
Institutional constraints to the development of the Spanish fishing sector (18th and 19th centuries)

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ABSTRACT

Before the steam era, technological limitations restricted the capacity to catch and market fish. Furthermore, a restrictive institutional framework hindered the performance of the Spanish fishing industry: high manufacturing costs attributed to the salt monopoly, restrictions on labour supply caused by the Matricula de Mar (Maritime Registry), and contradictory legislation contributed to reduced labour participation and investment. The fishing industry was only free from institutional constraints after a long process of dismantling the maritime-fishing regulations of the *Ancien Régime* at the end of the nineteenth century.

KEYWORDS: fisheries, *Ancien Régime* institutions, fishing resources.

JEL CODES: N43, N54.

1. Introduction

The rapid expansion of Spain's fishing fleet during the 20th century made the country a global fishing power (Paz Andrade 1973; González Laxe 1983; García Alonso 1993; Carmona Badía 1997, 2022; López Losa and Amorim 2012; Espido Bello and Giráldez Rivero 2018). In 2021, Spain was the largest fishing country in the European Union and had one of the largest industrial fleets in the world.¹ Spain is also one of the world's largest fishing markets (Piquero and López Losa 2005). However, until the last decades of the 19th century, the Spanish fishing sector was characterised by underdevelopment,

1. The Spanish fleet accounted for 25% of the total EU GRT and contributed 25% of the total production of fishery products, with a value reaching 35.5% of the total (average values 2011-2022). <https://ec.europa.eu/eurostat/web/fisheries/data/main-tables>. The Spanish deep-sea fleet is the fifth-largest in the world after China, Taiwan, Japan and South Korea (McCauley et al. 2018).

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if not decline (Carmona Badía and López Losa 2009, pp. 263-274). Before the steam era, fisheries in Spain had limited growth potential.

Geographic, technical, and socioeconomic obstacles hindered both supply and demand growth. In addition to limited catching capacity, the difficulty of preserving fresh fish and transporting it to distant markets also prevented supply expansion. Low levels of urbanisation and income did not help to increase the demand for a good that, under these conditions, was relatively expensive and in irregular supply. As a result, salted fish, including significant amounts of imported cod, covered most of the low domestic demand for fish. While there are doubts about the reliability of fishing statistics published in the 1860s (Carmona Badía 1983, pp. 403-407; Giráldez Rivero 1991), they show that almost half of the catch was processed (43.2% salted; 5.3% pickled). Apparent consumption can be calculated at 2.11 kg of fresh fish, 1.76 kg of salted fish, and 0.2 kg of pickled fish per capita; to which almost 2 kg of cod should be added.² In an environment of low demand, there were few incentives to increase fishing effort (López Losa 2002, pp. 35-38).

Although the lack of quantitative data complicates international comparisons, many 18th-century *ilustrados*³ lamented the poor performance of the Spanish fishing sector in contrast to the success of the French and, above all, the Dutch and the British in the international deep-sea fishing and saltfish markets. They were concerned about the loss of currency that the purchase of codfish generated (Uztariz 1757) and emphasised the need to open new fisheries to reduce imports. However, most referred to Spanish fisheries only tangentially (Martínez Shaw 1998, p. 1675). Few mentioned the impetus Catalan merchants and industrialists were giving to the production of salted sardines in Galicia and Andalusia. Nor did they propose improving other fisheries that already existed along the Spanish coasts beyond some basic suggestions that were usually impractical (Alonso Álvarez 1977; Carmona Badía 1983; Ríos Jiménez 2006). What most concerned them was the crucial role of fisheries in providing labour for commercial shipping and the Navy. According to Bernardo de Ulloa (1740, p. 42),

The most important obstacle to our traffic stems from the neglect of our fisheries, and the fact that they are entirely abandoned on our extensive coasts, since these are the breeding grounds from which the best sailors are taken.⁴

2. Average figures for 1863-1867. *Anuario estadístico de España*, years 1862-1865 and 1866-67, <https://www.ine.es/inebaseweb/25687.do#> (accessed 23/10/2021). In the same five-year period, the apparent consumption of cod reached 1.92 kg per capita per year. *Estadísticas del Comercio Exterior de España* (Spanish Foreign Trade Statistics), respective years.

3. Spanish Enlightenment intellectuals.

4. “El más principal obstáculo a nuestro Tráfico, nace del descuido de nuestras Pesquerías, y estar enteramente abandonadas en nuestras dilatadas Costas, siendo estas el plantel de donde se sacan, y crían los mejores Marineros.”

