

The "Grapes Country": Portuguese Viticulture from the Early Nineteenth Century Until the New Millennium

Conceição Andrade Martins and Ana Cardoso de Matos

Introduction

Historically, vines have been cultivated all over the country and wine is an important production and a key article of our balance of trade.¹ From the fifteenth century, the Portuguese expansion process increased

C. Andrade Martins (⋈) Institute of Social Sciences, University of Lisbon, Lisbon, Portugal

A. Cardoso de Matos University of Évora-CIDEHUS, Évora, Portugal e-mail: amatos@uevora.pt

¹At least since the fourteenth century, Portuguese wines were shipped, mainly through the ports of Lisbon, Oporto' and Viana, to the northern Europe markets. It was estimated that, by the middle of the fourteenth century, would be exported, annually, between 12,000 and 30,000 barrels (pipas) of wine, the majority of which the "well-known" Lisbon wines. In value, wine exports would amount to about one million pounds, what was, "by far", the main source of revenue of Portuguese foreign trade. See, Castro, 1971, pp. 274–276; Brito, 1889, pp. 450–469.

the demand for wines by the vessels that annually left the Tagus River in the search of lightening the unknown and discovers "new worlds". Not just because wine was an essential product for the survival of the crews of the sea fleets that crossed the South Atlantic and the Indian Ocean, but also because it was an important commodity of the world's maritime trade.² Despite this, Portuguese wines trade overseas was quite irregular until the beginning of the eighteenth century. Its take off dates back to the last quarter of the seventeenth and is directly connected, firstly with the international political-diplomatic and military context of the second half of that century and the rivalry between the British and the French.³ Secondly, with the development of the Portuguese–British trade encouraged, largely, by the 1654 treaty (Westminster Treaty) which awarded "huge" privileges to English merchants trading in the Portuguese "economic space", above all in Brazil, including entitlement to lower duties.⁴ And thirdly, with the maritime and commercial competition between the British and the Dutch's which, "crossing" the Portuguese sea ports, increased the demand of national products, among which wine proved to be a good "return merchandise". By the end of the eighteenth, wine products—wine, spirit, and vinegar already accounted for about half of mainland's articles exports, but for the United Kingdom, Portugal's major trade partner, their weight was much higher: 84%.5

²There is evidence that during the *Quattrocento* many fields had been cleared to plant vineyards and wine supply was quite abundant. See Lobo, 1903, secção I, p. 15.

³Devolution war (1667), Augsburg Alliance war (1688/1697) and Spain Succession war (1701/1713). Increase of English royalties on French wines in 1660, 1689 and 1697. Barriers or even ban on French wines importations into the UK between 1667–1670 and 1679–1685. Throughout these years the exports of Portuguese wines to England rose from less than 200 barrels (pipas) to over 12,000. See Martins, 1990, pp. 77–79 and 217–218.

⁴About this treaty considered the "Magna Carta" of the British dominance in Portugal, see Shillington, V. M., and Chapman, A. B. Wallis., The Commercial Relations of England and Portugal, London, s/d, p. 204.

⁵Since the beginning of eighteenth, Portuguese wines were at the top of British wine imports. Their share climbed from 41% in 1695/1704 (50% the Spanish wines and 3% the French) to 75% in 1740/1804 (20% the Spanish and 5% the French). See, Public Record Office, *Accounts and Papers*, XXXIV.

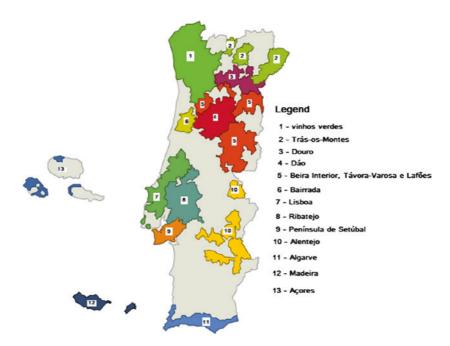
It is, therefore, not surprising that viticulture has become such an important branch of the national economy that, from the mid eighteenth on, imposed itself as a national "question" and compelled the state to interfere and regulate it. Especially the Port wine sector where, from 1756 onwards "the state was always present (... and even) in the periods of economic liberalism and free trade, its presence was stronger than in the rest of the economy and society" (Barreto 1988, p. 374). It was, in fact, in that year (1756) that Prime Minister Pombal demarcated the first wine district in the world—the Alto Douro's vineyards demarcated region—regulated all the winegrowing process inside Douro's wine district and established a company with royal privileges to supervise the wine production, manufacture, transport and trade inside and outside this region, namely in the warehouses of Gaia and Oporto. Thus, Port is the oldest controlled denomination of origin.

A century and a half later (1907/1908) six new wine regions would be demarcated: Two in the north and central north of the country (Vinho Verde and Dão); three in the south, nearby Lisbon (Carcavelos, Colares and Moscatel de Setúbal), and one in the islands (Madeira). At present, there are much more oenological *terroirs* protected spread out all over the mainland and islands (See Map 1), and, as a major old world wine country, Portugal boasts two wine producing regions UNESCO world heritage sites: the Douro valley wine district and the Pico island wine region in the Azores.

At the turn of the millennium the importance of wine sector in Portugal can be measured by the following indicators: (i) the cultivated area under vines was around 250,000 hectares (the 8th at world level), which corresponds to 6.8% of the Portuguese agricultural surface, the higher vineyard's density in EU and in the main world wine countries⁷;

⁶About this company (the General Company of Agriculture of Alto Douro Vineyards), the demarcation of the Douro wine growing district and the regulation of its production and manufacture process, see, Pereira, 1990; Martins, 1998; Sousa, 2006.

⁷The second is Moldavia (6% of agricultural surface), the third Italy (5%), and the fourth Spain (4%). For vineyard acreage by country see, European Commission, DG Agriculture and Rural Development, elaboration based on notifications from EU Member States under Reg. (EU) 555/2008, Annex XIII, Table XIV; and for agricultural areas, *FAO Statistical Yearbook* 2013, Table 4, pp. 34–37.



Map 1 Portuguese wine-growing districts (*Source* Authors eleboration of Infovini's Regiões Vitivinícolas Map)

(ii) almost 40% of this acreage is dedicated to quality wines (VQPRD), rising this proportion to higher values in the north-west and north-east of the country (See Table 1); (iii) at the same period (1995/2005), the wine production exceeds 7 million of hectolitres (10° world wine producer and 5° EU), corresponding to 4% of EU production and 2.6% of the whole world production; (iv) the value of this production in the agriculture branch is over 8%, less than the French (around 10%), close to the Italian (9%) and higher than the Spanish (3%); (v) exports amount to about 2.5 million hectolitres (3.5% of the world market) and its value rounds 530 million Euros; and (vi) this branch involves almost 250,000 wine farming companies, the majority of small and very small scale, and more than 100 cooperative wineries accounting for half of the wine production.

The aim of this chapter is to highlight the relevance of *vitiviniculture* and wine trade to Portuguese economy and society, and to put in

| Table 1 Portuguese viticultu | ral land (2010) |
|-------------------------------------|-----------------|
|-------------------------------------|-----------------|

| Wine regions | Land in wine (hect) | % total land in wine | Land in VQPRD ^c (hect) | % VQPRD ^c regional land in wine |
|--|------------------------|----------------------|--------------------------------------|--|
| Northwest (Minho) | 31,010 | 13.0 | 29,388 | 94.8 |
| Northeast (T Montes ^a) | 68,765 | 28.9 | 41,358 | 60.1 |
| Center (Beiras) | 56,663 | 23.8 | 12,555 | 22.2 |
| South Center (Estremadura, Lx e Vale Tejo ^b) | 52,752 | 22.2 | 5058 | 9.6 |
| South (Alentejo and Algarve) | 25,473 | 10.7 | 9125 | 35.8 |
| Mainland Portugal | 234,663 | 98.7 | 97,484 | 41.5 |
| Azores | 1700 | 0.7 | 228 | 13.4 |
| Madeira | 1423 | 0.6 | 497 | 34.9 |
| Total Portugal | 237,786 | 100.0 | 98,209 | 41.3 |

Notes

Source IVV, Yearbook 2011 as at 31 July 2010-

evidence the main changes and progresses of this branch since the turn of the nineteenth century.

