

Wine Globalization

A New Comparative History

Edited by

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Portugal

Pedro Lains

Wine has been an important part of Portuguese agriculture for a very long period of time. The evolution of its output and exports is closely related to changes in domestic economic conditions as well as changes in the international markets. Vines were cultivated all over the territory, from the northern hills of Trás-os-Montes, to the Douro Valley, from the coastal region of Estremadura to the dry climates of southern Alentejo and farther to the islands of Madeira and the Azores. Until recently, wine was also an important source of calorie intake, together with grains, olive oil, fish and meat. The small size of the domestic economy, its geographical position at the southern periphery of Europe and the evolution of domestic economic policies and international treaties and tariffs are key elements for the understanding of the evolution of wine production and trade in Portugal. Portugal has lagged behind economic development elsewhere in Europe for a long time, and most of its industries reflect that backwardness and were seldom on the technological frontier. Yet the economic history of Portugal is also punctuated by instances where local innovation and technological advances were of great relevance, and winemaking provides examples of such positive developments.

Portugal's wine producers managed to develop a strong export sector from earlier periods in history. Indeed, David Ricardo's famous treatise on comparative advantage used as an example the exchange of wine for cloth between industrializing Britain and agrarian Portugal (Ricardo 1817). The country is ranked highly by a number of global wine market indicators.¹ For example, since the nineteenth century it has had around 10 percent of its total crop land under vine, which is one of the highest in the world and

¹ See Anderson and Pinilla (2017).

about twenty times the global average. True, the yields of those vineyards are lower than in neighbouring countries, so its wine production per capita is usually a little below the leaders, France and Italy, but often ahead of Spain. It is frequently ranked second or third in the world in terms of the value of wine exports per capita, after Spain during 1860–90 and Algeria from 1890 to 1960 (and briefly Tunisia post-World War II). The share of wine in its total exports was higher than for any country other than Algeria up to 1970. Only in the past quarter-century has it slipped in its ranking by that indicator. Moreover, Portugal has consumed as much wine per capita as its wealthier neighbours most of the past ten decades and is ranked first globally in terms of wine's share of national alcohol consumption.

In the eighteenth century, due to changes in international politics, port wine developed into a buoyant export industry with Great Britain as its most important market at the time. Yet port remained a relatively small part of total wine production in the country, and the sector evolved with little transformation from what it had been in earlier times. By the mid-nineteenth century, Portugal's vines, as those of other southern European producers, especially France and Spain, were affected by oidium and phylloxera that were imported from North America. The reaction to these diseases involved a great transformation of the sector, leading to higher levels of productivity in wine production, lowering of the quality of that wine and a greater share of international trade. These adjustments continued to the end of the nineteenth century.

Thereafter, the sector continued to expand across the country, but it catered mainly to the domestic market and protected colonial markets and involved overproduction and a succession of crises. Then in the 1930s came the regulation which improved conditions of winegrowers and the quality of their wine, albeit only partially. According to a widely publicized official slogan of the time, 'to drink wine is to feed one million people in Portugal'. That was a major trait of the sector up to the end of the *Estado Novo* in 1974, and accession to the European Communities in 1986. In the last decades of the twentieth century, Portugal's wine industry followed at a distance the major transformations of the sector elsewhere in the world, including the increase in the share of quality wines catering for social consumption. As a result, wineries have increased in size and brands have become more important.

In this chapter, identify three waves of globalization of Portugal's wine since 1750 and provide a description and an understanding of the fundamental features of those waves. For that purpose, we deal with four traits of Portugal's wine sector in each wave, namely production, domestic consumption, exports and commercial policies. We start in the first section by

providing a long-term overview of the weight of the industry in Portugal's agricultural sector. The following section deals with the emergence of the port wine industry and its relevance for the wine sector as a whole. The third section examines the transformations of output, productivity and foreign trade stemming from the phylloxera invasion. The focus then shifts to the regulations introduced in the 1930s, the rapid increase in production for domestic consumption up to the 1980s, and the export boom that occurred in the most recent decade, before drawing together the main conclusions of the chapter.

THE AGRARIAN BACKGROUND

Due to the efforts of a number of economic historians, particularly Reis (2016), it is now possible to depict the long-term trend of agricultural output and productivity in Portugal. The evolution of agricultural output in the eighteenth century is the outcome of different forces about which there is still uncertainty. In some cases, we found a close relationship between agricultural cycles and major political events at the domestic or international level, but in other cases the causes of the cycle relate to changes in climate conditions, demographic factors, innovations in crops and technological change, institutional bottlenecks and protectionist and other types of economic policies. The role of foreign markets has certainly had an impact as well, but not necessarily a dominant one throughout the centuries (Freire and Lains 2016).

The evolution of agricultural (and wine) output is shown in Figure 7.1, and Table 7.1 presents long-term trend rates of growth between peak years. There are clearly four main long-term trends since 1750 marked by the peak years of 1821, 1902, 1962 and 2015. The second half of the eighteenth century and first two decades of the nineteenth century was a period of almost no growth. It contrasts with the next period, to the end of the nineteenth century, when the trend growth rate was 0.36 percent per year. The first six decades of the twentieth century were marked by a higher trend growth rate of 1.52 percent per year, and it was followed by a slowdown to 0.60 percent per year for the period 1962 to 2015.

Portuguese agriculture went through a 'silent revolution' over the eighteenth century, driven by the development of markets and market integration and within an 'unchanged institutional and political context' (Serrão 2009, pp. 47–48). This was also a period of large inflows of gold from Brazil, which could have financed food imports, but instead domestic agricultural

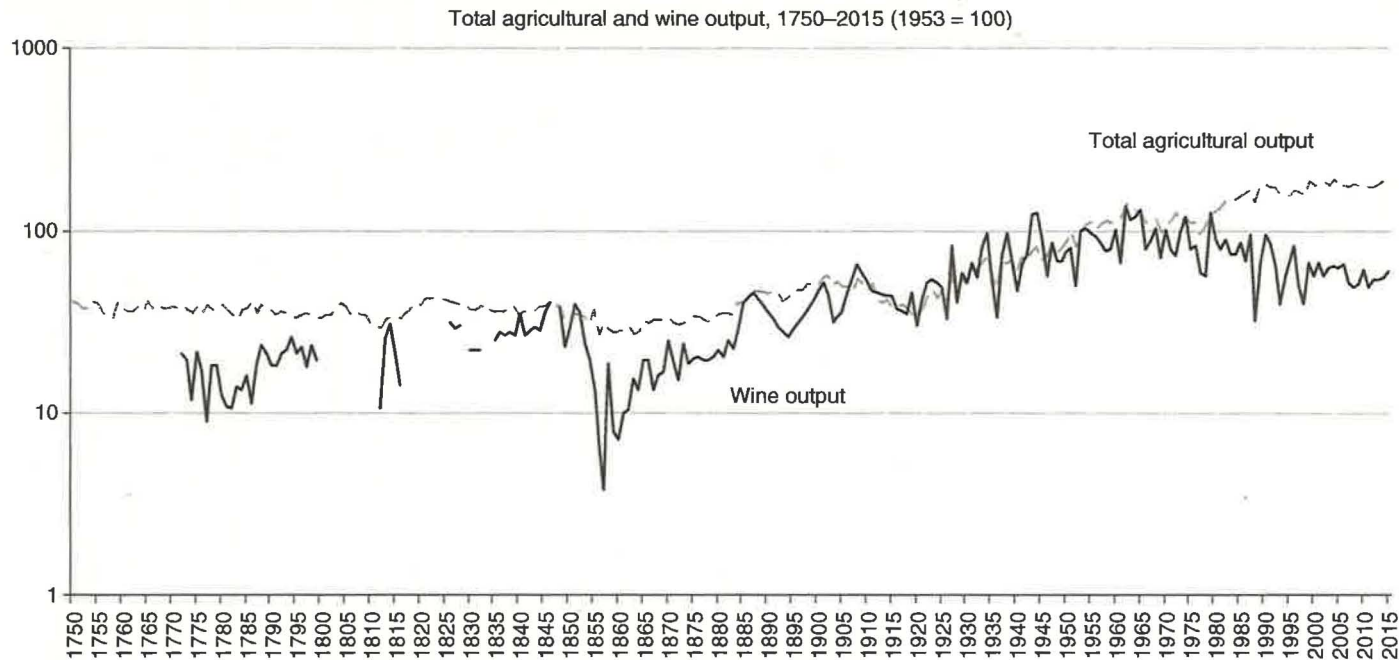


Figure 7.1 Volume of wine and total agricultural output, 1750 to 2015 (real values, semilogarithmic scale, 1953 = 100).

