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RESEARCH NOTE

Analyzing globalization through a case study of wine: the Global Wine Markets Annual Database, 1835–2023

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Abstract

This paper documents a new, unique annual database of global wine markets covering 1835–2023. The database expands enormously the opportunities for conducting studies on national and global wine production, consumption and trade from an historical and comparative perspective for the world as a whole and for most relevant countries. The combination of this basic information with other economic variables such as real GDP, population, total merchandise trade, total crop area, and the consumption of other alcoholic drinks has enabled us to generate myriad derived variables that are helpful for comparative analyses as well as for studying the two waves of globalization.

Keywords: globalization; wine history; historical databases; world economic history; wine economics

JEl codes: F10; N50; N70; Q10; Q17

Resumen

Este artículo presenta una nueva y única base de datos anual sobre los mercados mundiales del vino que abarca desde 1835 hasta 2023. La base de datos amplía enormemente las posibilidades de realizar estudios nacionales y globales sobre la producción, el consumo y el comercio del vino desde una perspectiva histórica y comparativa, tanto a nivel mundial como para los países más relevantes. La combinación de esta información básica con otras variables económicas, como el PIB real, la población, el comercio total de mercancías, la superficie total cultivada y el consumo de otras bebidas alcohólicas, nos ha permitido generar una multitud de variables derivadas que son útiles para análisis comparativos, así como para el estudio de las dos olas globalizadoras.

Palabras clave: globalización; historia del vino; bases de datos historicas; historia económica del mundo; economia del vino

1. Introduction

The study of the two waves of globalization has been one of the most popular topics in historical research over the past two decades. Economic historians and world historians in particular have made it a priority among their research topics.[1] The study of the second wave of globalization has also become highly relevant in other scientific fields, such as economics, geography, political science, and sociology.

From an economic perspective, the central aspects in the study of the globalization phenomenon have been its causes and consequences, and its temporal dynamics through the study of the market integration processes and its principal pillars: international trade in goods and services, migration of workers, and capital flows.

The majority of the historical research in international trade has tended to focus on the analysis of trade flows between large regions of the world, or between countries, and the study of its determinants, following the pioneering contributions of Lewis (1952, 1981), Estevadeordal *et al.* (2003), Jacks (2005, 2006), Findlay and O'Rourke (2007), Meissner *et al.* (2011), and Federico and Tena-Junguito (2019). Studies that focus on just world agri-food product trade in both waves of globalization and its causes include Anderson (2014, 2023a), Aparicio *et al.* (2009, 2018), and Serrano and Pinilla (2010, 2011, 2012, 2014). These general studies have been extended in recent years with analyses of a series of food or agricultural products that experienced significant globalization over the past few centuries in terms of their consumption, production or trade. There are extensive monographs for products such as silk (Federico, 1997), coffee (Clarence-Smith and Topik, 2003), beer (Swinnen, 2011), chocolate (Squicciarini and Swinnen, 2016), and wheat (Bertilorenzi *et al.*, 2025), as well as many articles that study other products. These studies enable us to understand the development of the two waves of globalization in a much more precise way than more-general analyses, as they analyze and interpret, with greater precision, the driving mechanisms of goods market integration as globalization proceeds. One of the obstacles faced is the difficulty in obtaining good data for the whole world and for the different countries over long periods of time, even for a single product.

The *Global Wine Markets Annual Database, 1835–2023* was developed to respond to this need. The database provides researchers with wine production, trade, and consumption data that cover the whole world over two globalization waves. This database built on one created by Anderson and Nelgen (2011) which included data for the period 1961–2009. Apart from adding many more years, more variables have been added, especially on consumption of wine and other alcoholic beverages.

Wine has been chosen as a case study due to its importance from economic, social, and cultural points of view. Since the domestication of the grapevine approximately 11,000 years ago in Western Asia and the Caucasus, wine has been a key drink in the diet and culture of civilizations that developed in Eurasia and around the Mediterranean Sea (Dong *et al.*, 2023). Further diffusion of vine growing and wine production was limited until the Age of Discovery. From the Mediterranean regions, it slowly advanced towards Europe's Atlantic coast, where the climatic conditions were ideal for growing vines, but then receded in Anatolia, the Middle East and North Africa as these lands became dominated by the Islamic Empires, due to the prohibition of alcohol consumption according to the Quran. From the sixteenth century, wine production extended, albeit modestly, to the Americas and then South Africa. It was not until the mid-nineteenth century that wine production in California and the rest of the New World increased significantly. However, it took until the

[1] O'Rourke and Williamson (1999); Pomeranz (2000); Bordo *et al.* (2003): Findlay and O'Rourke (2007).

