

## How Has COVID-19 Affected The Spanish Wine Industry? An Exploratory Analysis

Bartolomé Marco-Lajara<sup>1</sup> , Pedro Seva-Larrosa<sup>2</sup> and Javier Martínez-Falcó<sup>3</sup> , Eduardo Sánchez-García<sup>4</sup>

<sup>1,2,3,4</sup>University of Alicante, Spain

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### Abstract

The global wine industry has faced numerous adversities since the onset of the coronavirus. In particular, the Spanish wine industry has been severely affected as detailed in the following pages. To study the impact of COVID-19 on the Iberian country's wine industry, the research has attempted to quantify, through an exploratory approach, the effect of the coronavirus on employment in wine-related economic activities, distribution channels, exports, and wine tourism. The results of the research show a negative impact on the activities directly related to the commercialization of wine, on the consumption of wine consumed in Spain, on the evolution of exports and on the number of wine tourists. The research also demonstrates the importance of diversifying distribution channels to diversify the overall risk of wineries when demand shocks such as COVID-19 occur.

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### Introduction

The global pandemic caused by the COVID-19 virus is not a new context, given that throughout history there have been different epidemics that have affected the development of economic activities. COVID-19 is an infectious disease detected in Wuhan, China in late 2019.

The coronavirus was categorized as a pandemic in 2020 (WHO, 2020), causing 4.91 million deaths and 241 million infections worldwide in accordance with the data offered by Johns Hopkins University as of October 30, 2021. This disease has even been catalogued by the International Labor Organization (ILO) as one of the "most severe crises since the outbreak of World War II" (ILO, 2020). In the case of Spain, as of October 30, 2021, there are 4.99 million infected people and more than 87,000 in accordance with the data offered by the Spanish Ministry of Health, Consumer Affairs and Social Welfare.

The global wine industry has not been unaffected by this pandemic, because even though wine is among the most widely consumed beverages on the planet (Gutiérrez-Escobar et al., 2021), COVID-19 has had a virulent impact on the global wine industry, decreasing global revenues in the sector by more than 10% in 2020 (Lu, 2020). In addition to the pandemic, other crises have negatively affected the global wine sector since the onset of the coronavirus, such as severe wildfires in two of the most important New World countries in terms of wine production; the United States and Australia. Thus, if California suffered the four largest fires in its recent history between 2019 and 2020, the Australian wildfires in that same period were the most virulent for the oceanic country since records have been kept (Canavati et al., 2020).

Within this framework, the Spanish wine industry has been one of the major industries affected by the pandemic (Marco-Lajara et al., 2021). Thus, although the Iberian country is a world benchmark in wine growing and marketing (OIV, 2020), after the outbreak of COVID-19, Spanish wineries faced an

unprecedented turbulent environment. On March 14, 2020, the national government of Spain decreed the state of emergency, generating great uncertainty among entrepreneurs in the sector, as hotels, restaurants, and caterings (Horeca) were temporarily closed, as well as most productive activities as a consequence of mobility restrictions. During the state of emergency period, neither travel between Spanish regions nor the arrival of foreign tourists in those regions was allowed, drastically reducing, as a consequence, wine consumption related to tourist flows. Faced with this situation, Spanish wineries have already started to expand the online sales channel and shipments to home (AFI, 2020).

The purpose of the research is to analyze the effect that the irruption of the coronavirus has had on the Spanish wine industry, this being a task of an exploratory nature, given that there is no scientific production that has addressed the proposed research objective. In particular, the research attempts to address this objective by analyzing the evolution of the different wine distribution channels in Spain.

After this brief introduction in which the research is contextualized and the objective to be addressed is introduced, Section 2 presents the literature review carried out. Section 3 details the procedure followed to address the objective. Section 4 shows the most important results obtained from the study and, finally, Section 5 presents the conclusions, limitations, and future lines of research to overcome these limitations.