Sources: Total output: 1750–1848, Reis (2016); 1848–1997, Lains (2007); 1997–2015, Instituto Nacional de Estatística (2016). Wine output: 1772–1835, Martins (1998); 1835–2015, Anderson and Pinilla (2017).

Table 7.1 *Growth in wine volume and total agricultural output, Portugal, 1750 to 2015 (peak-to-peak yearly growth rates, %)*

Total agriculture		Wine	
1750–1821	0.08	1775–1814	0.88
1821–1902	0.36	1814–46	0.89
		1846–1908	0.77
1902–62	1.52	1908–43	1.80
		1943–62	0.60
1962–2015	0.60	1962–99	-1.89
		1999–2015	-0.73

Source: See Figures 7.1 and 7.2.

markets were protected from the outside world (discussed later in this chapter). Paradoxically or not, this was the period of the rise of port wine exports from the Douro region (Serrão 2009, 2016). The decline of output was accentuated in the last decades of the eighteenth century and the first decade of the nineteenth century, thanks to wars in the North Atlantic that affected trade between Portugal and Brazil and, more importantly, the Napoleonic Wars and the French invasions of continental Portugal from 1807 to 1811.

The interpretation of agricultural output growth after 1850 may be set in the context of the growth in other sectors of the economy. The second half of the nineteenth century was a period of moderate growth of the industrial sector and the overall economy. As such, the agricultural sector's performance in terms of output and factor productivity was relatively good. And it was even better in terms of exports because this was a period when wine exports expanded. It was also a period of increasing domestic market integration due to improvements in transport, including railways and roads, and to regional specialization between urban and rural areas and within rural areas.

Agricultural growth came to a halt after 1902, mostly because of the exhaustion of the positive influences up to then. After World War I, however, farm output gained a new momentum, this time due to a large extent to state protection through tariffs and price controls, public investments in infrastructure and education to accompany private investment and the bettering of the institutional framework. The slower-growth years from 1962 to 2015 may be explained in terms of changes in economic policies affecting the agricultural sector, as it became increasingly dependent on subsidies

and regulations, but growth in the late 1980s was associated with Portugal's accession to the European Communities.²

Growth of output and productivity was accompanied by changes in the structure of the agricultural sector, which were largely due to changes in the structure of demand, particularly domestic demand, because the sector remained relatively closed to international competition. Changes in domestic demand were related to changes in national income, thus favouring sectors producing products with high-income elasticities of demand such as animal products, fruits and vegetables.

By 1850, Portugal was still largely a rural economy, with two-thirds of its active population employed in agriculture. That share declined only slowly, and did not fall below one-third until 1974. Industry expanded faster than agriculture up to 1930, and then there were two decades of even growth before industrialization regained momentum. Despite the relative decline of agriculture, and despite the sector's relative backwardness by European standards, Portugal's agricultural sector went through periods of growth of total factor productivity and associated structural changes in land use and product mix (Lains 2003). Total factor productivity increased by 0.75 in 1865–1902, by 0.4 percent, in 1902–27, and then peaked at 1.9 percent in 1927–63 before declining during 1962–73 (at –0.8 percent per year; see Lains (2009, p. 340).

Wine has had a large share of total agricultural output. In 1515, it was 15 percent (Reis 2016, p. 174), in 1850 it was 19 percent, during 1861–70 it averaged 22 percent and in 1900–09 it peaked at 23 percent. These are extremely high shares by international standards. True, it had declined to 13.5 percent in 1935–39, but it remained at that level for some time and even by 1970–73 it was 11 percent and was still 9 percent in 2013.³ Figure 7.1 depicts the evolution of wine output volume from 1772 to 2015, expressed as an index to aid comparison with the evolution of total agricultural output. It shows that output increased faster for wine than for the rest of the agricultural sector from 1772 to a peak in 1846, and then it fell sharply due to the oidium disease that affected vines by the mid-nineteenth century. Then wine output expanded faster than agriculture again, to another peak in 1908, followed by a period where the two curves rose similarly through to the 1960s. Thereafter, wine expanded slower than other total agricultural output.

² See Lains (2003, 2009), Martins (2005), Soares (2005) and Amaral and Freire (2016).

³ See Reis (2016, p. 174), Lains (2009, p. 343) and Instituto Nacional de Estatística (2016, pp. 145, 150).

Wine output evolved according to particular determinants, including changes in external demand, the spread of diseases, changes in the structure of output and the evolution of domestic demand. These are the focus of the following sections.

CONTRA RICARDO: PORT FOR EXPORT, 1750–1860

Early modern economies were not very open, as it was the case for Portugal and its wine output was mostly consumed in the domestic market and wine exports were relatively unimportant, as were food imports. The main import was grain, but it accounted for only 1.4 percent of food consumption by value in 1700. By 1800, the external food balance was slightly negative, and the value of wine exports was just below that of grain imports. Table 7.2 shows that olive oil contributed more to export earnings than wine in 1700, but since then the value of wine exports increased greatly while that of olive oil exports stagnated through to 1850. For most of the sixteenth and seventeenth century, Portugal's wine exports were insignificant before they increased rapidly from the late seventeenth century: wine exports doubled in real value from 1600 to 1650 and then increased 4.7 times during 1650–1700. Yet wine exports accounted for just 1 percent of the total value of national food consumption in 1700 and 1750, before they increased sixfold during 1750–1800. By the beginning of the nineteenth century, wine exports accounted for 3.8 percent of total food consumption, but they slipped back to 3.1 percent by 1850.⁴

Wine production for exports, despite being small in scale, was one of the most dynamic sectors of the economy, particularly exports of port wine through the City of Porto at the mouth of the River Douro. Those exports were fortified wines produced from vines cultivated in the steep slopes of the valley. They required considerable investment in the preparation of land, winemaking, manufacturing of casks and transportation including the improvement of the navigability of the Douro River, and of the roads and the ships required to export the wine.

Figure 7.2 depicts the evolution of port wine output and exports from 1772 to 1850. It shows output was overwhelmingly exported up to the end of the eighteenth century, and then both output and exports declined, although the latter at a faster pace. The first half of the nineteenth century was a period of decline for this particular segment of Portugal's wine sector.

⁴ See Costa and Reis (2016). Serrão (2016, table 5.1) suggests that the share was 7 percent during 1778–95.