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second half of the twentieth century before wine globalization really took off (Anderson and Pinilla, 2018).

The key role played by wine in firstly Western European civilization and subsequently in others, together with its importance in the economy of the old and new producing countries, has generated increasing interest in its study by different social science fields, such as economics, history or geography.

The intensifying globalization of the consumption and production of wine, and especially the expansion of its trade since 1990, has given rise to the study of the economy and history of wine also from a global perspective, going beyond earlier national case studies and limited comparative studies.[2]

2. A brief history of the global wine markets database

The creation of the database was undertaken simultaneously with the development of an international project involving a considerable number of researchers with the objective of compiling a world economic history of wine over the past two centuries (Anderson and Pinilla, 2018). The aim of that research project was to analyze the different national cases from a comparative historical perspective (following Hatton *et al.,* 2007), and to draw lessons from the historical analysis for the future of this industry. To do so required collaboration between applied agricultural economists and (mainly economic) historians.

The database constituted the primary source of quantitative information used for this project, but some authors were able to supplement that with more detailed national data, such as on wine regions and wine grape varieties.

2.1. Overview and structure of the database

The database provides historical quantitative information for all key countries involved in wine production, consumption, and trade.[3] It also has auxiliary data on such macro variables as total agricultural crop area, total and adult population, real GDP at 1990 prices, local currency to US dollar current exchange rates, total merchandise exports and imports, volumes of production, consumption and trade in beer, and consumption of other alcoholic drinks and hence of all alcohol (expressed as liters of alcohol). These are valuable for calculating intensive indicators, such as per capita and per $ of real GDP, to compensate for differences in the sizes of countries and economies.

The years covered differ across variables depending on the availability of data. Although some tables begin before the nineteenth century, the main database starts in 1835, but is not complete for all countries from this year. There are comprehensive data for the whole world in terms of the area under vine from 1900; volumes of wine production and exports from 1860; wine import volume from 1925; current value of wine exports from 1900 and wine imports from 1961; and volume of wine consumption from 1961 (Table 1).

Our analysis begins in 1835, a date that roughly coincides with the onset of the first wave of globalization, as identified by O'Rourke and Williamson (2002, 2004). That is also just before California, Australia, and New Zealand began commercial wine grape production. Data for a few countries go back further (Portugal to 1750, South Africa to the 1660s, and Britain to the 1320s), but for many other countries the data are only sporadic until the mid-nineteenth century or later. We therefore interpolated to fill data gaps in the most

[2] Unwin (1991); Gatti *et al.* (2003); Anderson (2009); Simpson (2011); Anderson and Pinilla (2018); Messina *et al.* (2019).

[3] This database does not include any variable on the impact of climate change on global wine production, as this information is already available in Anderson and Nelgen (2020).

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Table 1. First year of data for key variables in annual database

	Grape vine area	Volume of wine production	Volume of wine exports	Volume of wine imports	Value of wine exports	Value of wine imports	Volume of beverage wine consumption
Important countries[a]	1835	1835	1835	1835	1850	1850	1840
Most of the world[b]	1890	1850	1850	1881	1890	1910	1862
World	1900	1860	1860	1925	1900	1961	1961

[a]"Important countries" are those representing a significant percentage of the global total of each variable.
[b]"Most of the world" refers to countries that account for more than half of the global total of each variable.
Source: Authors' compilation from Anderson and Pinilla (2024).

important series (volumes of wine production, exports, and imports) to be able to estimate global totals for those key variables back to 1860 when globalization accelerated. This allowed shares of the world total to be estimated for each variable. Our interpolation methodology in many cases was simply straight-lining between known points in the absence of any other information.[4] The interpolated data represent a small part of the world total of such variables, not exceeding 10% before 1900 and 5% thereafter. They are colored in the spreadsheet to warn users against relying on them in any study of countries with incomplete data.

The data are grouped in the tables into eight geographic regions. Three of them display all countries (Australasia, North America, and Western European major exporters), while the other five show major countries separately, along with a residual grouping for each of those regions. A total of 47 individual countries are reported, plus the five residual regions. Those 47 countries have accounted for 96% of global wine production and exports and over 90% of global consumption and imports since 1860.