Other essayists with closer links to the sector had a somewhat different perspective. They agreed with the mercantilists on the need to limit imports to expand the narrow domestic fish market but pointed to other circumstances that the latter ignored in their analysis. Among these circumstances, two institutions stand out: the Royal Salt Monopoly (*Estanco de la sal*) and the Maritime Registry (*Matrícula de mar*). As Carmona Badía (1983, 443-448) rightly pointed out, both represented obstacles to the functioning of Spanish fisheries because they discouraged the participation of labour and capital. Furthermore, the existing legislation on fishing gears and resource management was insufficient and often contradictory. It created uncertainty and instability in the rules of the game, which may also have reduced investment and the diffusion of certain fishing systems, as in the case of sailing trawlers (*parejas de bou*).

Rather than providing an extensive analysis of Spanish fisheries, this paper explores the institutions and regulations that may have shaped the productive behaviour of the industry before the 20th century.

2. The *Estanco de la Sal* (Royal Salt Monopoly) and the saltfish industry

This is the second secondary and extrinsic agent which in Spain acts against the prosperity of fisheries. It does not kill, nor does exterminate, as the *Bou* [pair trawling] does ...; but it paralyses their commerce and ties the hands of both the fisherman, so that he will not endeavour to make great strides, and of the salt businessman and trader, so that he may neither profit from it nor circulate it throughout the *Península*. It stifles, dulls, weakens, and causes the cessation of countless resources which, set in motion, would give subsistence to a significant number of Spaniards and considerable increases to the Treasury, which it cannot have, nor will it ever have, as long as it does not change its system of salts...⁵

The claims of Miravent y Soler (1835, p. 45) about the impact of the *Estanco* on fisheries in southern Spain are just one example of the many contemporary accounts that identify the salt monopoly as a barrier to the expansion of fishing in the country. In addition to supply inelasticity and uncertainty (Ocampo Suárez-Valdés 1990, p. 141), the main issue caused by

5. “Este es el segundo agente estrinseco y secundario que en España se opone a la prosperidad de las pescas. No mata, ni estermina como el Bou...; pero paraliza su comercio, y ata las manos, tanto al pescador para que no se afane en hacer grandes conquistas, como al empresario y traficante en la saladura, para que ni pueda beneficiarla ni circularla a toda la Península; sofocando, embotando, debilitando y haciendo cesar una infinidad de resortes que, puestos en movimiento, darían subsistencia a un sin número de Españoles, y al Erario aumentos considerables, que ni puede tener, ni tendrá jamás, mientras no varíe su sistema en punto de sales.”

the monopoly was the high salt prices that producers and fishermen had to pay. It is not easy to follow the trajectory of salt prices and, in turn, quantify their effect on production costs. Nevertheless, their course can be followed by analysing official sale price provisions.

Saltworks and the salt they produced had been a royal prerogative of the Castilian and Aragonese crowns since the Middle Ages. In 1631, the *Estanco* (Royal Monopoly) was established in Castile as part of an attempt at tax reform (Fernández de Pinedo 2014).⁶ Then, the price of salt was set at 40 *reales de vellón per fanega*.⁷ The failure of the salt tax resulted in the selling price being reduced to previous levels. In 1632, salt was sold at 17 rs. vn. in Old Castile and at 22 rs. vn. in New Castile, while the salt used in fish processing in Galicia, Asturias, and Andalusia received the grace price (*precio de gracia*) of 11 rs. vn./fanega (Gallardo Fernández 1808, p. 8).

Throughout the 18th century, the Bourbon monarchy's policies to promote fishing took the form of tax exemptions and privileges (Sáñez Reguart 1791, pp. XIX-XV; Pastor Rodríguez 1880, pp. 40-44; Vázquez Lijó 2008a, pp. 155-157). These included salt price reductions for the fish processing sector. Although the regular price of salt increased due to the application of surcharges to finance different projects and, above all, wars, the fishing and fish processing sectors generally benefited from preferential rates. In 1750, while the regular price of salt was around 50 rs. vn./fanega, the price for fisheries was set at 10 rs. vn. Subsequently, this price increased, reaching 14 rs. vn./fanega in 1781 before dropping back to 10 rs. vn. at the end of 1782. However, not long thereafter, the Royal Order of 29 June 1784 again raised the price of salt for fisheries to 14 rs. vn./fanega in order to finance war expenditures.⁸ In 1802, fishermen were once more exempted from surcharges, and prices returned to 10 rs. vn./fanega. Nevertheless, after Fernando VII was restored to the throne in 1813, the price of salt for fish processing was increased by an additional six reales per fanega to 16 rs. vn. as part of a plan to rebuild the Navy (Aldana 1873, p. 306).