Table 7.2 *External food balances, Portugal, 1700 to 1850*
(tonnes of silver equivalent and %)

	Wine exports (1)	Olive oil exports (2)	Grain imports (3)	External food balance (1+2+3)	Total food consumption (5)	External food balance/ Total food consumption (4 as % of 5)	Wine exports/ total food consumption (1 as % of 5)
1700	18.2	21.4	14.4	25.2	1,858	1.4	1.0
1750	20.4	6.1	23.0	3.5	2,311	0.2	0.9
1800	128.5	8.3	151.6	-14.8	3,360	-0.4	3.8
1850	115.2	10.3	10.0	115.5	3,742	3.1	3.1

Source: Costa and Reis (2016, table 1).

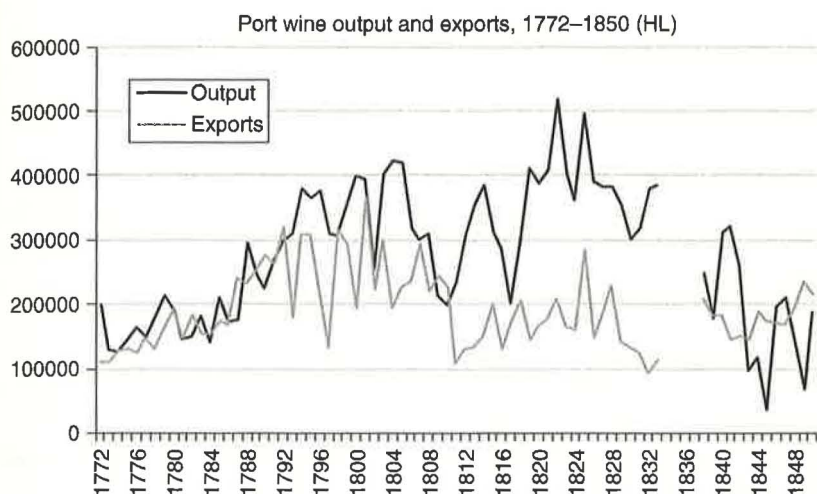


Figure 7.2 Volume of port wine production and exports, Portugal, 1772 to 1850 (HL).
Source: Martins (1990, pp. 229–30).

Port wine exports were dependent on external factors, particularly trade agreements with Great Britain, the growth of international demand for fortified wines and the international situation in terms of war and peace. Port wine was one of the first sectors in Portugal to be subject to specific policy measures, including the demarcation of the region of production, but political intervention apparently did not affect the growth of output (Martins 1988, p. 393).

The emergence of port wine is closely link to international politics and in particular to the interest that England had in establishing an alliance

with Portugal, at the time of French expansionism under Louis XIV which culminated in the Wars of Spanish Succession (1701–14). Portugal was a precious ally for England not only because of the strategic position of the port of Lisbon, but also because it was a source of Brazilian gold. The wine market in England was developing rapidly, and a replacement of French wines from Bordeaux was needed. Port wine was the ready answer, and it was the aim of the commercial and defence treaties signed between the two countries in 1703, which became known as the Methuen Treaty.

While port production and exports preceded the Anglo–French wars, the new international setting provided the right circumstances for its development and success in the English market (see Alexandre 2008, pp. 139–40, and Cardoso forthcoming). The Methuen Treaty favoured Portuguese wines to the detriment of French ones, and in return Portugal conceded to Britain special treatment for its exports of woollens. The port trade evolved not out of Ricardian comparative advantage but out of economic policy in part driven by rent seeking. In fact, the English and Portuguese negotiators of the treaty had interests, respectively, in woollens and wines (Grantham 1999; Anderson 2014).

By 1710, Portugal had a 50 percent market share in British wine imports and France had just 5 percent, having dropped from 70 percent in the 1680s (Palma and Reis 2016, pp. 33–34). Table 7.3 shows that Portugal's share in the British market peaked at 72 percent in the second half of the eighteenth century. Portugal's share fell over the nineteenth century but increased again slightly in the first decades of the twentieth century.

Port wine was not just a story of demand and protectionism. The wine sector of the Douro region had to adapt to the new market, which required investments in land transformation, transportation and winemaking. It was also necessary to develop a new institutional setting to control the quality of production and prices (Simpson 2011). The outcome was that port rose from insignificant in the 1680s to a peak in 1800, when it accounted for 40 percent of Portugal's wine production, implying a remarkable 3.7 percent annual growth over that period. In a relatively short time, port had become the country's second most important engine of preindustrial economic dynamism, along with maize.

Port wine production was one of the most advanced economic sectors in eighteenth century Portugal, even when compared to manufactures and services. It was an industry that was widely exposed to international market forces. It was also the first to be regulated in an extensive way, with the creation of the *Companhia das Vinhas do Alto Douro* in 1756, which defined the Douro wine region and regulated output, prices and commercialization (Martins 1988, p. 392). Although it was set up by the state, as a

Table 7.3 *Origin of volume of wine imports by the United Kingdom,^a 1675 to 1939 (%)*

	Portugal	France	Spain	Other	Total
1675-99	24.2	23.2	43.6	9.0	100
1700-49	57.0	4.5	32.7	5.8	100
1750-99	72.0	5.4	19.9	2.7	100
1800-49	48.3	7.4	30.5	13.9	100
1850-99	19.7	24.9	29.8	25.6	100
1900-39	26.1	19.0	20.9	34.1	100

^a England to 1785.

Source: Author's computation drawing on Anderson and Pinilla (2017).

majestic company it stemmed mostly from the want to auto-regulate from the producers and mostly from traders. This arrangement may have had advantages in the short term, but it also limited the growth of the sector and added to conflicts between growers and traders. It led to the merchants in Porto taking control of the sector, as its board was composed almost totally of merchants from Porto and later also from London.⁵ But the Douro producer and trade companies were 'remarkably hybrid in character', reflecting the regional and international complexity of the trade, which put together producers from remote rural regions in Portugal, to traders in Porto and in London (Duguid and Lopes 1999).

With the rise of liberalism from the 1820 revolution onwards, the role of the Douro Company was increasingly put into question. In 1834, its majestic powers were abolished and it was turned into a regular commercial company, thereby abolishing the monopoly of port wine exports through Porto. In 1852, it lost all of its powers regarding the production and trade of port wine, and in 1865 the sector was fully liberalized. The liberalization lasted nominally until 1907, but protection of the sector became mostly indirect (Alexandre 2008, pp. 146-47; Pereira 2008, pp. 179-80). As trade expanded, many Douro farmers stopped their wine production and instead sold their grapes to Porto export merchants. Later those merchants lost their trade to British merchants. This vertical integration of port wine, which led to the transfer of power from the producers to the merchants in Porto and then in London, was a consequence of the need to compete in an increasingly competitive market, where the control of quality was of paramount importance and merchants were better qualified to guarantee it than scattered producers (Duguid 2005, pp. 525-26).

⁵ See Pereira (2008, pp. 176-77). See also Duguid (2005) and Alexandre (2008, p. 141).

From 1678 to 1987, four cycles have been identified for the port wine sector, in terms of production and trade (Martins 1988, pp. 394–403; 1991). The first cycle stretches from 1678 to 1810 involved the creation and consolidation of the sector in terms of both production and trade. Output increased rapidly at 3.5 percent per year and port exports became Portugal's top export item (apart from reexports of cotton and sugar imported from Brazil), accounting in 1800 for 15 percent of total exports. Port wine during these 132 years was virtually totally exported to a single market, namely England or Britain. By the end of the eighteenth century, port accounted for 60 percent of all English wine imports.