Wine Tradition in Portugal

The suitability of Portugal for wine was highlighted by many renowned experts, namely the MP and head of the central Agriculture department, Moraes Soares (1811/1881), who assured, in the prologue of his studies on Portuguese vine-growing to the London International Exhibition of 1874 and the Paris Universal Exhibition of 1878, that "If Portugal is not the 'native' country of the vine is, at least, its homeland 'of adoption'" (Soares 1874, p. 3, 1878). A similar opinion expressed Villa Maior (1809/1884) in his Report to the 1867 International Exhibition.

^aIncludes Douro's wine district where the proportion of VQPRD wines is much higher (around 85%)

bIncludes Setúbal Peninsula

^cVQPRD are Quality Wines Produced in a Specified Region

There he stated that Portugal had, not only all the conditions to be a first-rate wine country but, more than any other, the ability to export wines of all categories. For them to be excellent, winegrowers only needed to improve their manufacture and treatment, since even when the vines were treated with little care and the wines made "by chance" we manage to make good wines.⁸ For his part, the scholar and politic Elvino de Brito (1851–1902) argued that, if it were not for the high taxes imposed on wines by the majority of the importing countries, the cultivation of vines could have expanded in such a way across the country, that all the other, including that of cereals, would be subsidiary (Brito 1889, p. 459). Finally, Lopes de Carvalho argued that "Viticulture has been at every age the alma mater of Portuguese agriculture" (Carvalho 1890–1891, p. 229).

Plant rather widespread in Portugal, like in the majority of the Mediterranean countries, grape growing had been strongly encouraged and supported either by the crown, the church or the monastic orders since the beginning of "nationality" (twelfth century). On one hand, exempting from the payment of rents, for a few years, the tenants who planted vineyards at their domains or at the fields surrounding the villages and cities (Porto, for instance), and on the other, charging lower rents to vines than to cereals. The main reasons for such a "protection" are known and connected with the growth of the religious and laic wine demand, the good adaptability of vineyards to thinner, poor and arid soils and its capacity to fix populations. Besides, for those who farmed the land, vines had the advantage of being subjected to fewer constraints than cereals and provide surpluses for the market. The expansion of the country's winegrowing area did not change, however, the "original characteristics" of this culture. In fact, wine remained a mixed and

⁸Villa Maior, 1868. About Portuguese participation in nineteenth century international exhibitions see, Matos and Martins, 2003.

⁹Vines paid census between 1/5 and 1/10 and grains usually around ¼. On this subject and the one of the wine-growing expansion in Portugal throughout the twelfth and sixteenth centuries. See, Alves, 1943; Barros, 2003, vol. 16, pp. 217–308; Coelho, 1977, 1983; Gonçalves, 1987, pp. 73–97; Lencastre, 1953; Rodriguez, 1997, vol. 3, pp. 17–28; Santana, 2003, vol. 15, pp. 11–24; Trindade, 1974.

supplementary production, even in districts relatively well integrated into the mercantile economy and with better connections with the marketplaces (local, national or international).¹⁰

So, although, historically, vines have been enough disseminated throughout Portugal, it has been just around the middle of the seventeenth century that its culture started to become predominant and almost exclusive in some regions, especially around the Douro river's valley. Encouraged by the domestic and external demand (mainly British, Dutch, German and Northern Europe), the viticulture specialization of this region began taking shape during the second half of the seventeenth century and has speeded up throughout the eighteenth and nineteenth centuries. 11 This process was led by the monks and the rural aristocracy, but seldom or never within the framework of the large farming. In fact, it has been, above all, the small and middle landowners and farmers who ensured and guided the Herculean labour of transforming the flaky schistose soils of the Douro valley into vineyards. 12 By doing so, they gave up audaciously the traditional self-consumption productions on behalf of the most commercial one, wine, and went ahead with the winegrowing specialization on the Douro valley, although the natural resources of this region were, at first sight, unfavourable compared with other places where viticulture was either in dissemination or was already intensively cultivated, like, for example, near the main cities and maritime ports (Lisbon, Porto, Viana do Castelo, Aveiro, Setúbal,

¹⁰The dispersion of cultures around Aveiro was characterized by Silva as a "selective mixed-farming", due the "predisposition" for concentrating cereals cultivation at certain places and vine's rather at the vicinity of the cities and the slopes of Este where, moreover, new vines had been planted. Silva 1994, pp. 90–91. On the "logic" of wine expansion in "low" Mondego, see Durand, 1972; Gonçalves, 1987.

¹¹In the seventeenth and eighteenth centuries those were important overseas markets for both Port and Madeira wines, but also for other Portuguese wines, namely the well-known Lisbon wine, that used to be sent to northern Europe and América through the Lisbon, Faro, Figueira, Setúbal and Viana harbours in vessels carrying other commodities, such as salt, fruits and colonial products. Further more, the British demand for wines strongly grew after the Restoration (1660) and the development of the maritime trade with its colonies, which Francis regarded as the "turning point" of its wine trade. See, Francis, 1972.

¹²This process involved the building of walled terraces in the steep slopes of the Douro valley.

etc.).¹³ In reality, due to the rocky soil and the hot dry climate of that part of the country, the yields are very low (around half a litre per vine in top estates, nowadays), but the juice is very rich and concentrated.

Given that until the 1850s (appearance of powdery mildew in Portuguese vines) there are no evidences of the use of chemical fertilizers on most productive grape varieties, and, therefore, no significant changes in the average yield of vines, the productive increases of the last decades of the eighteenth century and first half of the nineteenth must be resulting, mainly, from the enlargement of the vines' area (Fig. 1).¹⁴ This extension of vineyards only occasionally must have been assessed on land occupied by other crops, such as cereals, since in most cases the new plantations mainly benefited unproductive land, which gradually, according to winegrower's possibilities and markets demand, were planted with vines. This must have been the practice followed by small and medium growers who hardly could renounce the product of other crops to convert them into vineyards. And was, likewise, the case of the new vineyards sponsored by funds transferred from other sectors (commercial or financial), as happened in the Douro, Bairrada and Extremadura regions. 15

The, comparatively, low rate of the wine branch throughout the following years proceeds from the deep and lasting drop in production over the years 1850–1870, due, mainly, to the *oidium* crisis and to the long and difficult process of recovering the production in the following years (see Fig. 1). This slow process of recovery stemmed from the delay in finding the most effective treatments for this disease, its cost and the ones connected with the extra labours in the vineyards, needed to attack and prevent the disease (digger the vines more often, apply

¹³The Douro district would produce about 16,000 barrels (pipas) in the sixteenth century; 30,000 in the seventeenth century; 60,000 in the eighteenth century; and more than 100,000 by the mid of the nineteenth century, i.e., before the oidium and phylloxera diseases. Arquivo Nacional da Torre do Tombo, MR., maço 641.

 $^{^{14}}$ Wine production more then doubled between 1772/1773 and 1848/1849. It grew from 1.5 million hectolitres to 3.4 million.

¹⁵About this subjects see, Soares, 1873.