The *Estanco* was suspended during the Liberal Triennium (1820-1823). However, shortly thereafter, in 1823, it was reinstated at a universal price of 45 rs. vn./fanega, and all privileges, grace prices, and exemptions were abolished (García del Hoyo 2002, p. 54). The impact of this measure was disastrous, and the demands of producers and fishermen soon led to new relief measures that, according to Carmona Badía (1983, pp. 429-430), reduced the

6. Under the *Nueva Planta* decree, the saltworks of the Kingdom of Aragón were included in the *Estanco* in 1707. Giménez and Royo (2013, p. 105).

7. The currency unit, *reales de vellón*, will be abbreviated from here on as "rs. vn". The *fanega* was the measure of dry capacity used for salt.

8. AMDAB, Matriculas, Generalidad, Legajo 1872.

price to 20 rs. vn.⁹ In 1828, Spanish policy on salt prices for fisheries took a new direction. That year, the *Cortes* (Spanish Parliament) passed a law stipulating that salted fish that was exported abroad or transported by sea to domestic markets was to pay only 10 rs. vn./fanega. However, just a few years later, in 1834, a new decree eliminated all salt price exemptions, meaning salt-fish producers and fishermen were to pay the regular price of 52 rs. vn./fanega. Only those who exported saltfish to foreign markets would receive a 30% premium on price, which would be reduced to 15% for exports to colonial markets. Perhaps as compensation, the decree stipulated that, “Duties on the same articles imported from abroad shall be arranged in such a way as to result in a benefit in favour of nationals”.¹⁰

However, the potential benefits of these reductions and import levies were relatively small. Spain produced salted sardines (and salted tuna in the south), whereas imports were mostly codfish, rather than sardines or herring. Furthermore, Spanish salted sardines were not in high demand in international markets. The following year, Galician members of the *Cortes* complained that these export promotion measures were useless. Because most salted sardines were exported via cabotage to Spanish markets, mainly to the Mediterranean, they asked that the same benefits be extended to the coastal trade.¹¹ Treasury representatives argued that export subsidies were the means commonly used by neighbouring countries to promote industry and that tax exemptions could not be adopted because they would create tax inequalities within Spain. Moreover, members of the *Cortes* opposed to exemptions declared that the figures on salt prices and consumption cited by salted pilchard manufacturers to support their claims about the burden caused by the monopoly were more than questionable. These members alluded to fraudulent salt sales and made subtle accusations of smuggling.¹² In the end, it appears that the protests were successful. The salt sales price for all fish that was transported by sea, both abroad and domestically, was again set at 10 rs. vn./fanega at the end of 1835.¹³

A broader perspective is needed to explain the protests against the high production costs caused by the Royal Monopoly. The salt monopoly established two types of salt prices. First, there was the monopoly price that Spanish consumers had to pay. Among domestic consumers, fish manufacturers constituted a privileged group that benefited from many price reductions but was also subject to changes that undoubtedly affected production. Second, there was the open market price at which the Spanish Treasury sold salt to

9. Gaceta de Madrid, 24, 21/02/1824.

10. Gaceta de Madrid, 172, 7/08/1834.

11. Diario de Sesiones de Cortes, 160, 2/03/1835; *ibidem*, 161, 3/03/1835.

12. *Ibidem*, 183, 30/03/1835; *ibidem*, 188, 6/04/1835.

13. Gaceta de Madrid, 341, 2/12/1835.

foreign merchants, but not to Spanish consumers. Fishermen and fish manufacturers frequently complained that the countries that dominated the salt-fish market in the Atlantic were able to buy Spanish salt at prices that were much lower than monopoly prices (Carmona Badía 1983, p. 433; Vázquez Lijó 2008a, p. 166). In the 1730s, Alfonso Navia-Osorio (1732, p. 42) suggested that selling salt to fishermen at the same price paid by foreigners would reduce the amount of money that left Spain to pay for salted fish, and that “with our fishermen’s profits being higher, the number of them, and consequently that of sailors, would increase”.