A period of instability and stagnation followed, a consequence of overall military activity and political instability in Europe and in Portugal, which lasted from 1810 to 1865. During 1811–13, exports to Britain halved, and that new lower level lasted for most of the rest of the nineteenth century. Total port exports declined by one-third between 1790–1809 and 1864, aggravated by the fact that in 1850–52 the Douro region was affected by oidium (Martins 1988, pp. 403–9). Britain remained by far the largest market, with about 90 percent of total exports from Portugal in 1850–52.

The negative trend was reversed in the 1860s due to the diversification of countries of destination for the exports. Britain's relative weight declined as new markets developed in Germany and other northern countries, as well as in France and Brazil. Export prices, however, declined and port wine became less important in Portugal's trade as the Portuguese economy diversified. Even so, by 1930–39 port still accounted for 20 percent of total exports from Portugal, down from 30 percent in the 1870–79.

New firms were founded, new international trade treaties were signed and new regulations were enacted to protect brands. But the government in Lisbon preferred to protect trade rather than production. From 1865 to 1907, production and trade were totally liberalized, following the general trend in Portugal then. This stimulated fast growth but did not improve quality. By 1907, new regulations were enacted but they proved highly ineffective.⁶

Things start to improve with the ascension of the *Estado Novo*, when the Casa do Douro, the *Grémio dos Exportadores*, and the *Instituto do Vinho do Porto* were founded. This provided a new institutional framework that would last for most of the twentieth century. Prior to the 1950s, port was divided into the modern classification of 'vintage' and 'tawny' and producers did their own blending (Duguid 2005, p. 524n). From the 1960s onwards, a new positive cycle was marked by growth and market diversification.

⁶ As also for Spain and other countries. See Pan-Montojo (2009) and Simpson (2011).

By the decade of the 1980s, France had become the largest market for Portugal's port exports, with a 40 percent market share. Moreover, commercialization was also transformed as bottle wine exports increased their share to 80 percent of total wine exports in 1986. Also, the firm structure of the sector changed, with the number of export firms falling to forty-three in the 1980s (from 113 in 1934–1935). It was trade that conditioned production rather than the other way round, such that the state protected traders more than producers (Martins 1988) and producers had little influence on the market.

The dynamism of port wine production and exports was not matched by the rest of Portugal's wine sector, which was relatively backward like the rest of Portuguese agriculture as compared to agriculture in northern Europe.

PHYLLOXERA, THE EXPORT BOOM AND ITS BACKLASH, 1860–1930

Following two decades of recovery in response to the stabilization of the domestic and international markets, in 1852, Portugal's vines were affected by a mildew fungus (*oidium*) that originated in North America. The disease reached first the Douro region, due to its wider contacts with the outside world, and spread rapidly southwards and caused a sharp contraction in wine output (see Figure 7.1 above). From the peak in 1851 to the trough in 1857, total wine output fell by almost 90 percent. Exports contracted by one-third as stocks were depleted. Yet there was a fast recovery, as the cure by sulphite was readily available and was used comprehensively despite its relatively high cost. The rapid recovery demonstrates the dynamism and capacity to adjust of Portugal's wine sector. Government intervention was kept to a minimum, but it was also a turning point in that respect, as new policies were introduced (Martins 1996).

Soon after wineries recovered from *oidium*, they were affected by another disease also imported from North America, the phylloxera insect. That far more devastating disease arrived first in France in the early 1860s and it reached the Douro region in 1865. Historically, this is the region that has been affected first by various global factors, both positive and negative (Martins 1991, p. 653; Matias 2002; Freire 2010; Simpson 2011). By 1883, one-quarter of Portugal's vine area had been affected by phylloxera, of which 90 percent was in the Douro region. Ten years later, half of the national vine area had been attacked. In order to combat the insect, wine-growers resorted to carbon sulphide, and the substitution of American for

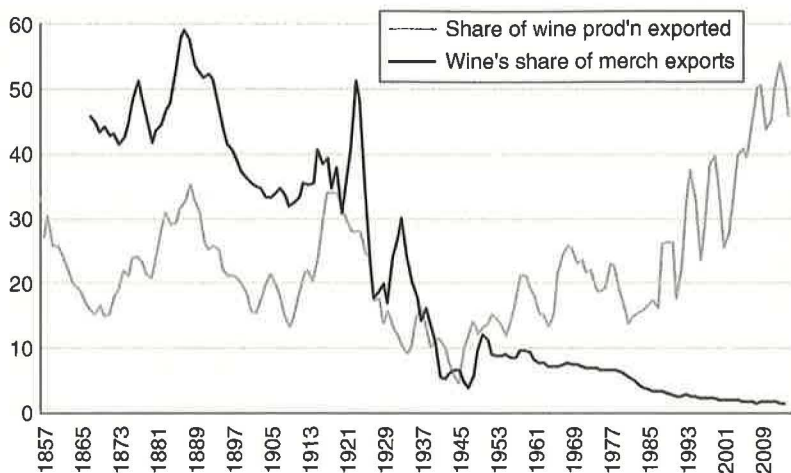


Figure 7.3 Share of wine production exported, and wine's share of all merchandise exports, Portugal, 1855 to 2015 (% , three-year moving average).

Source: Anderson and Pinilla (2017).

local vine rootstocks. The new rootstocks were considerably more productive, not only because they matured one or two years earlier than the local ones, but also because they produced on average one-third more grapes. In the process, the Douro region ceased to be the leader and the relevance of the south increased considerably (Martins 1991).

Policies also changed, as the Douro Company was closed in 1852, and in 1865 the Douro region ceased to have privileges. By the end of the nineteenth century, the area under vines was considerably larger than before phylloxera arrived in Portugal, and wine output expanded accordingly (Martins 2005, pp. 222, 232–33). The volume of wine output increased by 0.61 percent per year between the two peak years from 1846 and 1908. Then there was a sharp decline, which to a large extent was due to the rise of protectionist policies and then to the consequences of World War I, which contracted exports (Table 7.1).

Wineries spread across the country in many different ways and fashions, and they were cultivated with other crops such as olive and other fruit trees or vegetables, in both lowlands and up to 1,000 metres of altitude (Pereira 1983, p. 141). According to one estimate, half of Portugal's active population in 1900 was directly or indirectly involved in wine production (Freire 2010, p. 51). At an estimated 983 *reis* per hectare, the value of land occupied by vines was one of the highest in Portugal during 1900–09, after fruits and vegetables at 1,277 *reis* and rice at 1,000 *reis*, higher than

that of potato and maize and well above that of wheat.⁷ Wine production brought higher returns than that of grains, was not affected by import competition and the instability that it provoked, and it employed labour more regularly through the year (Martins 2005, pp. 235–36). Urbanization and the growth of transport infrastructure in Portugal were crucial contributors to that, as they increased domestic wine consumption (as also in Spain; see Fernández and Pinilla 2014, p. 69).

From the beginning of the twentieth century to the immediate aftermath of World War I, wine exports increased again and reached slightly above 30 percent of output in 1919. However, the growth of wine output in the inter-war period was insufficient to stop the decline in the share of the sector in total agricultural output, which fell from 23 percent in 1900–09 to 13.5 percent in 1935–39. The share of wine in Portugal's total exports also declined, from close to half prior to the 1890s to one-third in 1910–13, one-sixth in 1935–38 and one-tenth in the 1950s (Figure 7.3). Clearly, the domestic sector was largely dominant as an outlet for Portugal's wine sector. We have to explain its evolution looking to what happened within borders, in terms of the growth and changing patterns of consumption, but its large exposition to international trade also needs to be taken into account.

