The Economics of Wine, Beer and Cider: Identifying Synergies and Complementarities

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Abstract
◦*Purpose – Wine, beer and cider are living a renewed interest among consumers, but compared to wine, only a few studies have been conducted on beer and cider. The purpose of this paper is to examine the possible developments and topics exploring the synergies between these fermented drinks.*
◦*Design/methodology/approach – The paper analyses the markets for wine, beer and cider and proposes that cultural influences may explain synergies or complementarities in consumer behavior and consumption. It further proposes to explore purchase behavior, decision making, and responses to pricing aspects for these fermented beverages.*
◦*Findings – Cultural variables have different impacts on the consumption of the three fermented beverages around the world as well as quality cues differently impact on price formation for wine, beer and cider in the consumers' eyes.*
◦*Practical implications – Over the last decade, wine economics has diversified going beyond the agricultural field and into information, industrial and environmental economics and finance. There has been a particularly growing research interest in issues related to consumer behavior, quality signaling and consumer search. This is a path to be followed to analyze synergies and complementarities between wine, beer and cider.*

Keywords: wine economics, beer, cider, consumer behavior, price analysis

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EXECUTIVE SUMMARY

The supply for "fun" drinks is rising and it is becoming difficult to tell the difference between wine, beer and cider. Spirits are considered "hard" drinks with a base of distilled alcohol, by comparison and contrast to the fermented drinks such as wine, beer and cider. You can drink cherry wines, co-ferment of beer and blueberry juice that taste like a Lambrusco or rosé crispy ciders with flavors of pears that taste like a Prosecco. The increasing hybridization of wine, beer, and cider makes each beverage becomes increasingly blurred and redefines the competition lines between products and markets.

The demand for wine, beer or other alcoholic beverages has been examined mostly separately in the literature, although wine is the most researched one compared to other beverages (Fogarty, JES 2010; Nelson, JWE 2013; Outreville and Le Fur, JAFIO 2020). Mitchell (JWE 2016) presents an original comparative study of the characteristics of wine and beer demand within the EU. Cider like wine is an experience good that possesses a few characteristics that differentiates it from other beverages. However, there has been limited scholarly work conducted on cider (Sousa, 2014).

Wine economics has emerged as a growing discipline that analyzes wine-related issues not only within agricultural economics but in adjacent fields such as finance, trade, growth, and environmental economics. Economists like Adam Smith, David Ricardo, John Stuart Mill or Leon Walras, all wrote, to some extent, about wine (Chaikind, JWE 2012). Although these early writings are related the value of vineyard land or trade, they refer to wine as an example. Nothing similar can be traced for apples orchards or cider, although cider was known in the Roman Empire and became popular with the Normans, whose conquest of England in the 9th century brought apple orchards and cider production and consumption (Watson, 2013).

A simple Google search for words such as *wine, beer* and *cider* (although Google hits of single words may result in an exaggerated count) results in a tremendous difference in favor of wine. Storchmann (JWE 2012) reports the results of this Google search, done on September 5, 2010, for beverage words such as *coffee*, *milk*, *tea*, *water* and *wine*. With 343 million hits, the word *wine* yields more hits than any other beverage, except for water. However, compared to words such as *bread* (450 million) or *apple* (705 million) the amount of Google hits for *wine* appears to be smaller.

Since Google Scholar hits more specifically in scholarly publications we confined the search by discipline (*Business, Administration, Finance and Economics*) for the period 2012-2022. For the considered beverages, *wine* hits more scholarly coverage than *beer* and of course *cider*. These results are in line with the emergence of a new academic field called *wine economics*. *Cider economics* or *Economics of cider* do not exist yet. However, there are many similarities between cider, beer and wine that need to be explored.

A comparative analysis of the markets of still wine, beer and cider reveals that cider market will register the highest growth in the next years (IWSR, 2019). The three markets show to be very concentrated from a consumption point of view. Nearly half of the market for wine and beer is covered by the top five consuming countries, and for cider the top five countries absorb nearly three fourth of the market.

Compared to wine, there has been significantly less scholarly work conducted on beer and cider. The purpose of this paper is to examine the possible emergence of topics exploring the synergies in academic research between fermented drinks such as wine, beer and cider. The demand function for alcoholic beverages can be derived from the maximization of the utility function of the consumer. It is time dependent on income, prices and on the consumers' subjective discount for consumption in alternative goods and saving. There has been a particularly growing research interest in issues related to consumer behavior and pricing factors. This is clearly a path to be followed to analyze synergies and complementarities between wine, beer and cider. (Costanigro et al., AJAE 2010).

A classification of price determinants is proposed (Outreville and Le Fur, BFJ 2020) and the framework is applied to wine, cider, and to some extent to beer.

Classification of Price Determinants

Class	Fixed of predetermined state of nature	Variable or adjustable state of nature
Geography/Agricultural	Region of origin, soil	Weather, Fruit variety
Time horizon	Vintage	Age
Public information	Appellation, Label	Reputation, Experts
Production costs	Type of product	Process, yield
Quantity supplied	Size of producer	Volume, competition

A comparative analysis for the determinants of price for wine, beer and cider needs to be developed to analyze the impact of geographical factors, public information and supply conditions.