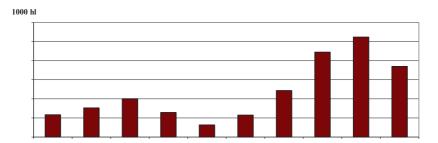


Fig. 1 Historical growth of Portuguese wine production 1796–2010 (average in 1000 hl) (Sources Martins, Conceição Andrade, Vinha, Vinho e Política Vinícola em Portugal do Pombalismo à Regeneração, op.cit.; Lains, Pedro e Sousa, Paulo Silveira e, "Estatística e produção agrícola em Portugal, 1848–1914", Análise Social, n° 149, 1998, pp. 935–968; Estatística Agrícola 1967–2010, Lisboa, INE, 1968–2011)

sulphur,...) and, last but not least, the emergence and spread of the *phylloxera*. Politically, this deeply depressing situation of viticulture and national economy encouraged the liberalization of the sector, accomplished between 1852 and 1865: reform and extinction of the Douro's wine company, abolition of the Douro's demarcated region and of the restrictive regime. That is, a century after Pombal had imposed protectionist measures to a specific branch of economy, Port wine sector, its production and trade were, finally, released from all constraints. As well as, all other wines were permitted to come into Douro's wine district and into Oporto "barriers", and also to be exported through its harbour.

The *phylloxera* disease reached sooner and with higher strength the Douro wine country, whose vineyards were attacked and destroyed by the insect since the late 1860s, and later and less intensely the other wine regions, where preventive actions were implemented by the end of the 70s and the replacement of old and/or infected vines by American varieties began earlier. Like on the surroundings of Lisbon, where one

¹⁶The so-called "restrictive regime" was a set of protectionist laws on the production, transport and trade of Port wine established since 1756. Besides the wine crisis, the 1850s has been a time of general crisis: huge floods, crop failures and epidemic outbreaks (cholera morbus, yellow fever).

of the larger and richer landlords of the country, José Maria dos Santos, shaped by then (mid 1870–1880) the "greatest vineyard of the world": around 6 million grapevines planted on unproductive sandy soils, precisely the most resistant to phylloxera, and producing, by the mid 1890s, between 10 million to 15 million hectolitres/annually. A huge wine production which, in the midst of a global crisis of overproduction, had the advantage of been situated face to the main "commercial centre" of the country (Lisbon) and being drained through a net of taverns supported by that winegrower.¹⁷

Therefore, in the late 1870s, when the phylloxera was still confined to Douro wine region, vineyards already covered about 200,000 ha of the mainland (more than 4% of agricultural surface); wine production, although still 30% below the pre-oidium average values, accounts for almost 25% of agricultural production and for about 68% of its growth; and country's wine cartography already showed deep changes (see Fig. 2). The "southern provinces" (Centre South and South) were harvesting almost 50% more wine than the Northern ones, while before the "1852 disease" their production was 32% inferior to that. At the turn of the century, their share almost reached 50% of national wine production while the share of the northern' provinces slumped to less than 30%.

The recovery, since the 1880s, of the pre-oidium flows of production, and the high growth of the following years (rate of 1.3% per year until the 1920s) will be at the heart of the turn of the century overproduction crisis (see Fig. 1). In fact, when the country's politic regime changed to a Republic (1910) the extent of vineyards had already reached 300,000 ha (7% of agricultural surface); wine production had climbed to 6 million hectolitres, which in value accounts for almost 16% of agricultural gross product, less than in the 1870s, it's true, but not so much considering the growth of agricultural production throughout this period (70% between 1870s and end 1900s). Once more, this crisis of overproduction and fall of prices gave place to state intervention in this branch

¹⁷About this landowner see, Martins, 1992, pp. 367–404.

¹⁸See Fig. 2. About these subjects see, Pery, 1875; Lains, 1990.

¹⁹See, Castro, 1908; Lains, 2003, pp. 253–255.

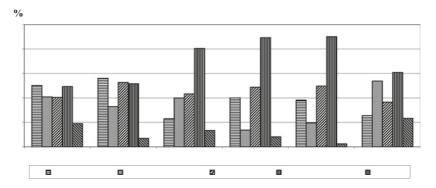


Fig. 2 Regional distribution of Portuguese wine production (%) (*Sources* Martins, Conceição Andrade, *Vinha, Vinho e Política Vinícola em Portugal do Pombalismo à Regeneração*, op.cit.; INE, *Estatísticas Agrícolas*, several years; IVV, *Anuários*, 1994–2007)

of the economy in order to regulate and "control" it. Whether restoring, in 1907/1908, the old Douro Demarcated Region, extinguished in the 1860s, or creating new ones: the green wine demarcated region, in the North-West, the Dão wine demarcates region, in the centre of the country, the Colares wine, Carcavelos wine and Moscatel of Setúbal wine demarcated regions, nearby Lisbon (see Map 1). Either restricting vine plantations, or regulating, once again, the Port wine trade and production, namely establishing a Port Wine Shippers' Guild and an Agricultural and Commercial Port Wine Association (both in 1908). Or, as well, taking actions to foster the growth of wine trade, namely by granting exportation premiums.

Under the Corporative regime (1933/1874) the wine sector control tightened further, particularly concerning the wine production of the demarcated regions, and particularly the Port wine production and the Port wine shippers' activities. The control of Port wine production was done through the "beneficio", i.e. the amount of Douro's grape must production annually "approved" to be fortified ("transformed" into Port wine) by the Casa do Douro. Established in 1933 together with the Port Wine Institute (IVP) and the Exporters' Guild, the first of these institutions (Casa do Douro) was set up to "protect" and monitoring

growers activities; the second (IVP), was supposed to control the "quality" of the wine and warrant its origin by granting certificates of origin; and the third, to oversee the exporting firms' activity and, eventually, establish minimum export prices. A few years later (1937) it was decided to set up another organization expressly concerned with ordinary wines, the Junta Nacional do Vinho (JNV), whose main purpose was regulating this wine market balancing supply with demand. During almost half a century of existence, it actively contributed to the modernization and organization of this wine sector, for the dissemination of knowledge about wine and for the promotion of cooperative wineries. Dissolved in 1986, when Portugal joined UE, it was replaced by the Institute Of Vine and Wine (IVV)

If, historically, the wine branch played such an important role in economic policies it was not only because, as Salazar used to say in the 40s, drinking wine helps to feed a million Portuguese, but mainly because of this sector's weight, as a whole, in Portuguese economy and in the balance of trade (see Table 2). But also for its role in the agro-industrial economy and, recently, in the development of inner's country land, helping to mitigate rural depopulation and its negative effects by the revitalization of local economies.

Table 2 Wine in Portuguese balance of trade

| Weight of wine in Portuguese special trade | | Imports cov | erage rate by | wine exports | |
|--|------------------|----------------------|---------------|---------------|----------------------|
| | Port wine (%) | Portuguese wines (%) | | Port wine (%) | Portuguese wines (%) |
| 1776/1808 | 13 | 18 | 1800/1819 | 14 | 16 |
| 1809/1886 | 33 | 45 | 1820/1899 | 21 | 30 |
| 1887/1940 | 20 | 35 | 1900/1939 | 8 | 14 |
| 1941/1986 | 4 | 8 | 1940/1984 | 2 | 5 |

Source Martins, Conceição Andrade, *Memória do Vinho do Porto*, op.cit., pp. 238–240