Then, 25 years later, Gerónimo de Uztariz (1757, p. 318) noted this contradiction but thought any solution problematic. He stated that the prices at which other European exporters, such as “France, Sicily, Sardinia, and Portugal”, sold salt were similar to those charged in Spain. Increasing them would only lead to the loss of this vital trade with the “northern countries” and the revenue it generated for the Treasury. A century later, nothing had changed. At best, salt was sold to nationals at prices of around 10 to 12 rs. vn./fanega, whereas foreign importers paid only 1.5 to 2 rs. vn./fanega in Andalusia “to salt the fish that Spain later consumes” (Representación 1821, p. 111).¹⁴

Given the scarcity of data, it is not easy to quantitatively assess the effect of monopoly prices on the cost structure of saltfish production and, in turn, on the sector’s competitiveness. García del Hoyo (2002, pp. 54-55) evaluated the impact of salt prices on salted sardine production in Andalusia using data from Oyarvide (1776)¹⁵ and Miravent (1835). He calculated that, at the standard price of 52 rs. vn./fanega, salt would have amounted to about a third of the total cost of raw materials (sardines and salt). For manufacturers that could export by sea and take advantage of grace prices, it would have amounted to 12-15%. In the last quarter of the 18th century, Cornide published a more detailed cost structure for Galicia (Table 1). According to his calculations, salt accounted for 21% of the production cost. A hypothetical cost structure using the price foreigners paid for salt (2 rs. vn./fanega), with all other costs being equal, has also been simulated in Table 1. These new calculations show that at this price, the share of salt would have plummeted to 3%, reducing total costs by 20%.

14. See also Museo Naval (MN), Ms. 2203.

15. In González Escobar (1988, pp. 63-92).

TABLE 1 - *Production costs of one thousand (un millar) of salted pilchard in Galicia in the last quarter of the 18th century*

	At the regular price of 17 rs. vn.		At the hypothetical price of 2 rs. vn.	
	rs. vn.	%	rs. vn.	%
Sardines (1 millar - about 23 kg)	12.00	59.26	12.00	72.73
Salt (one <i>ferrado</i> - about 12.87 kg)	4.25	20.99	0.50	3.03
Labour	1.00	4.94	1.00	6.06
Packing	3.00	14.81	3.00	18.18
Production cost (rs vn.)	20.25	100.00	16.50	100.00

Source: Cornide (1774, p. 149).

In the 1830s, circumstances had not changed substantially. Only those manufacturers who could transport salted sardines by sea, and therefore had access to grace prices, were able to bring their product to market at a competitive price. According to Santos Castroviejo (1998, p. 123), those who were unable to access these prices were forced to pay the regular price of 50 rs. vn./fanega. Under these circumstances, salt constituted almost half (46%) of production costs. When salt was purchased at the grace price of 10 rs. vn., this share would fall to 14%, and total costs would be reduced by a third. At the price charged to foreigners (2 rs. vn./fanega), the impact of salt on production costs would have been minimal (1%), and total production costs would have been reduced by 40%. However, the issue was complex because the salt monopoly constituted a valuable source of revenue for the Spanish Treasury. As Treasury Minister Pedro Surrá y Rull stated in 1841, “[...] the approach to be taken with regard to revenue that constitutes one-sixteenth of that which enters the Treasury requires very particular meditation”.¹⁶

Francisco Conte (1854, p. 216) made similar considerations about tax revenue ten years later. At the same time, he added an argument commonly put forth by those who disagreed with salted fish producers’ demands. He contended that the industry’s future prospects and lack of progress were not determined exclusively by the price of salt. He subtly suggested that if the salted sardine trade was unable to expand nationally or access international markets, it was not because of the salt monopoly, as the sector enjoyed reduced prices. It was a question of product quality.

16. “(E)l sesgo que haya de tomarse respecto de una renta que constituye la dieciseisava parte de las que ingresan en el Erario requiere meditación muy particular”. *Diario de Sesiones*, 55, 29/05/1841, p. 1025.

TABLE 2 • *The Royal Salt Monopoly (Estanco de la Sal). Participation (percentage) of the Spanish Treasury's total revenue*

1761-1765	5.00
1803-1807	11.00
1814-1818	10.50
1820-1821	14.23
1824	13.75
1829	11.36
1833	9.85
1837	8.60
1842	6.00
1847	10.00
1849-1855	9.00

Source: Comín (1990). 1761-1765, in Pieper (1992, p. 118), cited in Vázquez Lijó (2008a, p. 152).