Of course, national borders did not remain fixed over such a long timeframe. We follow the convention of other comparative historians in using current national boundaries. For example, Alsace and Lorraine are counted as part of France even though they were folded into Germany during 1871–1918. Data for the Austro-Hungarian Empire have been carefully disaggregated prior to 1920 (see Storchmann, 2018). We also count European colonies as separate countries during the imperial period. Importantly, Algeria is considered a separate trading entity prior to, as well as following, its independence from France in 1962. It also means the colonies that came together to form the Federation of Australia in 1901 are treated as if the Federation also existed in the nineteenth century.[5]

2.2. *Vine area and wine production*

Data on vine-bearing area are available for all countries of the world after 1900. Hence, each country's share of the global vineyard area has been calculated. Using complementary information in the database on total crop area, population, and real GDP, we have also calculated vine's share of the total crop area, vine area per capita, and vine area per million dollars of real GDP.

The wine production volume series is, together with the export volume series, the longest in the database, as there are data available from 1860 for the whole world. Again, it has been possible to derive each country's share of global production as well as per capita production and production per $m of real GDP.

Vine area and wine production (and trade) are shown also for earlier periods for France (from 1700), Portugal (from 1750), and South Africa (from 1666). Greek raisin production (and export volume and value) are shown from 1835.

[4] Appendix 2 of Anderson and Pinilla (2017) provides details on the data and years for which values were obtained through linear interpolation. It is evident that our calculation method smooths the variations between the two years for which interpolation is applied. However, since these cases account for only a small share of the global total, we do not regard this as a major concern.

[5] The number of countries with greater than 100,000 inhabitants was 132 in 1835, but it halved over the next 60 years and was as few as 51 in 1912. By 1922, when the Austro-Hungarian and Ottoman empires had collapsed, there were 66 countries. That number had risen to 76 by 1950, 136 by 1970, 163 by 1990, and 182 by 2011—or 195 if UN member countries with less than 100,000 inhabitants are included (Griffiths and Butcher, 2013). Further details on how the data were estimated in cases of changing borders can be found in Anderson and Pinilla (2017).

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2.3. International trade in wine

Data on trade include national wine exports and imports, in both volume and US$ value terms. For several countries, the volume data begin in 1835, but not for all countries until 1860 in the case of exports and 1925 in the case of imports. Export volumes are also expressed as a share of the volume of wine production, as well as per capita and per $m of real GDP.

Current US dollar values of wine exports are available from 1850 for some key exporting countries and for all countries from 1900. In the case of wine import values, although information is available from 1835 for the then two largest importing countries (Britain and Russia), it is only from 1960 onwards for all countries. Export and import values are also expressed per capita, and as a percentage of all merchandise trade. Also reported are wine trade specialization indexes,[6] the index of revealed comparative advantage in wine,[7] intra-industry trade indexes,[8] and the unit values (average prices) of wine exports and imports.

It is too cumbersome to include bilateral trade data for all countries. However, for some countries there are early bilateral wine trade data available. For Britain, wine import data are available from 1323, with main supplying countries' shares shown from the late 1600s to 1940. The main destinations of wine exports and the principal origins of imports between 1850 and 1938 are provided also for France. For both countries data are also included on the tariffs paid at their borders on imports of wine.

2.4. Wine and other alcohol consumption

Wine, beer, spirits, and total alcohol consumption data are included (from the World Health Organization) for all countries from 1960. They are also available for high-income countries from 1880 to 1936 (from the Institut national de la Statistique et des Études Économiques). For other countries with reliable wine production and trade volume data pre-1960, apparent wine consumption is estimated as net imports plus the average of production in the current and two previous years (so as to allow for delays between production and final consumption and to smooth vintage weather fluctuations).[9] Volumes of consumption are also expressed in liters of alcohol, total and per capita, per adult, and per $m of real GDP and wine consumption (in liters of alcohol) per adult and per capita. Also included are shares of wine, beer and spirits in the total volume of alcohol consumption, wine imports as a share of wine consumption, wine self-sufficiency, and wine, beer and spirits consumption intensity indexes.[10] A separate table shows consumer taxes on wine, beer and spirits for 2008, 2012 and 2014 (since updated to 2018 by Anderson, 2020a).

[6] The trade specialization index is $(X - M)/(X + M)$ and so is within the range -1 to +1, and zero when wine exports = wine imports. It is reported in both volume and value terms.

[7] The index of "revealed" comparative advantage is $(X_{ij}/X_{it})/(X_{nj}/X_{nt})$, where X is exports, i is country, j is wine, t is all merchandise exports, n is the world. A country is considered to have a comparative advantage (disadvantage) in wine when the index exceeds (is less than) one.