Port Wine, the Locomotive of Portuguese Wine Economy

It was throughout the eighteenth century that Port wine imposes itself as a first quality wine, whose characteristics allowed it, when well manufactured (vinified), to age well and even improve its flavours. The process of making Port has been modified and improved since then, but its key features are a good maturation of the grapes, and precise rules of vinification and ageing, including the addition of varying proportions of wine spirit at Douro's wine cellars and during its "stage" at the warehouses of Gaia and Oporto (the so-called refreshments). 20 "Manufactured", first of all, to answer the British demand and taste for "full-bodied, strongly coloured and strong tasting" wines (i.e. "dark, strong and sweet"), the share of Port wine in Portuguese wine exports to the UK quickly rose from less than 1/5 to more than half in the first two decades of the eighteenth century, and to 34 thereafter (see Table 3). Thus, Port wine won all other wines' competition in the UK, including ordinary Portuguese wines, and put these in its orbit, both in the foreign and domestic markets.²¹ The Port wine was, by the way, the only wine that had a positive overall behaviour in eighteenth-century England, and most of its success was due to the British wine trade firms established at Oporto since the second half of the seventeenth century (Warre in 1670, Croft in 1678, Dawson and Harris in 1680, Bearsley in 1692, Offley Forrester in 1729, ...) as well as to the British Factory (Feitoria), whose regulation dates back to 1727.²²

Therefore, since the eighteenth century that Port wine trade, as well Madeira's wine, was the driving force of Portuguese wines trade overseas, specially to the United Kingdom until 1831, when it was decided

²⁰The process of making Port wine includes fermentation, fortification and ageing, to allow the wine to mellow, develop its flavours and mature, in cool dark warehouses at Oporto and Gaia where the temperate climate of the coast ensures that the wines will age slowly and harmoniously. One of the unique properties of Port is its ability to gain in richness and flavour over very long periods of ageing in wood, partly because it is fortified and partly because it is a wine of extraordinary concentration and aromatic potential (http://www.croftport.com/en/).

²¹Regarding Portuguese wines competition in the British market see Public Record Office, *Accounts and Papers*, XXXIV.

²²Croft is, nowadays, the oldest firm still active in Port wine business.

to level tariffs on all foreign wines, thus ending the preferential conditions that Portuguese wines had enjoyed under the Methuen Treaty (1703). Although this measure was, on its own, less crippling for the port wine trade with England than those implemented by Gladstone in 1860 and 1861, the truth is that, between 1830 and 1859, Portuguese wines lost some 15% of their share of the British market, and the drop became even more accentuated after the changes to customs duties introduced by Gladstone in 1860 and in 1861. Indeed, once tariffs were generally lowered, though progressive charges introduced on wines in accordance with their alcohol content, Port wines were included in the highest category (over 26° Sykes) and had to pay over a shilling more per gallon than less alcoholic wines.

That is to say, the differential duties that encumbered the product made it much less competitive on the British market.²⁴ Moreover, the prohibition upon exporting wines to Britain that had not been properly approved and qualified for that destination meant that, according to Forrester, a third of the Upper Douro production was "condemned" to be consumed on the domestic market.²⁵ Not precisely because these wines were defective in any way, or of lower quality, but rather because they were pure (i.e. made only from unblended fermented grape juice) and/or produced outside the demarcated area. Far more than this geographic fluke, what irritated Forrester was that both the law and the export trade rejected those wines on the grounds that they were not good enough quality and were not to the English taste (i.e. not "dark, strong and sweet").

²³From 1831 on, foreign wines had to pay 5 shillings and 6 pence per gallon, approximately double the amount paid by wines from the British Empire (2 sh and 9 d). It will be recalled that Article II of the Methuen Treaty stipulated that "from henceforth" Portuguese wines would pay lower import duties than French wines, and, in fact, for a long time they enjoyed an even better advantage than the third less agreed in the 1703 Treaty. See Martins, 2003, pp. 111–130.

²⁴At that time, Port wine shipped to the United Kingdom paid more per barrel in export duty than the same product sent for other European countries or to America. On this matter, see Forrester, 1850.

²⁵Those measures were implemented in 1822, 1825 and 1833. Between 1833 and 1852, the portion of Douro production that was not approved for export and therefore destined for home consumption vastly exceeded the portion approved (over 70%). %). Cf. Martins, 1990, p. 202 and pp. 322–325.

| Table 3 | Port wine share in | າ the main | Portuguese | wine n | markets ^a | (nineteenth | and |
|----------|--------------------|------------|------------|--------|----------------------|-------------|-----|
| twentiet | th centuries) | | | | | | |

| | UK (%) | Nordic countries ^b (%) | France (%) | Benelux (%) | Brasil (%) | USA (%) | Pt Colonies and PALOPs ^c (%) |
|--------------------------------------|--------|---|---------------|----------------|---------------|---------|---|
| First half nineteenth century | 90 | 59 | 18 | 66 | 24 | 41 | 42 |
| Second half nineteenth century | 91 | 94 | 3 | 70 | 22 | 80 | 1 |
| First half twentieth century | 88 | 57 | 19 | 30 | 10 | 7 | 2 |
| Second half twentieth century | 67 | 29 | 83 | 59 | 9 | 4 | 0.3 |

Notes

Thus, the law and the merchants effectively conspired to encourage the widespread practice of adulterating port. Not only demanding that wine separated off for sale to the United Kingdom should have particular qualities that the wines themselves were unable to produce, but also insisting that the English preferred wines that were "full-bodied, strongly coloured and strong tasting". So, while port had traditionally been laced with 4 to 5 gallons of brandy per barrel, now most of the wine exported to the United Kingdom received five times that amount, and even had elderberries and mistelle added to it. In opposition to merchants' believe, this did not appeal to the English, whose tastes were now inclining more towards lighter younger cheaper wines (such as sherry and French wine). And worse, it also meant that the supply of Douro wines could not keep up with the increased demand from Britain. Those adulterations practised (or instigated) by the merchants had yet another perverse effect, since it not only damaged the

^aAverage of the quantities exported during each period

^bDenmark, Norvege and Sweden

^cPALOPs means African countries whose official language is Portuguese Source Martins, Conceição Andrade, *Memória do Vinho do Porto*, op.cit., pp. 248–253

reputation of port among the more wealthy classes, but also led to its disqualification, in 1859, by a wine jury. His members alleged that the Gaia warehouses were full of wines unsuitable for export and, thus, deserving to be burnt, and requested for measures to restore the "licit and legal" trade with foreign markets.²⁶

Even if Port wine sector was highly regulated and constrained, either by a restrictive system as by heavy taxes on foreign trade, it was also quite protected from other national wines competition both in the domestic or international markets. For that purpose, since the 1750s until the 1860s it was forbidden to export any other wines by the Oporto Harbour, as well as their access to that city, its surroundings and Douro's wine district. Besides, among other privileges, the Douro Wine Company had the exclusive of supplying the taverns of Oporto and surroundings, of providing wine to some Brazilian captaincies and of distilling grape spirit in the Northern provinces. The supply of brandy to fortify Port wine, as well as of darker, stronger, and full-bodied wines to blend with Douro wines and improve their quality, or increase the quantity of Port wine stored in the warehouses of Oporto and Gaia, encouraged winegrowers from the Northern provinces to enlarge their vineyards. Furthermore, the demographic growth, the raising of Europeans' standard of living (and also of the Portuguese's, although more moderate), and the consequent increase of international, domestic and colonial demand (Brazilian, first, and African from the end of the 19th) urged the winegrowers of the Centre and South Centre provinces to extend their vines, trusting that the capital proximity and the extinguishing of Douro's protectionism (in the 1850–1860s) might ensure new exits for their wines.²⁷

This process of vineyard acreage enlargement was particularly intense between the last quarter of the 19th and the 1960s, reacting to the increasing demand for ordinary and cheap domestic wines. As show Tables 4 and 5, the foreign demand for this type of wines grew quicker than those of Port through these years, especially in Northern

²⁶On these matters see, Forrester, 1844, 1859.

²⁷It was, in fact, this expansive conjuncture, add to the progressive abolishment of the "restrictive regime", eventually accomplished in 1865, that urged winegrowers to expand their vines area, a crop, after all, more profitable than many others, including grains.

and Central Europe and in the colonial markets, even if the growth rate of the first period (1776/1859—1860/1904) might reflect the gap between Port wine exports and those of all the other Portuguese wines, which was particularly high until the 1830s.