Until the monopoly was finally abolished in 1869, the question of whether it was detrimental to the development of the saltfish industry or, conversely, the industry's problems lay in factors other than the price of salt was the subject of frequent political debate. Representatives of Galician and Andalusian producers frequently lobbied to abolish the monopoly in the Spanish Parliament. However, small producers and fishermen could hardly present their demands before such high levels of government. Indeed, it could be argued that grace prices may have helped the fish salting industry in Galicia and the Andalusian Atlantic, but they did not apply to all fisheries. For example, cured and pickled fish, salted fish transported to inland markets by land, and fishermen who used salt to preserve fresh fish when it arrived at markets did not enjoy these prices. They had to pay the regular price of 52 rs. vn./fanega, plus shipping and handling costs and other local and/or regional surcharges. In 1841, a group of members of the *Cortes* from Asturias requested that grace prices be applied to commodities such as salted cured hake that was transported overland to Castile, but they were unsuccessful. They reported that the price those manufacturers faced was 64 rs. vn./fanega, which made it impossible for cured hake to compete with imported cod in inland markets.¹⁷ As the fishermen of Chiclana, in the province of Cádiz, stated that the same decade, price reductions only favoured those shipowners and investors who had the financial capacity to develop a long-distance fish trade, which was hardly within reach for most fishermen.¹⁸

17. Diario de Sesiones, apéndice octavo al nº 20, 12/04/1841, p. 333.

18. MN. Ms. 2203.

3. The *Matrícula de Mar* (Maritime Registry)

The naval capabilities of European powers depended largely on their ability to mobilise personnel engaged in maritime activities for service in the Navy. Different systems were used to ensure a regular and sufficient supply of sailors, particularly in times of conflict (Vázquez Lijó 2006, p. 293; Frykman 2009, p. 69). Following the example of France's *inscription maritime*, Bourbon Spain opted for a conscription model that would come to be known as the *Matrícula de Mar*.

In the first decades of the 17th century, naval authorities made several attempts to replace voluntary service with a system of conscription, but they were unsuccessful.¹⁹ It was not until a century later, after the end of the War of the Spanish Succession, that *Matrícula de Mar* finally got underway. The new Bourbon administration aimed to reorganise Spain's military structures and strengthen its maritime potential. Spanish foreign policy required a solid navy to defend Peninsular territories and colonial possessions and promote trade between the metropolis and the empire (Martínez Shaw and Fernández Díaz 1995, pp. 241-244, 267). Christopher Storrs (2016, p. 53) maintains that 18th-century Spain, like Britain and France, was both a fiscal-military and fiscal-naval state, and the *Matrícula de Mar* was one of the cornerstones of the Bourbon project.

While various early-18th-century regulations foreshadowed the development of the *Matrícula de Mar*, the Naval Ordinance of 1737 represented the first real steps toward establishing this registration system (Salas 1879, pp. 167-174; Vázquez Lijo 2007, pp. 244-260). The ordinances of 1748 (*Ordenanzas generales de la Armada*), 1751 (*Real ordenanza para régimen y fomento de la marinería matriculada*), and 1802 (*las Ordenanzas para el régimen y gobierno militar de las matrículas de mar*) provided its final form. The *Matrícula de Mar* comprised the registration of all men engaged in the fishing and maritime industries between the ages of 14 and 60. In exchange for registering, they would be granted various privileges, the most important of which was the monopoly on fishing and navigation (Ordenanzas 1748, p. 212, Título sexto, Art. III). In theory, this arrangement should have provided a powerful incentive to attract labour and capital to maritime fishing activities and therefore have contributed to adequately meeting the Navy's need for seafarers. However, it failed to have the expected effect. Contemporary sources unsparingly characterise the *Matrícula* as an obstacle to the development of maritime industries.

19. The Basques' refusal to accept the proposed conditions appears to have contributed to their failure. Salas (1879, pp.101-106); Burgos Madroñero (1993, p. 15); Rahn Phillips (2006, p. 178).

The harsh conditions of naval service generated many complaints (Vázquez Lijó 1997, 2020). High mortality rates during the long cycle of conflicts in the second half of the 18th century and the early 19th century undoubtedly did not help to make naval service attractive (Frykman 2009, p. 90). Furthermore, sailors frequently were not paid on time. Sources describe delays of months, and even years, in receiving promised wages, causing significant hardship for many families (Salas 1879, p. 295). Nevertheless, the length of naval service may well have been the principal reason for the system's inability to attract conscripts. Men enrolled in the *Matrícula* were obliged to take part in two campaigns, in addition to being ready to serve whenever they were needed during the 45 years that their registration lasted (Carmona Badía 1983, p. 444; Hoces-García 2020, p. 15). The Navy recognised this problem in 1817, when it issued a royal order limiting the period of enrolment to 25 years, or fifteen consecutive campaigns.²⁰

Registered fishermen and seafarers at each port were divided into four groups. Each year, one group was eligible for conscription. Its members were allowed to work in fishing and navigation only along the coast of the province where they were based. They had to be ready to be assigned to ships for active service at any time, should the Navy need them. However, fraud in the form of the use of paid substitutes to avoid naval service was commonplace. Substitutes were mostly peasants with little maritime training. As a result, many sailors came to the Navy with little training and officers frequently complained about the poor quality of the men under their command. The Biscayan fishing guilds underscored this problem in a petition to the king asking that fishermen be freed from compulsory naval service:

[...] the poor fishermen, who have never known any navigation other than that of their boats, nor any manoeuvre other than that of nets and lines, tremble when they hear of a new destination that is absolutely unknown to them, and when enrolment opens, they do not stop at giving sums for (the) enlistment (of substitutes) [...] who perhaps have never seen the sea.