### **Literature Review**

As a consequence of the rapid transmission of the virus, a huge number of academic papers have emerged with the aim of putting an end to the pandemic. In this complex context, humanity requires more than ever a collective effort to translate into scholarly articles of value to society (Kupferschmidt, 2020). One of the collective responses of publishers has been the creation of open access resource centers to gather and make accessible all publications related to the COVID-19 topic. Thus, large multinational publishers such as Elsevier, Springer, and Emerald have adopted this measure (Torres-Salinas, 2020). In addition, many scientific repositories provide quick access to their preprints on the COVID-19 topic on their home pages, such as arXiv and Zenodo, creating virtual communities to collect the most relevant papers.

During COVID-19, most of the scientific output has revolved around epidemiological issues (Chahrour et al., 2020). Nevertheless, a new research trend has focused on understanding the impact of the pathogen on the economic activities of the affected countries. There is a paucity of academic literature on the effect of the pandemic on the wine industry, since, to our knowledge, there are only two research studies indexed in the Web of Science database that address this topic and they are for the Australian (Wittwer & Anderson, 2020) and Italian (Bressan et al., 2021) cases. In order to fill this gap in the literature, this paper aims to address this objective for the Spanish case.

There are industries that have been studied under a more global approach than others, such as maritime and air transport, the tourism industry, and the financial industry, since the articles that address the impact of the coronavirus on these sectors try to estimate its impact at world level. This may be due to the characteristics of these industries, since their proper functioning depends on the free movement of capital, individuals, and goods. On the contrary, the impact of the pandemic on industries such as food, energy, hospitality, and entertainment has been investigated mainly at national level, as a consequence of the heterogeneity of resources and capabilities across nations.

All industries have been directly or indirectly affected by the instability caused by the coronavirus. However, the virulence of the impact has not been the same in all sectors, with the impact being especially virulent for the service activities. With regard to the hotel and catering sector, restaurants have had to limit their seating capacity, in some cases even closing their establishments completely due to government

orders imposed in different countries (Roy et al., 2020). Restaurants that had financial surpluses have been able to quickly adapt their services in order-to-delivery format (Yang et al., 2020). However, as the pandemic spread, the hospitality sector has sought government financial support in order to overcome the adverse effects of the health crisis.

In relation to the tourism industry, the pandemic has affected the proper functioning of tourism activities around the world (Gössling, 2021), particularly in those countries with high dependence on tourism, such as Mexico, Italy, and Spain (WEF, 2019). The scientific production generated during the pandemic shows the negative effect of the coronavirus on different tourism products, such as: educational (Tiwari et al., 2020), rural (Hong et al., 2020), sustainable (Almeida & Silva, 2020), cruise (Lu & Zheng, 2020) and wine tourism (Karagiannis & Metaxas, 2020).

Measures to restrict mobility during the pandemic have also caused large losses to airlines worldwide as a result of massive flight cancellations by tourists (Almeida & Silva, 2020), being one of the first industries affected when the first outbreaks of the virus were discovered, since the transportation of people by air could increase the speed of spread of the coronavirus (Maneenop & Kotcharin, 2020). The shipping industry has not remained unaffected by the pandemic, as the drop-in consumer demand has had a domino effect on shipping and port activity (Notteboom et al., 2021).

As for the healthcare industry, it is facing an unprecedented crisis in terms of the safety of healthcare personnel, economic viability, the challenges of healthcare education and other issues related to the provision of safe healthcare. In this context, it is important to underline that there is a remarkable interest in one of its modalities, telemedicine. The impact of the COVID-19 pandemic has led to a rapid expansion of telemedicine, as it can reduce the spread of the virus by preserving safety distance and improving access to consultation (Betancourt et al., 2020; Doraiswamy et al., 2020).

Another big loser in the service sector has been the leisure industry. In the last two decades, most European states have promoted the leisure industry for its contribution to growth, innovation, tourism, and social cohesion and identity (Dümcke, 2021). However, the inability of individuals to leave their homes has led to a situation where the industry has reached its limits. The widespread move to digital platforms and content during lock-in has led to an increase in free cultural offerings, transforming the way art and culture are consumed. Dümcke (2021) and Comunian & England (2020) analyze the cultural industry in Germany and the UK, respectively, to analyze whether the changes in cultural consumption patterns as a consequence of the pandemic are structural or conjunctural.