The winegrowing expansion of the last quarter of the eighteenth century and the first decades of the 19th is, therefore, straight connected with the growth of domestic and foreign demand for wines, both stimulated by Port wine production and trade.²⁸ So it's not surprising that, before the phylloxera, the Douro wine country was the larger and most important Portuguese wine region. With around 100,000 ha of vineyards producing an average of 450,000 hl of wine (22% of all national production), more than half of this region's wine production was transformed into Port wine, commodity that contributed to 2/3 of national wine exports, around 30% of Portuguese overseas trade and covered 1/5 of imports. But the importance of Port wine in Portuguese economy can be measured by many other indicators, namely its share in the national wine trade, and its weight in the balance of trade (see Tables 2 and 6; Fig. 3).

The Turning Point of Portuguese's Viticulture: Nineteenth-Century Vine Diseases

In the "collective imaginary" *phylloxera* is the "most terrible scourge" that reached Portuguese viticulture. First of all, due to the devastation it caused in the most important viticultural *terroir* (Douro's wine country), where the aphid destroyed thousand of vineyards and left large spots of land covered with dead vines (known as mortórios).²⁹ Secondly, owing

²⁸The first great expansion of vineyards dates back, however, to the last decades of the seventeenth century, and is straight connected to the benefits then granted to Portuguese wines in the United Kingdom and reinforced, a few years later, by the Methuen Treaty (1703). See Martins, 2003.

²⁹Native to North America, the plylloxera is a disease induced by an aphid (insect) with wings that feeds on leaves and roots, causing nodules and eventually killing the vine. It came to Europe, with vines imported from North America and quickly "attacks" the French vineyards since early 1860s. In Portugal the phylloxera appeared in the Douro's valley by the end of the 1860s and the crisis reached its climax in 1881/1885. About the evolution and effects of this disease in Portugal see, Martins, 1991.

Table 4 Main overseas markets for Portuguese wines^a (nineteenth and twentieth centuries)

| | | First half nineteenth century (%) | Second half nineteenth century (%) | First half twentieth century (%) | Second half twentieth century (%) |
|--|---|---|--|--|---|
| UK | For Port wine For the other Portuguese wines | 81.8 17.2 | 60.8 3.5 | 57.8 3.7 | 19.9 3.0 |
| Brasil | For Port wine For the other Portuguese wines | 9.3 58.3 | 22.4 47.4 | 6.0 25.4 | 0.4 1.2 |
| Nordic countries ^b | For Port wine For the other Portuguese wines | | 3.5 0.1 | 8.7 3.2 | 7.4 5.5 |
| France | For Port wine For the other Portuguese wines | 0.03 0.3 | 1.9 34.0 | 11.4 22.8 | 35.6 2.2 |
| Benelux | For Port wine For the other Portuguese wines | | 1.9 0.5 | 5.7 6.3 | 19.0 4.0 |
| USA | For Port wine For the other Portuguese wines | 1.8 5.0 | 0.7 0.1 | 2.3 0.3 | 1.1 9.1 |
| Portuguese Colonies and PALOPs ^c | For Port wine For the other Portuguese wines | 1.3 3.4 | 0.2 10.5 | 0.9 27.2 | 0.4 48.9 |

Notes

^aAverage of quantities exported during each period

^bDenmark, Norvege and Sweden

CPALOPs means African countries whose official language is Portuguese Source Martins, Conceição Andrade, Memória do Vinho do Porto, op.cit., pp. 248–253

| Annual average growth rates | | |
|-----------------------------|---------------|----------------------------|
| Periods | Port wine (%) | Other Portuguese wines (%) |
| 1776/1859 and 1860/1904 | 3.3 | 5.2 |
| 1860/1904 and 1905/1949 | 0.4 | 0.9 |
| 1905/1949 and 1950/1989 | 0.5 | 1.5 |

Table 5 Growth of the foreign demand for Portuguese wines

Sources Martins, Conceição Andrade, Memória do Vinho do Porto, op.cit., pp. 248–252; Id., Vinha, Vinho e Política Vinícola ..., op.cit., vol. 3, anexo 5

to the inefficiency and high cost, either of most of the treatments tried (in particular sulphide injections), or of its cure (American grafts, and replantings), which considerably rose the wine costs of production.³⁰ And thirdly for its social and economic effects, once it caused a decrease in wines quality and its depreciation, which jointly with higher costs of production ruined thousands of winegrowers and promoted emigration and rural depopulation; gave rise to socio-economic crises and to the wine crisis of the late nineteenth century (of overproduction and prices depreciation); and reduced wine revenues with negative effects on public finances and the trade balance.

Table 6 Port wine share in Portuguese wine trade

| | Port wine quantities (%) | Port wine values (%) |
|-----------|--------------------------|----------------------|
| 1775/1814 | 72 | 77 |
| 1815/1879 | 62 | 79 |
| 1880/1939 | 35 | 58 |
| 1940/1974 | 18 | 45 |
| 1975/1989 | 34 | 61 |

Source Martins, Conceição Andrade, *Memória do Vinho do Porto*, op.cit., pp. 233–254

³⁰The first attempts to treat this disease employed vine's ash, soot, arsenic, cupric acid, soda nitrogen, ammonia, potassium sulphate and Peyrat insecticide, but the only ones that proved to be truly effective were submersion in water, carbon sulphide injections and American vines grafted in local grape varieties, or planted as direct producers. These managed, eventually, to put Phylloxera under control, but the price of this disease was very high, especially for Douro's wine country... See Martins. 1991.

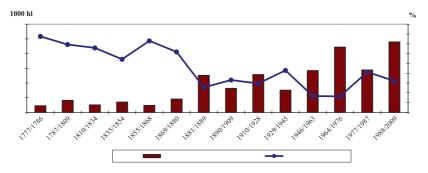


Fig. 3 Portuguese wine exports 1796–2010 (in 1000 hl and % of Port wine) (Sources Martins, Conceição Andrade, *Memória do Vinho do Porto*, op.cit.; Instituto Nacional de Estatística, *Estatísticas do Comércio Extern*o; Estatísticas do IVP, do ICEP, do IVV/IVDP e do IVM)

Yet, if we take into account the effects of this disease not only at the wine production level but also into all the viticultural process, excluding in Douro's wine district phylloxera was not as devastating or innovating as *oidium* (powdery mildew) (see Fig. 1 and Table 7).³¹ Indeed, the era of "viticultural progress" of Portuguese winegrowing and winemaking began with the *oidium*, once it has been then that: (i) increased the process of vineyards renewal and extension, either because the disease spread better in weakened vines, or because some grape varieties were more resistant than others to powdery mildew³²; (ii) the new plantations began being made in line and with greater spacing between the newly planted vines; (iii) were intensified and improved some cultural practices and techniques, particularly those

³¹During the peak of the oidium crisis (1856/1860) wine production fell to almost ¼ (from near 4 million hl in 1845/1852 to 1 million) and remained below the average of the 1840s until the 1880s. Douro wine district was deeper affected by the phylloxera, that completely destroyed a huge amount of its vineyards as it was already said. About the impact of this disease in that region, see Martins, 1991.

³²Since 1856/1857, the agronomic revues argued in favour of the replacement of old vines with new ones. The sudden increase of the French demand for Portuguese wines in the 1870s also incited winegrowers to extend their vineyards area. Remember that the plylloxera "attacked" the French vineyards since early 1860s, spread rapidly to all winegrowing regions and in a few years infected and destroyed more than 600,000 ha of vineyards and caused production losses of about 50%.

related with digging, pruning, grafting and fertilization, this one still "restricted" to natural fertilizers, but already considered the "preservative treatment" of *oidium*, while sulphur was taken only as a palliative; (iv) the winemaking processes were improved to remove from wine the taste and smell of sulphur³³; (v) were carried on studies on vine's phytonomy and on vine diseases pathology, allowing to set which grape varieties were more resistant to oidium (moscatel, malvasia, etc.) and more suited to the geomorphologic and climatic characteristics of each region; (vi) was pushed the transfer and concentration of vineyards³⁴; and (vii) and the national wine map began showing its future configuration (See Fig. 2).