[8] The intra-industry trade index is calculated in volume or value terms as the share of country i's wine exports going to country j $[x_{ij}/x_i]$ divided by the share of country j's imports (m_j) in world wine imports (m_w) net of country i's imports (m_i). That is, $[x_{ij}/x_i]/[m_j/(m_w - m_i)]$.

[9] All consumption data, like production data, are "recorded," that is, no account is taken of informally produced or homemade (legal or illegal) alcoholic beverage production or consumption. The World Health Organization (2011) estimates that 29% of world alcohol consumption was unrecorded in 2005, and that estimate is 48% in low-income countries and 69% in South and Southeast Asia, compared with 11% in high-income countries. A table of these estimates is included for each country for 2000, 2005, and 2010.

[10] The consumption intensity index is calculated in volume or value terms for country i as f_{im}/f_m, where m is one of three beverages (wine, beer, or spirits) and f_{im} is the fraction of wine, beer, or spirits consumption in total national alcohol consumption volume or expenditure in country i such that $0 \leq f_{im} \leq 1$ and $\sum_m f_{im} = 1$. This is

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2.5. Original sources underlying the database

Two international organizations have specialized in global agricultural data compiling: the International Institute of Agriculture (IIA), and the Food and Agriculture Organization (FAO) of the United Nations, each with their head office in Rome.[11] They are the key source of data on vine bearing area, total agricultural crop area, and wine and beer production and trade volumes.[12]

The IIA was founded in Rome in 1905 by David Lubin (1849–1919), an American trader and agricultural reformer of Polish origin. The objective of the IIA was to gather, classify, and distribute information about crops, prices, and international agricultural trade. It immediately began to publish international agricultural statistics. During its existence, it published six statistical yearbooks starting with the data published in 1903 and ending in 1938. A seventh volume with the same format as the six previous publications was published after the war in conjunction with the newly created FAO and covered the whole period of the Second World War. The FAO, created as a specialized agency of the United Nations, undertook the activities previously performed by the IIA, extending its objectives and aims significantly. Ties of senior officials of the IIA with the Italian fascist regime were the reason for dissolving the IIA and replacing it with the FAO (Pan-Montojo, 2016). The number of products for which information was provided increased significantly over the years, as did the number of countries. There is no information at IIA before 1921 for vine area and wine production and before 1925 for wine trade. The 1928–1929 yearbook provides average annual production, area under vine and wine trade for the period 1909–1913.

The FAO's *Yearbook of Food and Agricultural Statistics*, and after 1958 its *Production Yearbook* and *Trade Yearbook*, added to the pre-war statistics of the IIA, although it took a few years to match the quality and exhaustiveness of the data provided by the IIA (Yates, 1955). Therefore, there are large gaps in the information provided during this period for countries of the Soviet Bloc and many Asian and African countries. After 1961, the data are available electronically from the FAOSTAT database.

The data published by the IIA and the FAO are based on official national statistics of each member country. Their quality depends, therefore, on the quality of the data assembled by national statistics offices.

In our case, for many countries we have also chosen to use the national statistics directly, as they offer more-complete data and other detailed information. These national data are usually obtained after being extracted and refined by researchers studying these countries. This is especially the case for France, Germany, Austria, Switzerland and Hungary, Italy (Federico *et al.*, 2011, Spain (Gallego and Pinilla, 1996), Portugal (Freire and Lains, 2016), United Kingdom, Argentina, Australia and New Zealand (Anderson, 2015), Chile (Morel-Astorga, 2002), South Africa, the United States, Greece (Petmetzas, 2017), Algeria, Morocco and Tunisia, and East Asia (Anderson and Harada, 2018).[13]

Macro variables such as population pre-1961, and real GDP, are from Maddison (2013). Exchange rates and total merchandise trade for the nineteenth century are from Federico and Tena-Junguito (2019). Russia's wine import values were kindly provided by Ekaterina Khaustova, derived from primary Russian archival sources in Moscow. For other countries, when data were required which were not included in the afore-mentioned or standard

divided by the fraction for that same beverage in world total alcohol consumption, f_m, where $0 \leq f_m \leq 1$ and $\sum_m f_m = 1$.

[11] IIA (1911–1947); FAO (1947–1957); FAO (1958–2000); FAOSTAT (1961–2023).

[12] Anderson and Pinilla (2017) provide much more detailed information on the sources used, broken down by country.

[13] For these countries, the contribution of the authors of the chapters about them in Anderson and Pinilla (2018) was also significant.

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United Nations sources (e.g. COMTRADE for trade data from 1961), they were obtained from Mitchell (2007a, 2007b, 2007c).