As regards the secondary sector, scientific production is oriented towards the analysis of the impact of the coronavirus on the energy industry. This industry has been affected by the impact of the pathogen, which has had a huge impact on the renewable energy subsector (Song et al., 2020). The Asian giants, India and China, set a goal of more than halving their renewable energy generation capacity by 2022, with a current stagnation due to COVID-19 (Pradhan et al., 2020). In fact, the construction of new solar and wind plants slowed dramatically in 2020 and is expected to slow further in the coming years, with South Africa and Brazil being the countries most affected by the slowdown in renewable energy installation projects (Pradhan et al., 2020).

Finally, in relation to the primary sector, it is important to note that the food industry has suffered a lower relative impact (Gray, 2020). This is because customers have continued to consume food despite the confinements imposed by different governments around the world. Nevertheless, this industry has been affected by the so-called indirect effects of the pathogen. On the one hand, from the supply side, the pandemic has caused numerous problems resulting from limited worker mobility, transport delays and

poor accessibility to certain raw materials (Höhler&Lansink, 2020). On the other hand, from the demand side, food companies have had to cope with customer-generated stock-outs due to customers' fear of a supply crisis. These indirect effects have been reported in the academic literature for different foods, such as rice (Adnan &Nordin, 2020), cereals (Brewin, 2020), fruits and vegetables (Çakır et al., 2020) or sugar (Solomon et al., 2020). In this context, the research by Wittwer& Anderson (2020) and Bressan et al. (2021) deserve special attention since they try to measure the effect of COVID-19 on the wine industry for the Australian and Italian case. Both studies point to a decline in wine sales during 2020, with two fundamental factors explaining the decline, as the researchers point out: (1) COVID-19 and (2) the minority consumption of wine in China. This research also shows that those wineries dependent on the direct sales distribution channel in the winery have been more affected by the pandemic, given their lower diversification of distribution channels and, as a consequence, their lower risk diversification.

### **Methodology**

The research analyzes the evolution of the different channels through which wine is marketed in Spain in order to examine the effect of COVID-19 on the wine industry. To this end, firstly, the impact of the pandemic on employment in the wine-related sectors is shown. Second, the evolution of wine distribution channels in Spain is analyzed. Thirdly, Spanish wine exports during the last three years are analyzed and, finally, the impact of the coronavirus on tourism and, in particular, on wine tourism is shown.

The research adopts an exploratory approach, since its objective has not been previously addressed in the academic literature. In order to carry out the study, use has been made of secondary data, since through the combination of existing data it is possible to generate new and valuable knowledge (Andrews et al., 2012). The data used for the study came from the following organizations: the Ministry of Agriculture, Fisheries and Food (MAPA, for its acronym in Spanish), the Interprofessional Wine Organization (OIVE, for its acronym in Spanish), the Spanish Wine Market Observatory (OEMV, for its acronym in Spanish), the Spanish Wine Federation (FEV, for its acronym in Spanish) and the Tourism Observatory of the Wine Routes of Spain (OTRVE, for its acronym in Spanish).