A famous wine-cropper from Azeitão (nearby Lisbon), José Maria da Fonseca (1804/1884), is a good example of this "openness" to improvements that spread through the vineyards and the wineries. The innovations and improvements he introduced in the commercial area were also extended to the vine culture and the manufacture of wine. He developed, in his vineyards, the plantation in line and with spacing; used farming with plough and mule cattle; and introduced grapevines varieties from other regions or imported. In his wine cellars he practised the "desengaço" of the grapes (remove them from the bunch); manufactured the wine by the system of open waterspout; acquired new filters and modern filling machines; and fortified his must and wines with less graduate spirits.³⁵

It was, indeed, all those changes and innovations introduced at different steps of the productive process to combat the oidium and to clarify the wine that lead us to reinforce the idea that it was, in fact, the first of the vineyard's diseases cycle (oidium) that started the turning point of Portuguese's viticulture. Thus, the major grape diseases that hit out European wine countries from the 1850s (powdery mildew, *phylloxera*, mildew, *maromba*, anthracnose, etc.) acted simultaneously

³³Namely, with the introduction of new techniques of fermentation and "clearing" of the must which involves fining and filtration. See, Matos, 2013, pp. 165–189.

³⁴As illustrate the cases of Dona Antónia Adelaide Ferreira (in Douro) and José Maria da Fonseca (in the surrounding area of Lisbon). The first one has been studied by Pereira, & Ollazabel, 1996; the second by Martins, 2000, pp. 35–54.

³⁵See Martins, 2000.

| Years | Wine production | Wine exports |
|-----------|-----------------|--------------|
| 1845/1852 | 3911 | 402 |
| 1853/1855 | 2357 | 340 |
| 1856/1860 | 1006 | 192 |
| 1861/1865 | 1430 | 252 |
| 1866/1872 | 2059 | 324 |
| 1873/1883 | 2385 | 575 |
| 1884/1890 | 4825 | 1415 |
| 1891/1899 | 4171 | 785 |
| 1900/1910 | 5265 | 868 |
| 1911/1921 | 4528 | 1238 |

Table 7 Wine production and exports during oidium and phylloxera crises (averages in 1000 hl)

Sources Martins, Conceição Andrade, Vinha, Vinho e Política Vinícola em Portugal, op.cit.; Lains, Pedro e Sousa, Paulo Silveira e, "Estatística e produção agrícola em Portugal, 1848-1914", op.cit.

as constraint and progress factors of the wine sector. In the first case, due to its negative effect on production quantities, costs of cultivating and of wine manufacturing, and on farmers' income. And in the second case, because they helped to the rise of wine prices, to the introduction, dissemination and generalization of new cultural practices, to the establishment of new and more accurate winemaking practices and techniques, and to the general modernization of all wine branch's. 36 From all the changes that occurred on Portuguese viticulture between the oidium crises (1850'decade) and the spread of phylloxera outside the Douro's district (1880'decade), the most determinants were, no doubt, those connected with the need to fight and control the effects of the first of those diseases (oidium or powdery mildew). On one hand, due to the innovations and improvements introduced in the soil management at different stages of the productive process: reinforcement of the digs, top-dressings and fertilizers, changes in the planting and pruning systems, introduction of chemical disinfectants. On the other hand, as a result of the innovation and improvements in the fields and at the wine cellars and wine presses to clarify the wine. And also due to the

³⁶About this innovations and transer of technology see Madureira and Matos, 2005.

modifications introduced, since then, into the country's wine cartography, as shown in Fig. 2.³⁷ That is, the supremacy of Centre South wine districts over the Northern provinces, in opposition to what happened previously, which endured until the EU integration, in 1986.

Besides, if we compare the Portuguese wine regions of the Douro, Bucelas, Carcavelos or Setúbal with those of Bordeaux, Bourgogne (France) or Jerez (Spain), its clear that in any of them the profitability of the wine culture, on the one hand, and the succeeding attacks of cryptogrammic diseases of the second half of the nineteenth century, on the other, acted as additional incentives for the modernization of this economic sector. As did, recently, the EU, through financial support to the replanting or modernization of vineyards in some wine districts, namely in Douro's where competing with the powerful multinational Port wine firms, quite a few old wine families have been investing in vineyards at theirs Quintas, using the latest vineyard landscaping techniques and the finest traditional Port wine grape varieties, but also preserving the old terraces and vines. So, recovery was achieved during the nineties after uprooting aged and unprofitable vineyards, in return for indemnity payments and gradual replacement of old and less productive grape varieties.

From Productive Fragmentation to Wine Cooperativism

Historically, wine productive structure was based, overwhelmingly, on small and very small production and producers, as show data available to the county of Arcos in 1820: 53% of the parishes harvest less than 3 casks of wine (lower echelon); 47% between 3 and 10 casks (*medium* echelon); and none above 10 casks (upper echelon).³⁸ However, what

³⁷See Fig. 2 in page 29 of this chapter.

³⁸Capela, 1984.

most sticks out in this case is the relatively small amplitude of the farming exploitation sizes—minimum of 0.7 barrels/pipas (in Sistelo) and a maximum of 6 barrels/pipas (in Aboim)—as well as the fragmentation of the productive structure also quite evident in a 1842 study on the statistics of wine production in Portugal.³⁹

Prior to the oídium crisis (around 1850), harvests average in the "wine growing country" (Douro wine district) rose to 80,000/100,000 barrels/pipas of wine. But, although its productive structure was based on small estates and farming—vineyards producing around 1 to 2 pipas—what weighed most in the total production of the region were the farms (Quintas) whose harvests went up dozens and even hundreds of pipas. Such was the case of the Vesúvio Quinta, situated far upriver in the Upper Douro, where in the late 1840s the average harvest rounded 700 pipas. 40 In the post-oídium (the mid-1870s) wine productive structure has been characterized as follows: the main production came from the "small and medium estates" and most of the winemakers harvest between 1 and 2 barrels (pipas) of wine, despite they were not uncommon producers of more than 500 barrels (pipas).⁴¹ So, only exceptionally "medium-sized" and smallholders had enough economic strength to labour their vineyards according to the most appropriate procedures, or financial resources to store and age their wines, although they could raise its value "at least" 10% per year. 42

More then half a century later, in the 1940s there would be 336.876 winegrowers in Portugal (mainland), just over half of which (52%) in the area of activity of the National Wine Board (Junta Nacional do Vinho—JNV) and close to 1/3 (30%) in the Green Wine region (Região do Vinho Verde—RVV) (see Map 1). In decreasing order stood the wine

³⁹This study is based on data on the production of wines, brandies and vinegar provided by the registers of the literary subsidy (wine tax created in 1772 to finance Minor Studies and abolished in 1857). See Costa, 1842.

⁴⁰See Pereira, 1990.

⁴¹Breve Notícia, 1874.