3. An overview of wine's globalization

In the first globalization wave, global wine exports (treating Algeria as part of France) grew almost fourfold between 1861 and 1891 but then fell so that by 1914 they were below their 1880 level. Exports mainly fluctuated between 5% and 10% of production, except for a brief peak of 15% in the late 1880s.

However, if Algeria is treated as a separate country from France, our view of the evolution of the international wine trade changes significantly. The post-1891 decline appears more moderate, and trade gradually recovered until the outbreak of the First World War. Following the war, exports increased substantially, reaching a peak in 1938 that was notably higher than in 1891—representing a 25% increase in the volume of wine exported. This highlights some distinctive features in the configuration of the global wine market during the first wave of globalization.

The first key point is the central role played by France throughout this period, both as the leading exporter and the main importer. France's dominant position—accounting for between 30% and 60% of the total value of exported wine—was the result of profound transformations in its wine production, driven by two main factors: the improvement in wine quality through technological leadership, and the development of new marketing techniques that secured its top wines a privileged position among high-income consumers in developed countries. Moreover, France's colonial expansion further supported its exports, alongside trade liberalization (triggered by the 1860 Cobden-Chevalier Treaty) and reductions in trade costs (Ayuda *et al.*, 2020a).

In this context, another crucial element was the phylloxera plague that first devastated the French vineyards (Gale, 2011). The drastic fall in production forced France to import massive quantities of wine both to meet domestic demand and to sustain, at least partially, its exports. This strongly stimulated wine production in other Mediterranean countries, especially Spain (its main supplier) and Italy, either to export directly to France or to capitalize on France's weakened position by entering other markets, both in Europe and the Americas, where millions of Mediterranean immigrants demanded wine as part of their daily consumption. A key factor was that, as vineyards in France were replanted—the only solution to phylloxera—hybrid Franco-American rootstocks were initially used, which produced wines with low alcohol content and body. These wines required blending with stronger, darker wines, such as those from Spain. However, as part of its colonial policy in Algeria, France actively promoted vineyard expansion there by European settlers, which led to a customs union and the replacement of Spanish wine with Algerian wine (Pinilla and Ayuda, 2002).

If Algerian exports to France—which peaked in the 1930s—are excluded, global wine exports declined sharply between the late 1920s and the mid-1940s. A series of shocks severely disrupted trade: the Russian Revolution, Prohibition in the United States, the 1929 crash, the Great Depression, and the Second World War (Ayuda *et al.*, 2020b).

After the war, exports entered a sustained upward trend that has continued for over seven decades. It was not until 1990 that the previous peak—15% of wine production being exported—was regained. Today, this figure exceeds 40% (Figure 1). A crucial factor behind this dynamic growth in the second wave of globalization was the disappearance of Algeria, which had become the world's leading wine exporter by volume (Meloni and Swinnen, 2014). Its independence, the end of its privileged access to the French market,

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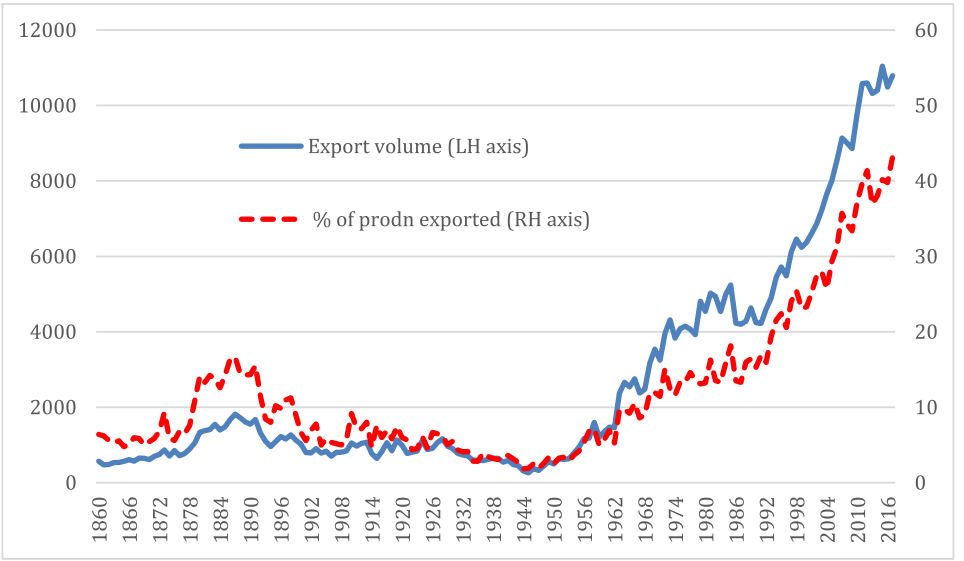

Figure 1. Global wine export volume (ML) and share of world wine production exported, 1860–2017 (%, assuming Algeria was part of France pre-1963).
Source: Authors' compilation from Anderson and Pinilla (2024).

and the expulsion of Europeans—who had been almost exclusively the owners of the vineyards and export-oriented wineries—led to the near-complete collapse of Algerian wine exports.