### **Results**

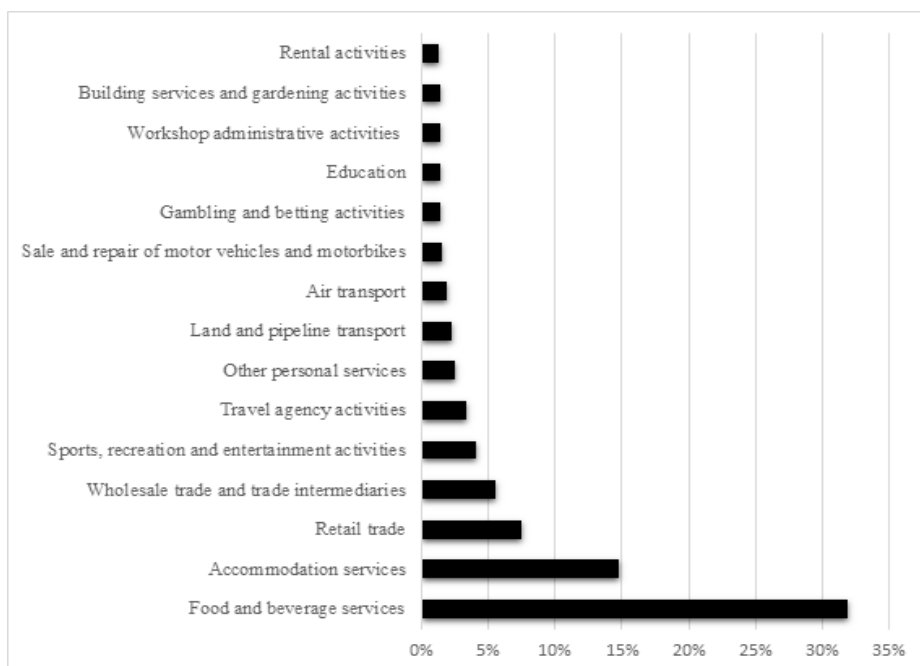
The results will be presented in four blocks: (1) the effect of coronavirus on employment in wine-related industries, (2) the effect of coronavirus on wine distribution channels, (2) the effect of coronavirus on wine exports, and (4) the effect of coronavirus on wine tourism.

#### **Effect of coronavirus on employment data for wine-related industries.**

Food and beverage services, accommodation services and retail trade were the hardest hit industries by the pandemic in 2020, as evidenced by the Temporary Layoffs (ERTE, for its acronym in Spanish) requested by these sectors as a consequence of the convulsive environment generated by the pandemic (see Figure 1). Therefore, the Horeca sector has been one of the most affected by the pandemic, with direct repercussions on wine sales, since this channel represents approximately one third of wine sales in the Spanish market.

Through Figure 1, it is also possible to point out the existence of a negative effect of the coronavirus on leisure, as it is one of the sectors in which the highest number of ERTes was recorded. This directly affects the wine industry, since wine represents a social act, and its consumption is usually linked to special events and celebrations.

**Figure 1.** Sectors most affected by the pandemic in terms of requests for ERTes (% of ERTes requested by sector). Year 2020.

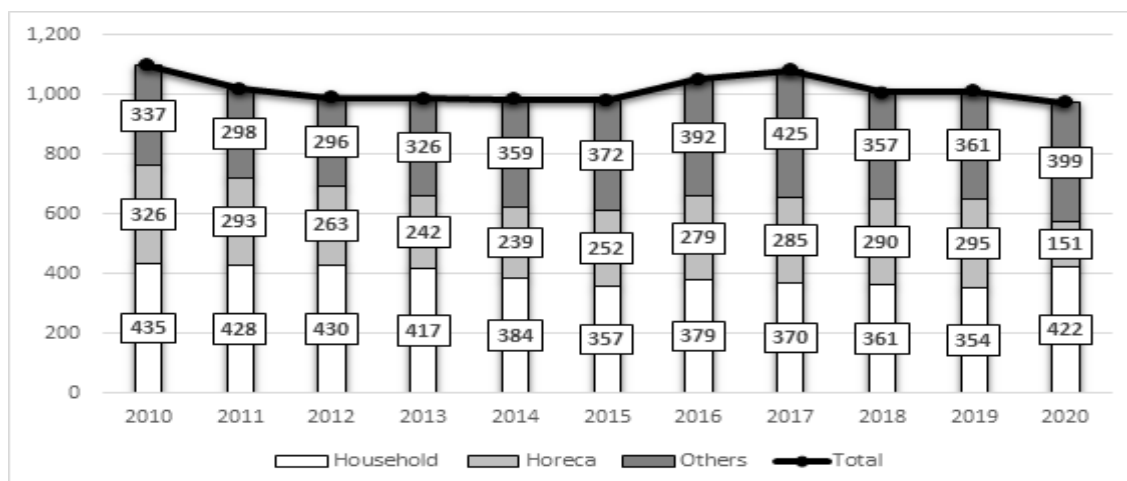


Source: prepared by the authors based on INE data.