The increase in output after phylloxera was, however, mostly made out of wines with low quality standards which were sold in bulk in the domestic and the international markets, mainly to France, where they were to fortify and improve the quality of wines produced there. The increase in exports went along with an increase in the domestic consumption, which was related to changes in the structure of demand for agricultural products. Figure 7.3 shows the evolution of the wine export shares by volume. The share of exports increased to 40.5 percent in 1886, declining thereafter to 11.4 percent in 1908, to increase again reaching another peak during World War I and declined to World War II to increase again thereafter.⁸

Global wine trade was rather limited by the middle of the nineteenth century, mostly because of the high costs of conservation and transportation. Thus trade was overwhelmingly in liquor wines, such as port and sherry. During the rest of the century, the cost of shipping table wines was reduced and the methods of production improved so that wines lasted for longer. But the growth of trade was also an outcome of the liberalization of trade since the 1860s and most and foremost from the sharp increase in the

⁷ Lains (2003, p. 60). One pound sterling was equivalent to 4,500 *reis*.

⁸ There are no data for wine exports for some of the World War I years, so interpolations were used.

demand for imports in France due to the attack of its vineyards by phylloxera. Consumption across Europe and other continents was also increasing, as a consequence of rising incomes and industrialization. The wine export surge lasted, however, for only a few decades, as by 1892 France and other wine importers increased tariffs in order to protect domestic production or, in the case of France, production from the North African colonies, namely Algeria.⁹

By the mid-nineteenth century, port, Madeira and table wines were by far Portugal's single largest export items, amounting to 51.9 percent of total exports, and Britain the largest market, importing 75 percent of exports by volume, in 1850–54, then decreasing to 58 percent, in 1910–14. In the following decades, that overall picture changed considerably, particularly in the last decades of the nineteenth century, as Portugal's exports diversified both in terms of its composition and regional distribution.

Even if the Portuguese response to increases in international demand was not fully satisfactory, there were two instances in which wine exports were rather responsive. Firstly, in spite of the wine disease that affected the Douro port wine production area in 1867–68, wine producers of the region, taking advantage of the freedom to export all kinds of wines from Porto granted in 1865, managed to keep their exports up by mixing the genuine port wines with wines from the southern regions of Portugal not yet affected by phylloxera (Pereira 1983, p. 225; Lains 1986). The mixture of wines led to a decline in quality and complaints from British importers. Nevertheless, the volume and price of exports did not decline until after 1870, following a general fall in international prices. The maintenance of export levels contrasts with the drastic decrease in port wine production. According to official estimates, in 1880 output had decreased by 24 ML, and a further decrease of 54 ML was registered in 1888.

Exports went through the phylloxera crisis without drastic decline, as: by 1880, the export peak of 1875–77 had already been reached, and they increased further until 1886. Brazil accounted for most of this increase, which may reflect the decrease in quality of port wines after phylloxera (Pereira 1983, p. 130; Martins 1990, p. 229). There was a peak in the 1880s which was due to the increase of exports to France, whose vineyards had been severely affected by phylloxera. The main market for port wine was Britain, which by 1850–54 imported 75 percent of the volume exported by Portugal. This proportion decreased to 58 percent by 1910–14.

⁹ Pinilla and Ayuda (2002, pp. 54–55). For the rise and fall of the Algerian wine sector, see Meloni and Swinnen (2014).

Wine exports could not continue to depend on port wine, however, given that its strong alcoholic content pleased neither the British consumer nor the custom officer. Furthermore, the 1892 Méline tariff discriminated against heavier wines; and from 1906, Germany discriminated in favour of Italian Marsala wine, which was a strong competitor for port and Madeira. The alternative would have been to export more table wine. Portuguese table wines were known to be strong, almost as strong as port wine. For the boom in the French market, this happened to be an advantage because France imported wine to distil and mix with its own wines. In 1880–84, 40 percent of total output was exported, and the share of exports in port wine output was 79 percent in 1860–64 and 105 percent in 1909–13.¹⁰ In 1888, Portugal's share by volume of French wine imports was 8 percent, down from 15 percent in 1876. After 1889, wine sales to France were reduced, as French vineyards recovered and the imports from other sources, such as Algeria, increased (Lains 1986, p. 401).

In 1891, France increased its tariffs on foreign wine, thus protecting imports from Algeria. This led to a crisis in the Spanish wine sector, which up to then was France's main supplier (Pinilla and Ayuda 2002, pp. 52–53). In 1891, wine exports from Spain peaked at thirty-two times the level of 1850 and six times that of 1877, before suddenly falling to half that peak by the end of the 1890s. Between 1890 and 1938, imports of wine into France averaged 10 to 25 percent of domestic output, and the Spanish quota fell from the maximum of 80 percent of that market to a maximum of 26 percent by the 1930s. That decline was mostly all due to tariff protection (Pinilla and Serrano 2008, p. 136).

Meanwhile, the share of Portuguese wines sold on the British market decreased from 37 percent of total volume imports to 21 percent during 1891–1896. The main reason for this decline was a shift in taste in Britain away from consumption of high-alcohol wines. The structure of the British tariff schedule did not help either. Britain in 1860 imposed higher tariffs on heavier wines, port and sherry, discriminating in favour of lighter wines from France. In the abundant consular correspondence between Lisbon and London on this subject, the British government defended this discrimination as a tax on the alcoholic content of wine. However, it was diplomatically important for Britain to improve relations with France, and the 1860 Cobden–Chevalier Treaty led to discrimination in favour of French wines, which happened to have lower alcoholic content, and against those of Portugal (and Spain).

¹⁰ Exports exceed production in some years because they draw from stocks of previous years' production.

Wine duties in Britain were subsequently reduced in 1876 and 1886. Nevertheless, Portuguese wines were still too alcoholic to benefit from the reductions in tariffs. Spanish exporters adapted better to the changes in the British market: 96 percent of Spanish wines exported to Britain in 1876 fell within the higher duty scale, but twenty-two years later this proportion had fallen to 25 percent. Spanish table wine exports increased from 1.4 ML to 15 ML over that period. The comparable trend for Portugal was 96 percent of heavy wines in 1876 and 94 percent in 1898. It is thus not surprising that Portuguese wine exports to Britain increased in the period only from 0.9 to 1.3 ML. The larger increase in Spanish exports of lighter wines was due to a treaty with Britain in 1886 which reduced the scale in their favour. However, the fact is that Spain produced such wines and Portugal did not. In 1886, Portugal already had most-favoured-nation treatment from Britain, and as such it was not barred from exporting the same kind of wines, if only they were produced at competitive prices (Lains 1986, p. 403). Market diversification was achieved by increasing sales to Germany and the United States, as well as Brazil and the African colonies.

By 1910–14, Scandinavia and Germany purchased 27 percent of Portugal's port wine export volume (Pereira 1983, pp. 217–32; Martins 1990, pp. 248–51). Exports of table wine were marked by a large increase in exports to France in the 1880s, before which Portugal's main markets were Britain and Brazil. After the temporary boom in exports to France, table wine export levels were maintained and eventually increased after 1900–04, while exports to France fell back to their earlier level. This was due to the favourable trend in exports to Brazil and to Portugal's African colonies, the latter protected after 1892 (Martins 1990, pp. 252–53; Lanero 2014, p. 88). Wine was already the single most important export to those colonies in 1870, but the amounts were very small. By the end of the nineteenth century, wine trade to the colonies had expanded considerably, but then they declined during World War I along with the local economy (Clarence-Smith 1985, pp. 68, 94, 120–22; Lains 1986).