The globalization of wine since the 1980s has not only been driven by the expansion of traditional European exporters. Although wine production outside Europe was very limited prior to 1900, the colonization of temperate-zone countries by Europeans, and the knowledge brought by settler populations, laid the foundations for emerging wine industries. Initially, as discussed earlier, the fastest growth occurred in Algeria (Isnard, 1954). However, this was soon followed, during the first third of the twentieth century, by increasing production in North and South America, Australia, and South Africa. By the late 1930s, non-European countries accounted for one-fifth of global wine production. This share remained stagnant until the 1990s, but has since risen rapidly and is now close to two-fifths—closing the gap with Europe (Figure 2).

This is one of the most significant transformations of the second globalization wave. It is known as the rise of the New World wine exporters—Argentina, Australia, Canada, Chile, the United States, New Zealand, and South Africa. Their export success was based on the use of modern technologies, a break from European traditions by focusing on varietal wines, and an emphasis on maintaining stable wine quality, thus avoiding the rigidity of the Old World appellation systems.

Despite the observed growth in exports before World War II, the globalization of wine remained limited. The main reason was that wine did not become the dominant alcoholic beverage outside the traditional wine-consuming countries of southern Europe. While there was a notable increase in the consumption of high-quality wines by high-income groups in some non-wine-drinking European countries (such as the UK and northern Europe), in the countries with the highest economic growth during that period, local alcoholic beverages remained preferred (Figure 3). This was not solely a cultural phenomenon: even ordinary wine was typically more expensive than local drinks, which benefited from

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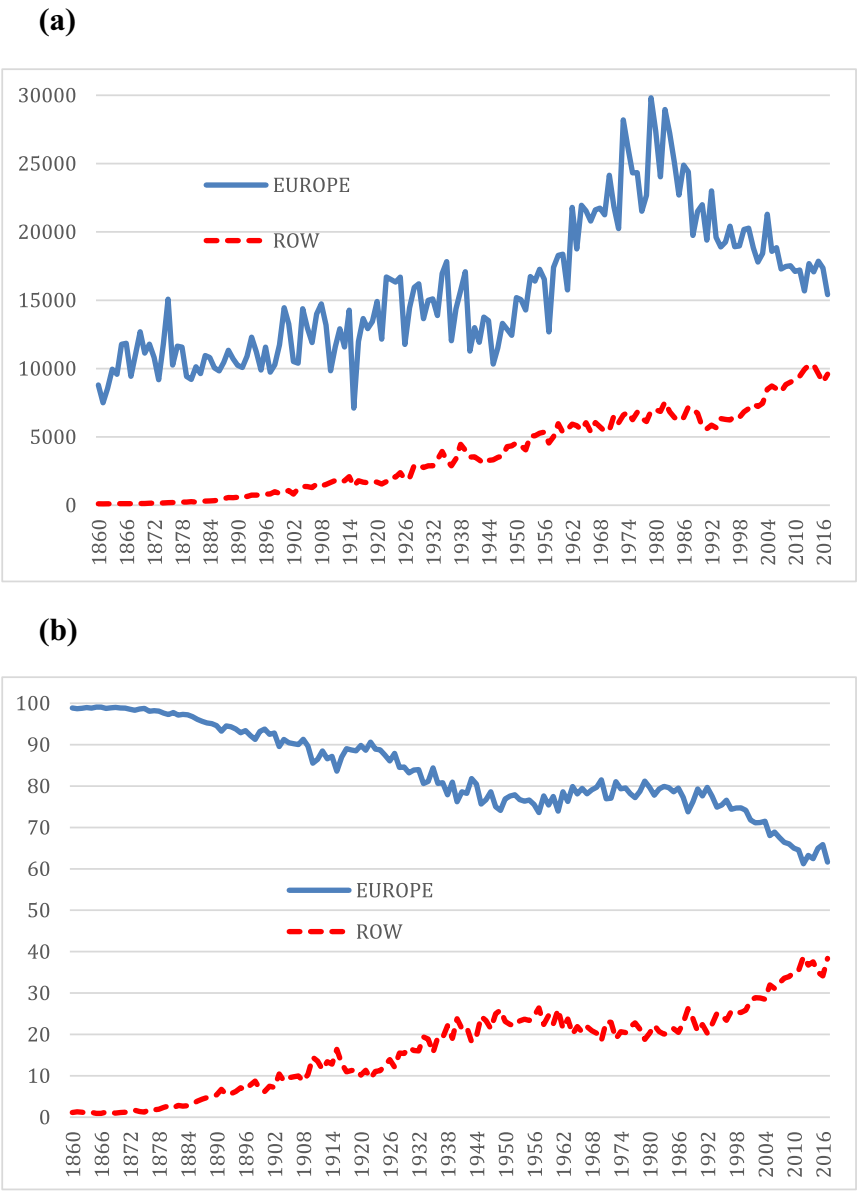