**Effect of coronavirus on Spanish wine distribution channels**

In Spain, there was a decrease in wine consumption in 2020 from the previous year, experiencing a decrease of 3.76%. Thus, although household wine consumption increased by 19.22% in 2020, this increase could not offset the sharp reduction produced in Horeca, producing a year-on-year reduction of 48.8%. As for the remaining channels, Figure 2 shows a notable increase of 10.52% in 2020.

**Figure 2.** Distribution of Spanish wine consumption by distribution channels (Millions of liters).



Source: prepared by the authors based on MAPA, OIVE and OEMV data.

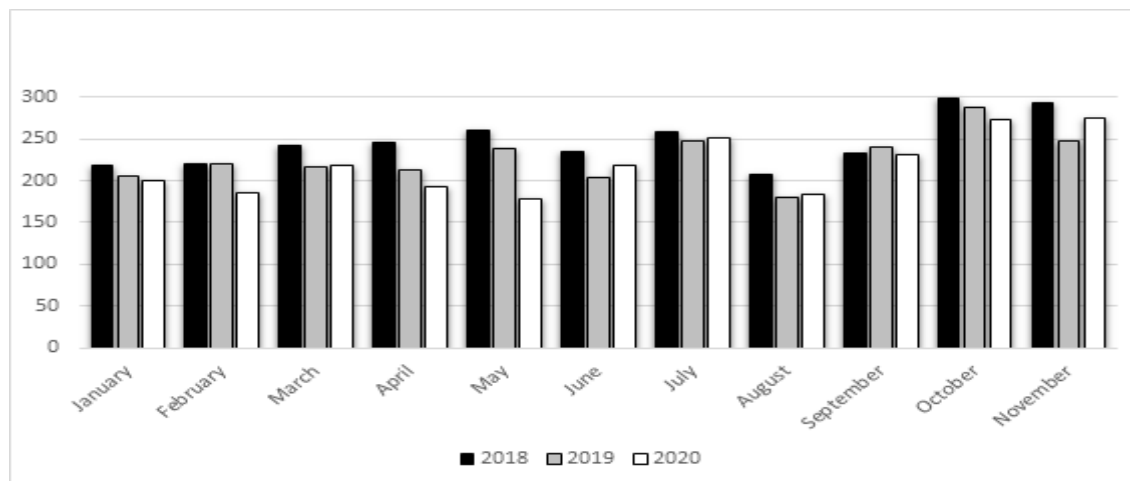
**The effect of coronavirus on Spanish wine exports**

The variability in monthly wine exports historically makes it difficult to calculate the impact of the coronavirus for this type of export, given that the variation of these can be conditioned by a multitude of

factors. However, Figure 3 shows that Spanish wine exports reached the lowest data in the last three years for the months of April and May 2020, as a consequence of the instability generated by the state of alarm, implemented in March 2020 by the Spanish government.

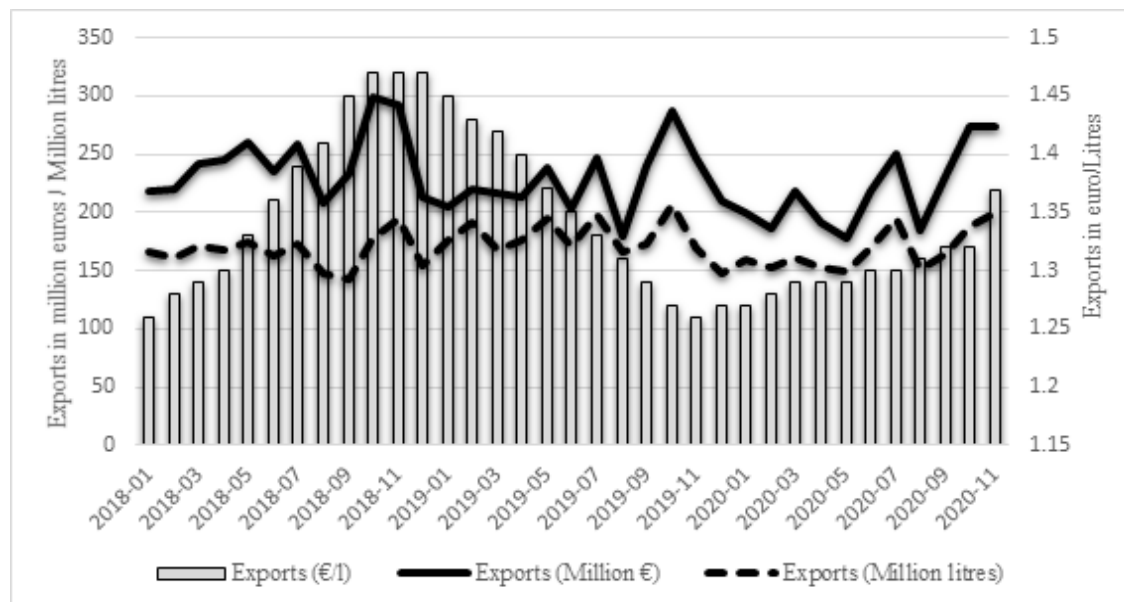
From the end of 2019 to the beginning of 2020, there was a strong drop in exports, both in volume and value (see Figure 4). In February 2020, on the other hand, exports began to stabilize, starting an upward trend at the end of the year. In fact, since August 2020, the difference between the monetary value of exports and the value in volume has increased, causing an increment in the euro per liter exported.