Portugal had difficulty securing trade agreements with its major partners as protectionist measures were successively implemented across Europe. The commercial treaties between Portugal and France from 1866 and 1882 were not reconfirmed by France during the French tariff reforms of 1890–91. In 1892, France applied its general tariff on Portuguese wines whereas Spain was exporting wines to France at the lower minimum tariff. In 1894, France imposed its higher tariff on wines from Italy, Switzerland and Portugal; Germany did likewise on Spain and Portugal, as did Italy on France and Portugal. Wine was predominantly exported to neighbouring

countries, or to countries to which nationals had immigrated. That was the case of wine imports into France, mainly from Spain and the French colony of Algeria, and into Germany, mainly from Italy through Austria or Switzerland, and from France (Martins 1990, p. 116).

Another reason that may explain Portugal's lack of commercial treaties after the mid-1880s is linked to the relative unimportance of this country. This is evident from the British reaction to Portugal discriminating against her products in retaliation to the preferential treatment that Britain had given to French wines under the Cobden–Chevalier Treaty of 1860. Despite the complaints from British merchants who were paying higher import duties in Portugal from 1866, Britain kept wine duties according to their alcoholic content, providing a *de facto* preferential treatment for French lighter wines. There was not much Portugal could do about it, after ten years of negotiations with Britain and after at least three years' discussion in parliament, Portugal finally gave most-favoured-nation status to Britain in 1876, without compensations in return (Lains 1986).

The share of Portugal in the volume and value of global wine exports peaked during the two decades of the world wars, at 9 percent, with rises before World War I and steady falls since World War II (Figure 7.4). Its share of global wine production increased through to the 1940s but catering mostly to the domestic market as export volumes, and the export ratio declined after World War I (Figures 7.3 and 7.4). Wine followed a general trend in Portuguese agriculture during the protectionist period that started with grains in the early 1890s and spread to the other sectors during World War I and its aftermath. With Spanish producers facing a shortfall in demand in South America and also in Europe, where wine consumption was still relatively small and growing only slowly, winegrower prices and profits were depressed up to at least the 1930 (Fernández and Pinilla 2014).

Growth of wine output and consumption during the second half of the nineteenth century was mostly concentrated in Europe. From the beginning of the twentieth century, Spain and Portugal suffered from the same negative factors, as France gave preference to wines from Algeria, as consumption in the more industrialized nations plateaued and protectionism increased, as abolition took hold in the United States and as expanded wine production in other parts of the world increased the level of competition (Pinilla and Ayuda 2007, pp. 180–81). There was also a redistribution of wine regions at the world level as output in the Americas expanded, as well as in the French colonies in North Africa, particularly Algeria. Between 1960 and 1900, France, Italy, Spain and Portugal accounted for 79 percent of world output, but by 1910–14 that share had

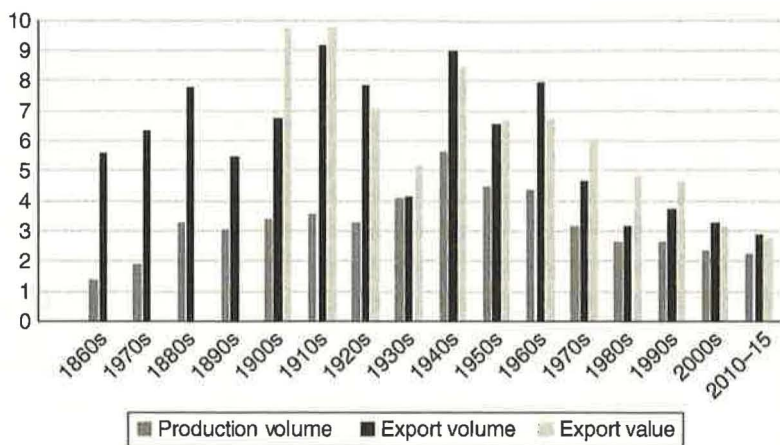


Figure 7.4 Portugal's shares of global wine production and exports, 1860 to 2015 (%).
 Source: Anderson and Pinilla (2017).

fallen to 73 percent and by the 1930s to 68 percent, before it fell at a slower rate through to 1990 (averaging 62 percent over those six decades; see Anderson and Pinilla 2017).

The wine sector's political leverage in Portugal remained relatively small for most of the nineteenth century. By the turn of the twentieth century, however, as output increased and exports declined and wine ceased to be simply a local problem and became a national one, some proactive measures were taken by the Portuguese governments. Portugal was a pioneer in the creation of wine regions, with the Douro wine region founded in 1756, but little had been done since then, and port wine remained an exception for all that time. From 1907 to 1911, six new wine regions were set up by the Portuguese government, most in the region around Lisbon, namely, Carcavelos, Colares and Bucelas, as well as Setúbal, 30 kilometres to the south of Lisbon, Vinhos Verdes in the north and Madeira, added to the existent Douro wine region that was also reorganized (Martins 1991, p. 683; Freire 2010, p. 53).

The domestic and international turmoil of the interwar period impeded the consolidation of institutional changes that would promote a better equilibrium for the wine industry, which was severely affected by an increasing productive capacity that faced a thriving domestic and international demand. Domestic and international politics would however change soon, and paradoxically the new authoritarian regime and reinforced protectionism at the international level would assist relevant changes in the sector.

DOMESTIC CONSOLIDATION AND THE THIRD
WAVE, 1930–2015

The Estado Novo led to an overhaul of the institutional framework of the Portuguese state, and the agricultural and wine sectors were naturally affected to a large extent. State intervention spread across many fields, including education, health and research, as well as roads and electrification and irrigation. Portugal remained one of the poorest western European economies, with low levels of instruction and capital per labour, but the dictatorship, looking for sources of political legitimization, was able to build a new set of infrastructures that impacted positively in the economy, at least in the short and medium term. The agricultural sector output kept growing for at least three more decades, whereas volatility of prices and incomes were to a large extent contained. The paradox of having protectionism accompanied by growth and structural change was not unlike what happened in a few other peripheral countries of Europe.¹¹ Wheat and wine were two of the most protected sectors from the 1930s onwards, while others hit by the crisis in the 1930s, namely producers of pork, beef, dairy, potato and wood, did not receive relevant protection from the state (Lanero 2014, pp. 90–91).

The new institutional setting increased the level of regulation of production and commercialization of the wine sector. The measures that were taken were mostly aimed at controlling the level of output and assuring better storage conditions and distribution in the domestic and colonial markets, then at increasing the quality of the wines produced for export to European markets. In 1937, the six wine regions created between 1907 and 1911 were consolidated and put under the supervision of the *Junta Nacional dos Vinhos*, one of the many institutions that characterized the corporatist state (Freire 2010, p. 53). After 1950, the concern with quality somehow increased and measures were implemented to improve the quality of grapes, providing technical assistance and fostering the creation of producer's cooperatives.

Yet the share of output from the demarcated wine regions changed very little in the years to come, from 62 percent of total wine output in 1939–49 to 58 percent in 1960–69. The production of table wines still accounted for 96 percent of total wine output in 1939–1949, and 95 percent in 1960–73. Contrarily, better-quality port wines accounted for only 2.5 percent and 3.5 percent of total output in the same two periods (Baptista 1993, pp. 209, 215). The number of wine cooperatives increased from just one in 1935 to nineteen in 1955 and fifty-seven in 1969, and in

¹¹ See Lains (2007), Lanero (2014) and references cited therein.

this latter year cooperatives accounted for 24 percent of total wine output (Baptista 1993, pp. 235–36; Lanero 2014, p. 91).