As a result, the last services that these ports have done for the Royal Navy have been useless, if not harmful, and this disorder has also caused the decline of the industry, because the fishermen are overburdened with huge debts that they must satisfy with the product of sweat spilled with so much risk and fatigue, many of its men have abandoned and are abandoning it.²¹

20. Gaceta de Madrid (1817, pp. 226-227).

21. ... los infelices pescadores, que nunca conocieron otra navegación que la de sus barcas ni mas maniobra que la de redes y aparejos, tiemblan al oír un nuevo destino ignorando absolutamente por ellos, y abierta suscripción, no se detienen en dar cantidades por enganche, que al cabo de años las satisfacen con el corto producto de la pesca, ni en que se suscriban gentes, que acaso jamás vieron el mar.

The Navy adopted several measures to prevent fraud. First, the use of men who were not registered in the *Matrícula* as oarsmen and crew members, which was fairly common practice in northern Spain, was prohibited.²² In addition, the exception that allowed the skippers of fishing boats and other registered fishermen to get out of naval service if they presented one or two substitutes was also abolished, which prompted a complaint by the Valencia guild in 1797.²³ These and other provisions of a similar nature appear to have negatively impacted fisheries such as the sardine fishery in Galicia and the sea-bream fishery in the Bay of Biscay. There are numerous references in contemporary sources to the abandonment of boats and even fisheries due to the lack of crew members.²⁴

Spain was continuously at war in the late 18th and early 19th centuries. This forced the Navy to resort to any available means to complete ship crews, given the shortage of men enrolled in the *Matrícula*. New regulations were adopted in an attempt to make the conditions of naval service more attractive. The maximum registration age was reduced from 60 to 45 under the 1802 Ordinance, and the period after which registered men were released from service was lowered to 25 years in 1817. In response to the chronic lack of skilled seafarers, the Navy adopted other measures such as drafting vagrants, amnesties for deserters and, finally, permitting the enlistment of men who were not registered in the *Matrícula* (Royal Order of 17 March 1805).²⁵ Nevertheless, as Vázquez Lijó (2020, p. 380) recently observed, these men's scant nautical training and greater tendency to desert made them a poor resource.

Although the severity of conscription decreased after the 1820s, the *Matrícula* continued to be seen as an impediment to the development of maritime industries. It allegedly caused a chronic labour shortage that affected most Spanish fisheries as well as merchant shipping.²⁶ Due to the high level of

De esto señor ha dimanado que los últimos servicios que estos puertos han hecho para la Real Marina hayan sido inútiles, cuando no perjudiciales, y este desorden además ha originado la decadencia de la industria, porque sobrecargados los pescadores con enormes deudas y que debían satisfacerse con el producto del sudor vertido con tanto riesgo y fatigas, la han abandonado y abandonan muchos de sus individuos. Archivo de la Cofradía de Pescadores de Lekeitio, Libro 6, fol. 393v.

22. Archivo Museo Don Álvaro de Bazán (AMDAB), Matrícula y Pesca. Asuntos particulares, legajo 1951; Vázquez Lijó (1997, pp. 111-112).

23. AMDAB, Matrícula, Generalidad, legajo 1884; see also the debates on the obligatory service of sardine boat skippers. AMDAB, Matrícula y Pesca. Asuntos particulares, legajo 1958.