**Figure 3.** Spanish wine exports during the months of 2020 (Millions of liters).



Source: prepared by the authors based on FEV data

**Figure 4.** Spanish wine exports in volume and value. Year 2020.



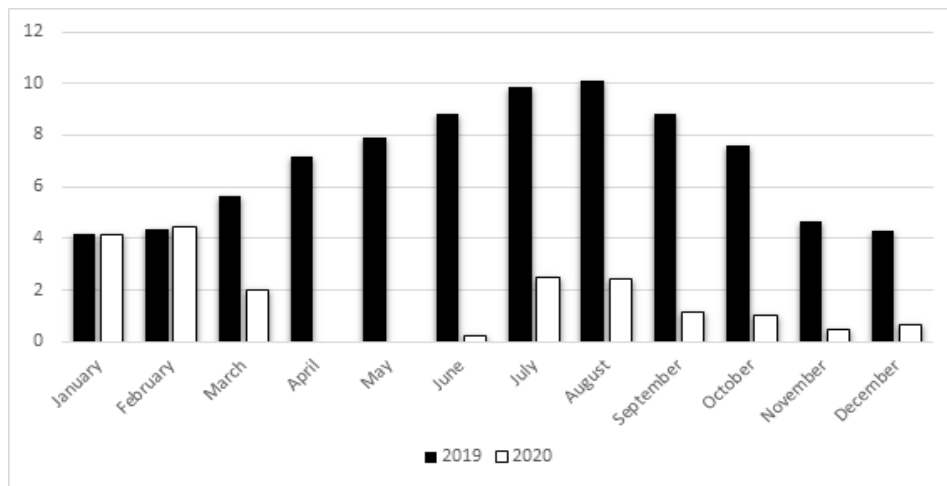
Source: prepared by the authors based on OIVE and OEMV data.

**The effect of coronavirus on wine tourism**

The Spanish state of alarm lasted 99 days (from March 14 to June 21, 2020). During this period, no travel between the country's different autonomous communities was allowed, nor was access to the Iberian

country by foreign tourists (see Figure 5). Therefore, in the months following the state of emergency decree, wine consumption linked to foreign tourists was drastically reduced. Thus, Spain went from registering 83,509,153 foreign tourists in 2019 to 18,933,103 in 2020, with no entry records for the months of April and May.