Other southern European winegrowers facing rising wages and lower wine prices also resorted to the creation of cooperatives in order to increase their ability to survive, and especially so in France, followed by Italy, Spain and Portugal. In France, winegrowers had easier access to capital, as the French government provided a large part of the capital needed at lower interest rates (Simpson 2000, p. 115). Cooperatives in Spain accounted for 40 percent of total wine production in 1964, when there numbered 600 (Martínez-Carrión and Medina-Albaladejo 2010, p. 88).

Wine output expanded considerably and increased its share of agriculture in the Portuguese economy, thanks to state assistance and price protection, but also to the shape of comparative advantages of the country. The increase in wine production was, however, accompanied by a fall in relative prices and thus the weight of the wine sector in total agricultural output, at current prices, declined from 23.3 percent in 1900–09 to 13.5 percent in 1935–1939, and it remained at that lower share through to the early 1970s (Lains 2009, p. 343). The vine area under production remained relatively stable, fluctuating between 300,000 and 400,000 ha from the late nineteenth century up to 1970 before declining gradually to around 200,000 ha. Wine productivity measured by output per hectare increased steeply in Portugal during the second half of the twentieth century (Freire 2010, pp. 40–41). Figure 7.5 shows the doubling in wine production per hectare between 1930 and 1980.

Trends in the wine sector in Portugal followed closely trends of the other three large Mediterranean producers, namely France, Italy and Spain, as the output share in that group of four countries fell from 63 percent of the world total, in 1960–64, to just 49 percent in 2010–14. Grape yields varied considerably in the same countries, from the maximum of 10.4 tonnes per hectare, in Italy in 2005–09, to a minimum of 2.5 tonnes per hectare in Spain in 1965–69. Portugal's yields declined from 6.0 tonnes in 1961–1964 to 3.0 tonnes in 1985–89, and increased from then to 4.5 tonnes in 2000–2004 and 4.0 tonnes in 2005–09 (Anderson and Nelgen 2011, table 97).

Price and revenue volatility increased as output exceeded demand. In the 1930s, overproduction and low prices in the domestic market were joined by economic depression in international markets. Wine production cannot rapidly adapt to changes in markets, as vines are a medium-term investment (Martins 1996, p. 415; Freire 2010, pp. 17–18). But port wines were not as affected as table wines. This was a major characteristic of the sector that put it in a different group from the rest of Portuguese agriculture. The fact that output could not adjust quickly to changes in demand implied that

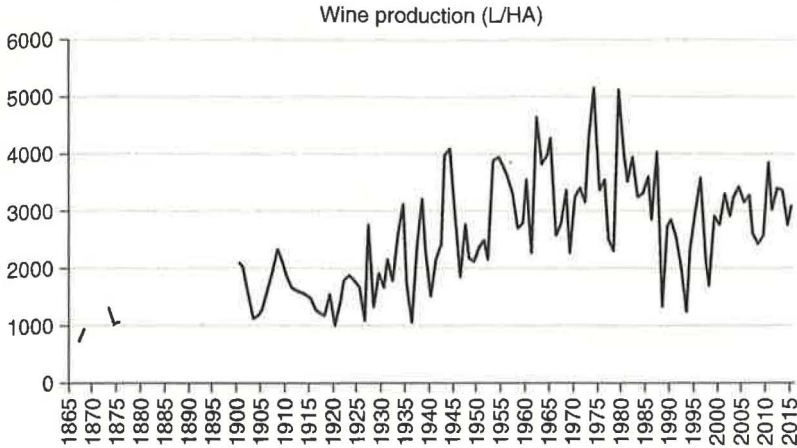


Figure 7.5 Wine production per hectare, Portugal, 1865 to 2015 (litres per hectare).
 Source: Author's computation from data in Anderson and Pinilla (2017).

the sector was affected by successive crises, which translated to high levels of income volatility for winemaker and grapegrowers.

Per capita consumption of wine peaked in the mid-1950s in France, in the late 1950s in Italy, in the mid-1970s in Spain and in the latter 1960s in Portugal. Wine per capita consumption declined in the four Mediterranean countries during the second half of the twentieth century, and in 2010–14 consumption levels were similar in the cases of France, Italy and Portugal, at a little over 40 litres per capita, whereas Spain had fallen by then to around 15 litres.

For most of the twentieth century up to the 1980s, wine producers in Spain catered mostly for the domestic market, which was dominated by poor-quality wines sold in bulk (Simpson 2000, pp. 98–99). The domestic market expanded rather slowly and had not much potential for further growth. In fact, as incomes increased and preferences changed, the growth in demand was increasingly concentrated in higher-quality wines sold in bottles and under brands. Then the state intervened with the aim of contracting production by reducing the area under vines and promoting quality improvements in the wines produced (Fernández 2012, pp. 41–42). The international market also improved, which Spanish producers were able to capitalize on (Fernández and Pinilla 2014). The sustained increase in output was thus largely dependent on export markets, particularly for wines of higher quality.

As before, success in global markets was dependent in part on the capacity to secure international trade agreements. Portugal joined the European Free Trade Association (EFTA) as a developing economy and had preferential treatment for some of its agricultural exports, including wine, but the gains from

trade were very small. Portugal also took advantage of the colonial markets, due to tariff protection and the rapid growth of demand for wine associated with the expansion of local economies. By 1956–60, wine exports to the colonies amounted to about 110 ML or 73 percent of total wine exports, by volume, although they accounted for only 10 percent of the total value of exports to them. This changed quickly as Portugal joined the General Agreement on Tariffs and Trade (GATT) and import protection in the colonies was gradually reduced. In 1972, three years before independence, the colonies were surpassed by the other markets as the main outlet for Portuguese wine exports (Clarence-Smith 1985, pp. 161–62, 201). In that same year, Portugal signed a commercial agreement with the EEC, before the first enlargement and the decline in the relevance of EFTA, but also with little consequences for the wine sector, except the small volumes of high quality that was exported (Amaro 1978).

The share of output exported thus rose consistently, after declining from 1930 onwards to a low close to 5 percent during World War II, reaching 30 percent again in the late 1960s. It was only by the end of the twentieth century that the wine export share reached a new peak at 50 percent. The increase in the share of exports was at least as fast in Portugal as in its three neighbouring countries, and in 2013–15 it was 46 percent, the same as Italy's, above France's 32 percent and close to Spain's 50 percent. Figure 7.6 shows the growth in wine output and exports, as well as in the unit value of exports. In the decades to the end of the period, export volume increased as did their unit value, whereas output declined. These trends were markedly different from what occurred in previous years. Yet the growth of Portugal's wine export volume after 1980 was lower than that of the other three key Mediterranean countries, contributing to its continuing decline in global exports (Figure 7.4). However, Portugal's unit values of wine exports were second only to those of France, as shown in Table 7.4.

From about 1980 onwards, world wine trade expanded rapidly, due to the increase in consumption of better-quality wines in the more developed economies, the trend being accompanied by improvements in trade practices, including the expansion of branding. Spain and even more so Portugal lagged behind in joining that positive trend. What happened since 1980 was coined 'a revolution in the vineyards and wines of Spain's' (Martínez-Carrión and Medina-Albaladejo 2010, p. 77). The response of European producers was different from that of other world regions, such as the United States and Australia that increasingly produced homogeneous quality wines on a large scale, whereas European countries continued producing in the traditional way, only increasing the level of output.