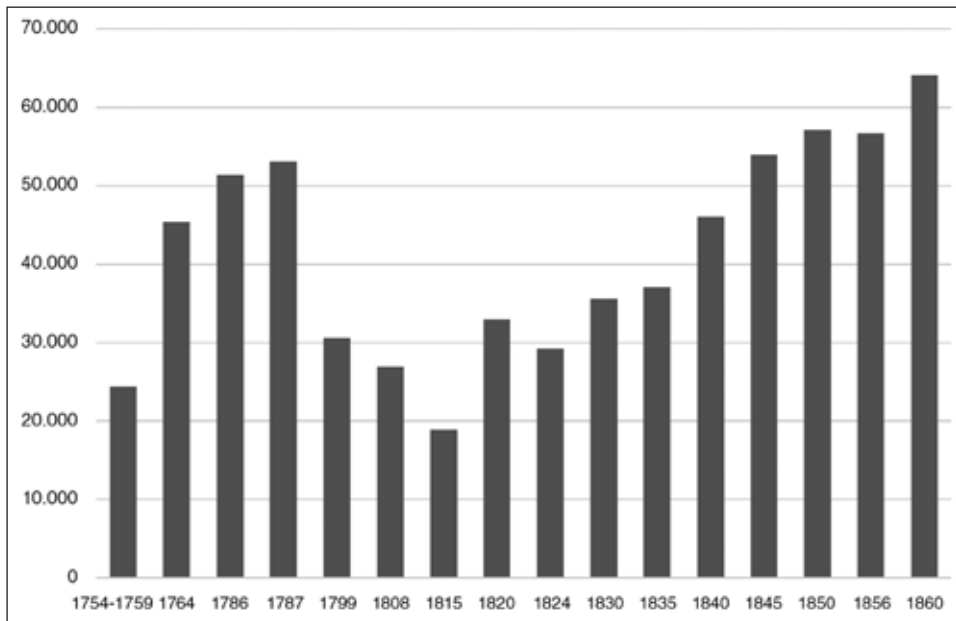
24. Archivo Histórico Nacional (AHN), Estado, Marina, Legajo 3208, Expediente 374. Basque testimonies in Archivo Foral de Bizkaia (AFB), Registro 97. For similar claims for Asturias, see Ocampo Suárez-Valdés (1990, 1993); for Cantabria, Pérez del Río y Villegas (1797); and for Galicia, AMDAB, Matrícula y Pesca. Asuntos particulares, leg. 1967.

25. AFB, Consulado, 0033/013.

26. Valdalisó (1991, pp. 91-92). On the conflictive relationship between the merchant navy and the Navy, García Domingo (2017a).

fraud, the available data should be taken with some reservations. Nonetheless, Figure 1 confirms the situation described in qualitative sources: a drastic decline in the number of enrolled men during the last decade of the 18th century, followed by a slight recovery starting in the 1820s. However, previous levels were not reached until the 1850s,²⁷ even though Spain's population increased by almost 50% during this period (Pérez Moreda 1999, p. 8).

FIGURE 1 ▪ *The Matricula de Mar in Spain, 1785-1850. Number of men eligible for naval service)*



Source: Burgos Madroñero (1995, p. 355); Corroza (1863, p. 64); Salas (1879, p. 211); Ocampo Suárez-Valdés (1990, p. 127); Vázquez Lijó (2020, p. 83).

Despite the many proposals to make the *Matricula de Mar* more attractive, it was clear early on that it was perceived as creating a problem for maritime fishing activities. Thus, Antonio Sáñez Reguart, who was probably the leading expert on Spanish fisheries in the late 18th century, included a section with the expressive title, “The destructive impact of the *Matricula* system and the need to reform it’, in his unsuccessful plan to restore northern Spanish fisheries. He argued that

27. Zabala Uriarte (1981, 1983, pp. 297-310); Carmona Badía (1983, p. 307); Ocampo Suárez-Valdés (1990, pp. 125-127); Vázquez Lijó (1997, pp. 118-124); Hoces-García (2020, p. 17).

[...] in the terms in which it stands, it is one of the principal (causes) of the decline ... (of) the national fishery (sector), depriving it of countless hands... and thus we are generally seeing that for every man who enrolls, ten withdraw from joining the profession.²⁸

As Carmona Badía (1983) rightly indicated, the main consequence of the *Matricula de Mar* was that it discouraged labour and capital participation in the fishing sector. While Sáñez proposed reforming the system rather than abolishing it, contemporaries such as Pérez del Río (1797, pp. 301-302) and Caamaño (1797, p. 4) called outright for its abolition and the establishment of complete freedom of fishing. A report on measures to promote Spanish fisheries, drafted by the Cantabrian Society in 1815, stated that

