory elements) (Delmastro 2007). Considering this, more hedonic regressions were implemented in order to test for any relationship between sensory aspects and price, as well as external aspects of the tasting and scores.

Results

The analysis on the price confirms the strong correlation between the scores and the cost of the bottles of wine, as well as between the price and the vintage of the wine. Furthermore, it detects a negative correlation between the volumes produced of a given wine and its price. The local region plays a central role in defining Italian and French wine's reputation in U.S. market, as it appears to be a ranking of the wine regions based both on the prices and rating scores. For example, among the Italian wines on the US market, wines from Calabria and Tuscany are those with the highest prices followed by Piemonte. Wines that are recommended to be aged to reach their best are usually more expensive than wines that are to be drunk immediately.

The hedonic analysis of the scores assigned by wine tasting assessors revealed that certain descriptors exist that are associated with higher ratings and scores. In the same way, significant correlations are found between some recurring descriptors of the aroma and taste of the wines and their price. In particular, some descriptors associated

to aged wines, as tobacco, toasted, cocoa, coffee, etc. are positively correlated with quality, but also white wines descriptors, as peach and citrus fruits. At the opposite, descriptors typical of easy-drinking wines are negatively correlated to quality. The results mostly confirm evidence from literature but the alignment between experts' opinion and consumers' choice should be analysed more in depth.

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Introduction

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