Figure 2. Global wine production, Europe and rest of the world, 1860–2017. (a) Volume (ML), (b) Shares of global wine production (%).
Source: Authors' compilation from Anderson and Pinilla (2024).

cost reductions due to technological innovations stemming from the Industrial Revolution (Anderson *et al.*, 2018). This limited progress in wine consumption is key to understanding the functioning of the global wine market during that era (Anderson and Pinilla, 2022; Ayuda *et al.*, 2020b).

Since the 1960s, however, wine consumption has followed a pattern of convergence. While beer or spirits were traditionally preferred in Northwest Europe, North America,

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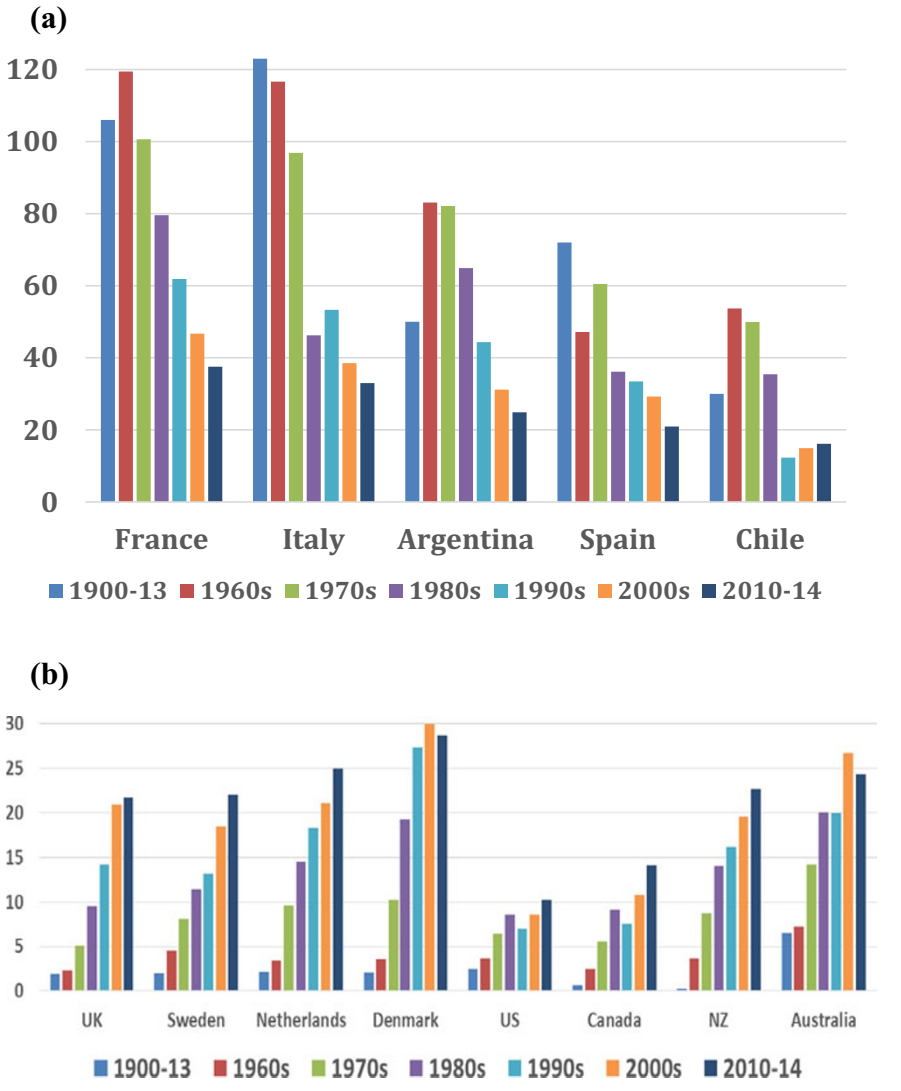