⁴²Either by applying to the vineyards all appropriate cultural operations (digging, pruning, re-routing, etc.) or the manures, chemical fertilizers and correctives most indicated. See Menezes, 1891; Rasteiro Júnior, 1892.

regions of Dão (11%) and Douro (6%), followed by the remaining wine regions of Bucelas, Carcavelos, Colares and Moscatel of Setúbal, each one representing less than 0.5%. Regarding the approximately 21,600 winegrowers of the world oldest demarcated region, the Douro wine district, almost ¾ (72%) were very small vintners/laborers harvesting less than 5 barrels (pipas) of wine and 12% small producers of 5 to 10 pipas. The larger winegrowers (of more than 50 pipas) accounted for about 2% and the remaining medium-sized producers (14%) gathered between 10 and 50 pipas. In the distribution of the benefit, i.e. the authorization to convert their wines into Port wine and, consequently, sell it at higher prices, the most fortunate were, however, the medium and large producers, since the lower echelons (less than 5 pipas) that produced about 1/5 of the region's wine contributed only 1% to 2% of the total benefited. The productive structure of the JNV area was, however, still more fragmented, once more than 80% of its winegrowers produced less than 5 pipas of wine and 10% between 5 and 10 pipas. The medium size producers (between 10 and 50 pipas) did not exceed 8%, and the big ones (50 to 500 pipas) and greater producers (of more than 500 pipas) together little over 1%. Two decades later, the situation remained virtually unchangeable, except concerning the winemaking that profited from the establishment of more than 50 cooperative wineries in the JNV area. 43

Since the end of the nineteenth century that the formation of associations among winegrowers was spreading, directed, primarily, to the unification of winemaking processes and to the homogenization of ordinary wine types through the establishment of social wineries and commercial companies. However, the lack of legal framework and of technical and economic support restraint their establishment and/or survival until 1935/1942, when were established the wine cellars cooperatives of Muge and Almeirim (in the Centre South region). Slowly until 1952, and in a more planned way, later on, established on "technical-economic bases" that would lead to the undeniable success this structure would come to have in the years 1960 and 1970.⁴⁴ At the

⁴³See Martins and Monteiro, 2002.

⁴⁴Leónidas, 1971.

beginning of the 1970s, the 109 cooperative wineries sited in the mainland had the capacity of "manufacturing" 28% of the average annual wine production and integrated about 9% of the country's winegrowers. This movement profited, firstly, the winegrowers, especially the smaller ones who could more easily drain their production and have access to credit. But it also benefited consumers, by supplying the markets with greater regularity and with better wines.

Conclusion: The Challenges of the Globalization

In the wine branch, the process of merging began later than in the beverage industry (which included tea and coffee) and its aim was to deal with both the concentration in the distribution and retail sector and the growing globalization of the wine industry. In other words, to enable it facing up the control of international distribution networks by large multinational companies and adapt the industry to an increasingly globalized market. In Port wine sector, mergers and acquisitions (M&A) grew importance in the early 1960s, when Harvey's (Allied Domecq) bought Cockburn and Martinez Gassiot (1961) and Sandeman acquired Offley Forrester (1962). This process of M&A also involves national companies, such as Sogrape, that bought A. A. Ferreira in 1987; Offley Forrester (in 1996), previously sold to Barcardi-Martini; and Sandeman (in 2002) acquired by Seagram in 1980. These acquisitions carried out by Sogrape also result from the decreased weight of its main brand—Mateus Rosé—on the firm's sales, which compelled to diversify its portfolio.

This transfer of "national" and multinational Port wine companies⁴⁵ to great transnational economic groups is connected with the evolution of the international commercialization and distribution channels for alcoholic beverages, and with the consequent need to increase substantially the investments in those areas. Teresa Silva Lopes studied the

⁴⁵Many of the so-called "national" Port wine companies aren't, in fact, once they had been founded out of the country (United Kingdom, Ireland, Spain, etc.) and/or belonged to foreign families. Such is the case of Sandman's, established in London at the end of the eighteenth century by a Scottish wine merchant, and now a multinational Port wine company.

dynamics of the changes that occurred on the distribution channels used by Port wine firms during the twentieth century, and concluded that until the 60s the commercialization structures of those firms changed slowly comparatively to what happened in other segments of alcoholic beverages, namely in those of whisky and champagne where great changes had already taken place both on consumers' preferences, competition and new administration practices, mostly related to investments in new brands and in bottled wines at the origin. This explains their subsequent vulnerability to the competition of the great beverage firms and of international distribution, where the concentration was already high as a result of "several waves of mergers and acquisitions", as well as the tendency to reinforce the vertical integration. In this context, many Port wine companies were integrated into multinational groups, or established partnerships or alliances with other companies, and only a few kept up its independence.

To face the challenges of globalization, in 1992 seven of the ten largest Portuguese wine companies—Aliança, Bacalhôa Vinhos de Portugal/JP, Finagra/Herdade do Esporão, José Maria da Fonseca, Messias, Quinta da Aveleda e Sogrape⁴⁸—joined as a task force to promote internationally their wines. This cooperative strategy of companies, which together account for more than 75% of bottled wine exports, has enabled the Group of Seven (G7 of wines as it is known) to act jointly on two areas. Firstly, in emerging markets (China and Japan), but also in the traditional ones (Europe, the United States, Brazil and PALOPs), to where are exported more than 90% of Portuguese wines.

⁴⁶See, T. Lopes, 1998; T.S. Lopes 2001.

⁴⁷Teresa, 2000.

⁴⁸The oldest is José Maria da Fonseca. Established in the late 1820s in the Setúbal Península (Azeitão, 30 km South of Lisbon) its firm is famous for the international projection gave to the Moscatel of Setúbal since the first half of the nineteenth century, and for its pioneering either in the vineyards, the wine cellars or the wine trade. José Maria da Fonseca's was one of first wine companies to "create" a trade mark, to favour shipping its wines bottled rather than in bulk and, outside Port wine branch, to win gold medals and/or first class ones in almost all nineteenth century International exhibitions its wines were presented. Founded in 1942, Sogrape is well known thanks to its Mateus Rosé wine. Following its restructuration, in the 1980s, the company made strong investments in the main Portuguese wine regions, especially in Douro's. About José Maria da Fonseca, see Martins, 2000; about Sogrape, see Pereira, 2003.

But the formation of large economic groups and the increasing globalization of the sector led to the re-evaluation of the company's distinctive symbols, straight linked to their history and tradition. That is why Sogrape, one of the main Iberian wine groups, makes a point of presenting itself as "the first family wine company in Portugal", and Aveleda wishes to be seen as "a family business managed and guided, far over three Centuries, by generations of the same family" (!) This strategy is global and does not apply only to companies from the old continent. Take, for example, the cases of Gimenez Mendez, from Uruguay, who presents itself as "a family company committed to the excellence and quality of its wines", or Muratie, a small family business in South Africa boasting about being one of the first in that country to produce Port Wine (!)

References

Books

- Alves, Á. da M. (1943). Subsídios para a História do vinho na cidade do Porto, Porto.
- Breve Notícia. (1874). Breve notizia da Viticultura Portugueza ou Resumo dos esclarecimentos indispensáveis para se avaliar a colecção dos vinhos de Portugal apresentados na Exposição Internacional de 1874 em Londres. Lisboa: Imprensa Nacional.
- Capela, J.V. (1984). Produção e Comércio do Vinho dos Arcos 1750–1850. Alguns Dados e Problemas, Arcos de Valdevez, Braga: Gráfica da Editora Correio do Minho.
- Castro, D. Luís de. (1908). *Alguns aspectos económicos do projecto vinícola*. Lisboa: Separata da Revista Agronómica.
- Coelho, M.H. (1977). O Mosteiro de Arouca do século X ao XII, Coimbra.
- Coelho, M.H. (1983). O Baixo Mondego nos finais da Idade Média, Coimbra.
- Costa, C.A. da. (1842). Estatística da Produção dos Vinhos em Portugal no Anno de 1840, Extrahida do Arrolamento do Subsidio Litterario do Mesmo Anno, e a Sua Relação Com a Instrucção Primaria do Reino, Lisboa.
- Forrester, J.J. (1844). Uma ou duas palavras sobre vinho do Porto: dirigidas ao publico britannico em geral, e com especialidade aos particulares: mostrando