Table 7.4 Unit value of wine exports, Portugal,
France, Italy and Spain, 1850 to 2015
(annual averages, nominal US\$/KL)

	Portugal	France	Italy	Spain
1850-59	247	192	n.a.	118
1860-69	245	225	95	130
1870-79	217	150	89	134
1880-89	118	194	65	75
1890-99	119	246	53	38
1900-09	109	204	63	52
1910-19	103	292	129	64
1920-29	84	244	120	79
1930-39	106	327	95	57
1940-49	123	496	271	47
1950-59	166	468	194	28
1960-69	188	462	243	200
1970-79	724	1,177	334	432
1980-89	1,623	1,995	615	738
1990-99	2,427	3,604	1,335	1,176
2000-09	2,522	4,965	2,233	1,473
2010-15	3,020	6,539	2,896	1,469

Source: Anderson and Pinilla (2017).

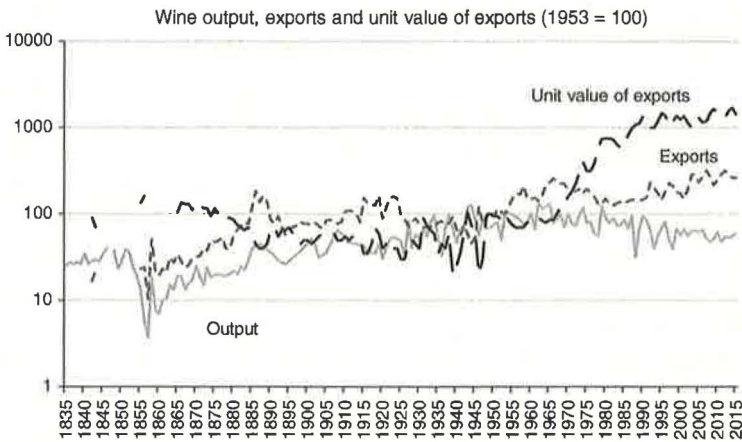


Figure 7.6 Volume of wine production and exports and unit value of wine exports, Portugal, 1835 to 2015 (real values, semilogarithmic scale, 1953 = 100).

Sources: See Figure 7.1.

Yet European producers still accounted for a large share of global wine trade throughout 1970–2000, which was still overwhelmingly sold in the European market (Fernández and Pinilla 2014, pp. 88–89). The growth of multinational firms operating in alcoholic beverages also helped exports, and their relevance increased in countries such as the United Kingdom, France and the Netherlands from the 1960s. But not so in Portugal (Lopes 2005). The main reason for Portugal's lag resided in the relatively small size of the firms operating there.

World trade in quality wine surged again after the turn of the century (Fernández and Pinilla 2014, pp. 91–92). In Spain, the consumption of quality wines increased from 14 percent in 1987 to 38 percent of total consumption in 2009. In per capita terms, table wines consumption declined from 36 to 8 litres per person in the same period of time, whereas quality wines remained at 6 litres. The change in the structure of wine consumption was also accompanied by a change of where it was consumed, which was increasingly more so outside the residence, that is socially. The Spanish 'wine revolution' also reached Spanish vineyards, as the area was reduced by one-third between 1980 and 2009 and the types of vines produced changed considerably too. Yields increased by 85 percent during 1994–2009 to 32 HL/litre in 2009, making Spain one of the highest yielding countries in the world (Martínez-Carrión and Medina-Albaladejo 2010).

Spanish and Portuguese wine producers have not been the most favoured within the European Common Market (Fernández and Pinilla 2014, p. 90). A nominal rate of direct protection to prices estimated by the Organization for Economic Cooperation and Development (OECD) stands at 8.6 percent in 1986–92, 6.4 percent in 1993–99, 1.7 percent in 2000–06 and 0.3 and 0 percent respectively in 2007–13 and 2014. Yet indirect support to wine producers increased in the same period, and on average the level of support remained unchanged between 2007 and 2012, with a 'nominal rate of total producer assistance', which measures total support as percentage of gross value of wine production, averaging 20 percent in that period. The largest recipients of aid were France, Italy and Spain, and in equal-fourth position were Germany, Austria and Portugal. Per hectare of vine, Portugal and Spain came slightly below the EU-27 average, whereas Italy, Germany and France came above the average. Producers in France received double the amount that producers in Portugal and Spain. Per litre of wine produced, Portugal was even with France, and both were above the EU-27 average, whereas Italy and Germany were slightly below (Anderson and Jensen 2016, p. 294).

EU subsidies are granted in a complex framework which can hardly be captured by any particular country or type of producer. Initially, in 1966, such regulations were mainly French and to a lesser extent Italian. The EU regulates quantities, prices and quality of wines. The first two are forms of direct protection to producers and distributors, and the third is only indirect as it is also consumer protection. Seven out of the eight European Common Market 1966 wine tariffs were copied from those of France, implying that all the other five EEC countries had to adjust, particularly in Germany, where a substantial reduction in tariffs for wines was required for containers below 2 litres (Meloni and Swinnen 2013, pp. 266–67).

In Portugal, in 2012 wine still had a large weight in the agricultural sector, representing in 2012 11 percent of value added and 8 percent of employment, thus with a labour productivity above the average. Its export performance was also positive, particularly in bottled wines, which increased at 4.6 percent per year during 2005–11. Apparently, the sector has been unable to fully exploit subsidies, which is probably due to difficulties in investment stemming either from low availability of funds from the financial sector or difficulties in securing markets. As a result, only about half of EU-approved support funds were spent (ViniPortugal n.d., p. 25).

In 1997, associations representing merchants, producers, wine cooperatives, distillers, farmers and wine regions founded the nonprofit association with the name ViniPortugal with the aim of marketing Portugal's wine in foreign markets.¹² The date of creation of the association is indicative of Portugal's delay. But the list of things to be done probably does not differ from lists of other associations in other countries or even from other times. What really matter are the reasons why the sound measures are not followed, which may have more to do with limits to investment, which may be the outcome of low profitability, low levels of starting capital to serve as collateral or lack of financial intermediates of capacity to influence economic policies and subsidies.¹³

CONCLUSION: A REVERSAL OF FORTUNES?

Wine is neither a homogeneous nor a diversified product. Instead the sector is composed by a scale of types, catering for differentiated markets. Following a long period of low levels of international trade, from 1870 to 1930, globalization and phylloxera transformed the wine sector, as production,

¹² www.viniportugal.pt/AboutUs.

¹³ For Spain, see Martínez-Carrión and Medina-Albaladejo (2010).

productivity and international trade increased. From 1930 onwards, another transformation took place, as the outcome of state intervention, definition of wine regions and increasing regulation, catering mostly for protected domestic markets, but with some exports of higher-quality wines. Since 1980, a new transformation occurred as the domestic markets of southern European countries increasingly demanded higher-quality wines.

It is clear from this study that Portugal's wine producers were able to adjust with significant rapidity and efficiency to changes in both domestic and international market conditions. Presumably that stemmed from the large wine comparative advantage Portugal has enjoyed over the past 250 years. Despite the growth of the sector, it is only in recent decades that Portugal's wines have been competing well in international markets, due to the country exporting wines of better quality.

We have defined in this chapter three waves of globalization of Portugal's wines, each with very different traits. The first wave was that of port exported mainly to Britain, which increased rapidly in the eighteenth and the first decades of the nineteenth century, but then declined. The second wave occurred as a consequence of growth of demand for table wines in France because of phylloxera, and this wave came to a halt by the last decades of the nineteenth century. The third wave occurred at the end of the twentieth century and is still ongoing. This is occurring in a context of widespread international competition. A key question now regarding this third wave is whether/when it is going to end. Success in this third wave for Portugal is based on previous developments in its domestic market – in contrast to the second wave, when producers were simply taking advantage of changes in the international markets. Because the latest wave is to a large extent related to parallel changes in the domestic market, they provide a more solid base for such developments. This wave may thus lead to a reversal of fortune for Portugal's wines in international markets.

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