Figure 3. Per capita wine consumption, traditional and newer wine-consuming countries, 1900–2014 (liters per year). (a) traditional wine-consuming countries, (b) newer wine-consuming countries.
Source: Authors' compilation from Anderson and Pinilla (2017).

and Australasia—contrasting with the strong wine culture of Southern Europe and parts of South America—this distinction has faded. In recent decades, traditional wine countries have halved their per capita consumption, while other high-income countries, including East Asia, have been catching up from very low starting levels (Anderson, 2020b, 2023b).

It is within this broader context that we can understand the depth of wine market globalization. Not only has production expanded across continents, with a significant decline in the Old World's share of exports, but consumption has also followed a similar globalizing trend. This explains the high proportion of global production still concentrated in three

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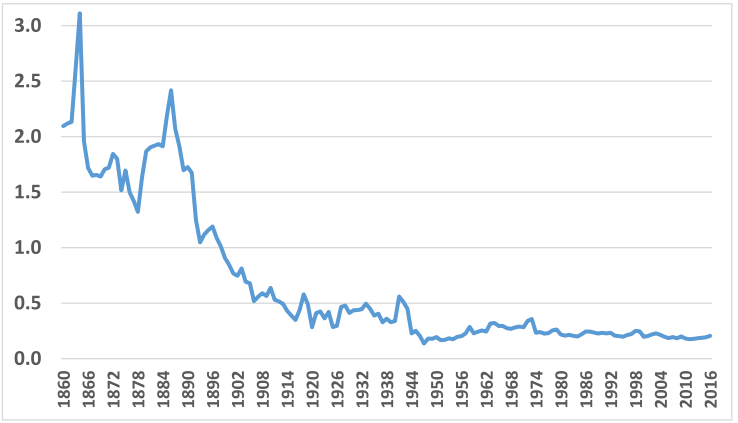

Figure 4. Share of wine in the value of global merchandise exports, 1860–2016 (%, assuming Algeria was part of France pre-1963)[a].

[a]Wine export value data are incomplete pre-1900, but the countries for which data are available accounted for 95% of the value of global wine exports (ignoring Algeria's) during 1900–1909, so their sub-total is inflated by dividing it by 0.95 before expressing that estimate as a % of the value of world merchandise exports for 1860–1899.

Source: Authors' compilation from Anderson and Pinilla (2024).

European countries—France, Italy, and Spain—which reflects their continued struggle to maintain foreign market shares.

To better understand the globalization process of the wine market, it is also useful to compare the evolution of wine exports with that of all other traded goods. When global wine exports are expressed in value and compared with all merchandise exports (Figure 4), five sub-periods are worth focusing on. From 1860 to 1878 wine did not keep up with the expansion in global exports of other goods; during 1878–1886, exports expanded faster for wine than for other goods—but that was just to solve France's crop failure; 1886–1916 saw wine exports again perform comparatively poorly; 1916–1947 wine slipped a bit more; and from 1947 wine has held its own, apart from the downward adjustment in 1973 and 1980 when the price of petroleum quadrupled and then doubled, respectively. In short, leaving aside Europe's late nineteenth century Phylloxera devastation, the wine industry did not globalize much when other industries did in the first globalization wave; but it certainly did in the second wave, and indeed started much earlier than most industries by having an export take-off immediately after World War II (Anderson and Pinilla, 2022). That early post-war start had nothing to do with wine export growth in New World countries, as their take-off did not begin before the late 1980s, having made almost no impression on international wine markets during the first globalization wave.

4. Conclusions

The study of the two waves of globalization has been a popular topic among historical researchers over the past three decades. A sizeable percentage of the most important studies on this subject have focused on flows of trade, workers, or capital between the countries and continents. This has provided us with a solid foundation on which to base our interpretation of what has occurred, including the causal mechanisms of globalization, their characteristics and consequences.

There are different paths for continuing and extending the analyses of globalization processes. One is to study different countries in order to examine the extent of their

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integration into the international economy and the consequences of this. Another is to select specific economic sectors or products. This requires access to a wider range of data than just trade-focused studies. Hence, the database presented in this article freely provides researchers, for the first time, with a long-term series of global wine industry data. It offers extensive annual core information on production, trade, and consumption of wine from 1835 to the present, plus myriad derived variables. We look forward to seeing it being used extensively by researchers, policy advisors, and industry participants.

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/S021261092510089X.

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