- como, e porque he adulterado, e apontando alguns meios de se conhecerem as adulterações. Porto: Typographia Commercial Portuense.
- Forrester, J.J. (1850). A Short Treatise on the unequal and disproportionate imposts levied on Port-Wine, shipped from Oporto to Great-Britain; compared with the imposts levied on wines, of the same character, shipped to America and other countries, London.
- Forrester, J.J. (1859). *Provas de verdade contra provas de vigho*. Porto: Typographia Commercial Portuense.
- Francis, A.D. (1972). The Wine Trade, London.
- Lains, P. (1990). A Evolução da Agricultura e da Indústria em Portugal (1850–1913). Uma Interpretação Quantitativa. Lisboa: Banco de Portugal.
- Lains, P. (2003). Os Progressos do Atraso. Uma Nova História Económica de Portugal, 1842–1992. Lisboa: Imprensa de Ciências Sociais.
- Lencastre, J. de. (1953). A vitivinicultura através de alguns documentos medievais de arquivos portugueses (secs IX a XX). Subsídios para um estudo, Porto.
- Leónidas, V.R. de P. (1971). As Cooperativas e o Fomento da Vitivinicultura, Lisboa.
- Lobo, A. de S.S.C. (1903). *História da Sociedade em Portugal no Século XV*, secção I. Lisboa: Imprensa Nacional.
- Martins, C.A. (1990). *Memória do Vinho do Porto*. Lisboa: Instituto de Ciências Sociais da Universidade de Lisboa.
- Martins, C.A. (1998), Vinha, Vinho e Política Vinícola em Portugal do Pombalismo à Regeneração, vol. I, Chapter 3, pp. 100–150, Évora.
- Martins, C.A., & Monteiro, N.G. (Eds.). (2002). A Agricultura, vol III de História do Trabalho e das Ocupações. Oeiras: Celta.
- Menezes, A.C. de. (1891). 5ª Região Agronómica. Viseu: Typographia da Folha.
- Pereira, G.M. (1990). O Douro. O Vinho, a Vinha e a Região. De Pombal a João Franco. Porto: CENPA.
- Pereira, G.M. (2003). Sogrape uma história vivida. Campo das Letras.
- Pereira, G.M., & Ollazabel, M.L.N. de A. de. (1996). *Dona Antónia*. s.l.: Edições Asa.
- Pery, G. (1875). Geographia e Estatística Geral de Portugal e Colónias, Lisboa.
- Rasteiro Júnior, J. (1892). Esboço de uma Memória Sobre a Economia Agrícola da 4ª região Agronómica. Lisboa: Typographia e Stereotypia Moderna.
- Shillington, V.M., & Chapman, A.B.W. (1988). *The Commercial relations of England and Portugal.* London: s/d.
- Silva, M.J.B. (1994). Esqueira. A vida de uma aldeia do século XV, Cascais.

- Soares, R. de M. (1873). Relatório da Direcção-Geral de Comércio e Indústria àcerca dos Serviços dependentes da Repartição de Agricultura desde a sua fundação até 1870, Lisboa.
- Soares, R. de M. (1874). Breve Notícia da Viticultura Portugueza ou Resumo dos esclarecimentos indispensaveis para se avaliar a collecção dos vinhos de Portugal apresentados na Exposição Internacional de 1874 em Londres. Lisboa: Imprensa Nacional.
- Soares, R. de M. (1878). *Mémoire sur les vins du Portugal*. Lisbonne: Imprimerie Nationale.
- Sousa, F. de. (2006). A Real Companhia Velha. Companhia Gerald a Agricultura das Vinhas do Alto Douro (1756–2006). Porto: CEPESE.
- Teresa, T.S. (2000). *Brands, Mergers and Acquisitions in the Alcoholic Beverages Industry*, Working Paper, The University of Reading.
- Villa Maior. (1868). Relatorio sobre a Classe LXXIII da Exposição Internacional de 1867, Lisboa.

Paper in Journals

- Barreto, A. (1988). O vinho do Porto e a intervenção do Estado. *Análise Social*, nº 100, 1º.
- Barros, A.J.M. (2003). Tombo do mosteiro de Ancede (séc XIV). *Douro—Estudos & Documentos*, vol. 16, pp. 217–308.
- Brito, E. De. (1889). A propósito da crise vinícola. Memória apresentada ás commissões de fazenda e de agricultura, pelo deputado Elvino de Brito. *Boletim da DGA*, nº6, pp. 450–469.
- Carvalho, A. M. Lopes de. (1890-1891). Portugal Agrícola, p. 229.
- Durand, R. (1972). La vigne et le vin dans le bassin du Mondego au Moyen Age (XII-XIIIe siécles). *Arquivos do Centro Cultural Português*, vol. V, pp. 13–37.
- Gonçalves, I. (1987). Entre o campo e a cidade na segunda metade do século XIV. *Estudos Medievais*, pp. 73–97.
- Lopes, T. (2001). A evolução das estruturas internacionais de comercialização do vinho do Porto no século XX. *Revista de História Económica e Social*, nº 1, pp. 91–132.
- Lopes, T.S. (1998). Internacionalização e concentração no vinho do Porto: 1945–1995: uma abordagem pelos custos de transacção. *Cadernos da revista Douro. Estudos & documentos*, nº 3.

- Martins, C.A. (1991). A filoxera na viticultura nacional. *Análise Social*, nº 112–113, pp. 653–688.
- Martins, C.A. (1992). Opções económicas e influência política de uma família burguesa oitocentista: o caso de São Romão e José Maria dos Santos. *Análise Social*, 116–117, pp. 367–404.
- Rodriguez, J.I. de la T. (1997). A viticultura nos mosteiros cistercienses do vale do Douro português (séculos XII–XIII). *Douro—Estudos & Documentos*, vol. 3, pp. 17–28.
- Santana, M.O.R. (2003). Da vinha e do vinho na documentação foraleira manuelina do vale do Douro. *Douro—Estudos & Documentos*, vol. 15, pp. 11–24.
- Trindade, M.J.L. (1974). A utilização agrária do solo em torno de Lisboa na Idade Média. *Boletim Cultural da Junta Distrital de Lisboa*, nº 39–40, pp. 3–10.

Paper in Books

- Castro, A. De. (1971). *Balança Comercial*. In Serrão, Joel (Ed.), *Dicionário de História de Portugal*, vol. I, Lisboa, pp. 274–276.
- Madureira, N.L.M., & Matos, A.C. de. (2005). *A tecnologia*. In Lains, P. & Silva, Á.F. da (Eds.), *História Económica de Portugal, 1700–2000*, vol. II, *O Século XIX*, Lisboa, Imprensa de Ciências Sociais, pp. 189–218.
- Martins, C.A. (2000). Survival and renewal of Portuguese family wine firms in front of internationalisation, 1820–1999, Fourth Convention of the European Business History Association, EBHA, Bordeaux, pp. 35–54.
- Martins, C.A. (2003). O Tratado de Methuen e o crescimento do comércio vinícola português na primeira metade de Setecentos. In José, L.C., & al. (Eds.), O Tratado de Methuen (1703) diplomacia, guerra, política e economia, Lisbon, Livros Horizonte, pp. 111–130.
- Matos, A.C. de. (2013). Matemático por formação, químico por paixão: Júlio Máximo de Oliveira Pimentel, um "politécnico" no Portugal Oitocentista. In Pina, A.M., Maurício, C., & Vaz, M.J. (Eds.), Metamorfoses da Cultura, estudos em homenagem a Maria Carlos Radich, Lisboa, CEHC-IUL, pp. 165–189.
- Matos, A.C. de, & Martins, C.A. (2003). As primeiras universais e a internacionalização da economia portuguesa na segunda metade do século XIX, papper to the XXIII Encontro da APHES, Coimbra.