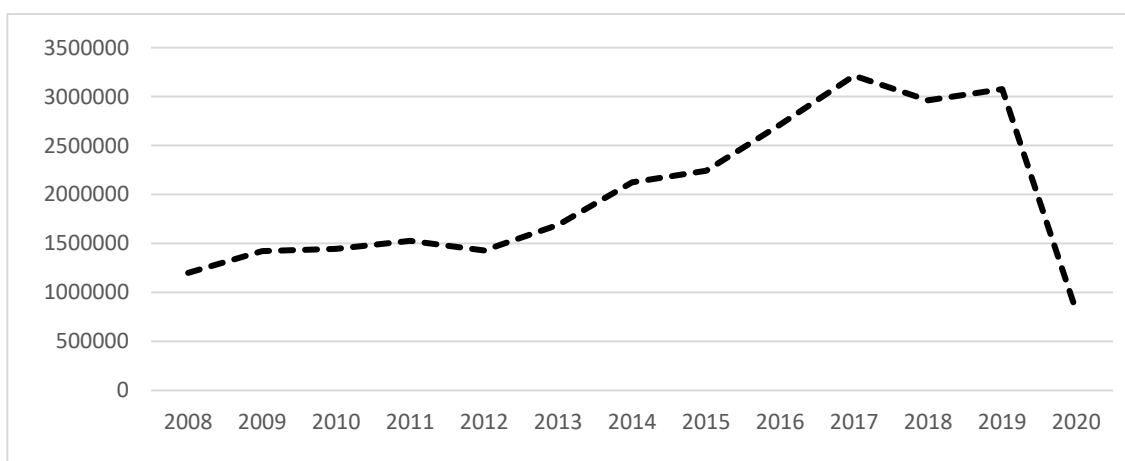
**Figure 5.**Number of international tourists in Spain (Millions of tourists).Year 2020.



Source: prepared by the authors based on INE data.

If we focus specifically on wine tourism (see Figure 6), it is possible to observe how there was a drastic reduction in the total number of visitors to wineries and wine museums belonging to the Wine Routes of Spain, experiencing a drop in the number of wine tourists of 73.5% in 2020 compared to the previous year. This drop has had a direct impact on wine sales in the winery itself and on wine consumption in the Horeca channel.

**Figure 6.**Number of visitors to wineries and wine museums belonging to the Wine Routes of Spain.Year 2020



Source: prepared by the authors based on OTRVE data.

**Conclusions**

The results derived from the research are particularly relevant for the Spanish wine industry, as they shed light on a turbulent environment as a consequence of the coronavirus outbreak. In fact, the research makes

a major contribution to the academic literature, as no research has addressed the impact of the coronavirus on the Spanish wine industry.

One of the first conclusions derived from the research is the strong restructuring of wine distribution channels, as household wine consumption (19.2%) and the other channels (10.52%) increased considerably. However, these increases could not offset the reduction in Horeca wine consumption (- 48.80%). On the one hand, the increase in household wine consumption can be explained by the substitution of food and beverage consumption in restaurants for consumption at home, since, as a result of mobility restrictions, the population has not been able to consume food and beverages in bars and restaurants. On the other hand, the drastic reduction in wine sales through the Horeca channel occurred as a consequence of the Spanish government's declaration of a state of emergency in mid-March 2020, as all types of establishments had to be closed in order to contain the rapid spread of the coronavirus.

As stated in the results section, the state of alarm began on March 14, 2020 and ended on June 21 of the same year, thus there were 99 days during which the flow of foreign tourists was restricted. Likewise, after this period, the competences regarding mobility restrictions were transferred to the different autonomous communities that make up the Iberian country, implementing strict restrictions that made the normal functioning of tourism impossible. This severely affected wine tourism, an essential activity to increase wine sales in the winery itself and to promote the commercialization of wine through Horeca, registering a sharp drop in the number of wine tourists of 73.5% in 2020 compared to 2019.

The present research makes a notable contribution to the academic literature. First, no study has addressed the impact of the pandemic on the Spanish wine industry. Second, the research serves for winemakers to understand what the main sources of the effect of the coronavirus on the wine industry have been. Thirdly, the work demonstrates the importance of diversification of distribution channels for marketing wine, as diversification of these channels leads to diversification of the wineries' overall risk.

Although the study contributes to the academic literature in a remarkable way, it also has certain limitations. The main limitation of the study is related to the data used, as these are secondary. To overcome this limitation, we propose as a future line of research to ask Spanish wineries through a questionnaire (primary data) about their economic situation and how they have been able to overcome the impact of the coronavirus.

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