The cause of this harm, which deprives the nation of an infinite amount of food ..., must be looked for closer to its roots, in the heart of the merchant. His commercial calculations are exact. The advantages that the investment of his money in a fishery, or in an establishment for salting and pickling the fish ... (like the Catalan factories, which are the quintessence of the economy, where fishing shows some signs of life) could bring him enter [into them] [...] Nothing frightens him, until he trains his attention on the basis of his enterprise, in the hands of which he needs to avail himself, having no recourse to others. He therefore reflects that his industry would run the risk of being left without hands from one day to the next for the commonplace reason of (the Navy) calling up those enrolled [...] Then his private industry would be paralysed without being able to avail itself of other arms. A blow that would put him at risk of a failure as irremediable as it was involuntary, rendering useless the funds (he had) invested in in boats, nets, warehouses, giros, and other preparations. He understands this certain danger so keenly that he constantly resolves to flee from the fishing trade. As an unailing consequence, this precious industry is abandoned to the poor hands of the enrolled, who have everything but wealth (Maceda 1815, 12-13).²⁹

28. AHN, leg. 3012.1. On the figure of Antonio Sáñez Reguart, Vázquez Lijó (2008b).

29. “La causa de este daño que priva a la nación de infinitos alimentos, regalos e intereses, se ha de buscar mas de raíz en el corazón del comerciante. Son exactos sus cálculos mercantiles. Penetra las ventajas que pudiera producirle la inversión de su dinero en una pesquería, o en un establecimiento de salar, salpresar, escabechar la pesca que comprase de primera mano (a ejemplo de las factorías catalanas, que son la quinta esencia de la economía, donde la pesca da alguna señal de vida) ... Nada le acobarda, hasta que fija su atención en la base de su empresa en las manos de que precisamente ha de valerse, sin quedarle recurso á otras. Reflexiona pues que su industria estaría expuesta á quedarse sin brazos de un día para otro por el superior motivo frecuente que llamase los matriculados para un armamento. Entonces se paralizaría su industria privada sin poder valerse de otros brazos. Golpe que le expondría á una quiebra tan irremediable como involuntaria, inutilizando sus caudales empleados en barcos, redes, almacenes, giros y otros preparativos. Aprehende este peligro cierto con tal viveza, que la resolución constante es huir del comercio de la pesca. Por consecuencia indefectible tan preciosa industria queda abandonada á manos pobres de los matriculados, que todo lo tienen menos caudal.”

The Navy responded forcefully to this report “from the coryphaeus of the *Matrícula*’s enemies” (Estado 1830, Apéndice, pp. 62-74). Naval representatives contended that the registration system was not contributing to the decline in Spanish fisheries and was therefore not responsible for the alleged shortage of fish that meant cod had to be imported. They argued that cod was imported because of its unique characteristics, which no Spanish fish could match, and not because the *Matrícula* provoked domestic fish supply restrictions. The problem was not the alleged lack of freedom but rather the national fishing industry’s inability to meet demand and compete with foreign fish.³⁰

At the heart of these disputes was the issue of freedom of industry. For many publicists, the abolition of the *Matrícula* was absolutely essential to make maritime activities profitable and therefore to attract investors and labour to the sector again. Nevertheless, freedom also entailed competition and not all actors in Spanish fisheries were of the same mind. As the 19th century progressed, attempts to end the fishing monopoly implicit in the *Matrícula* (and the Basque version of the system) increased. However, when maritime guilds felt their professional monopoly was threatened, they regularly invoked their privilege of exclusivity before maritime authorities, thus becoming *de facto* supporters of the system. Examples include the Basque fishing guilds (López Losa 2003) as well as fishermen in the Mediterranean when they opposed the use of trawling on their fishing grounds, as will be discussed in the next section of this article.

The Basque case is of particular interest for evaluating the impact of the *Matrícula de Mar*. Because of the Basque Country’s special administrative regime, called the *Fueros*, there was no *Matrícula* in the Basque maritime provinces. This did not mean that the Basques did not send men to the Navy, but rather that, by law, they could organise conscription in a different way. When men were requested for the Navy, regional authorities, rather than representatives of Spanish Crown, oversaw the enrolment process via maritime guilds (López Losa 2003, pp. 21-22). Another important Basque privilege was that guilds only provided information as to the number of men available for service, whereas in the rest of Spain men were registered by name in the *Matrícula*. Sáñez Reguart denounced that this Basque privilege made it easier to commit fraud by using substitutes who were often unfit for naval service.³¹ A century later, Canuto Corroza (1863, pp. 60-62) argued that, because the *Matrícula* did not exist on the Basque coast, the number of seamen and

30. According to Salas (1879, pp. 273-281), the relentless defence of the *Matrícula* had to do with the chaos that the abolition of the *Matrícula* and its replacement with a lottery system created during the Liberal Triennium (1820-1823).

31. AHN, leg. 3012.1.

fishermen in the region was comparatively much higher than in the rest of Spain. In his opinion, this simple fact demonstrated that the *Matrícula* was futile and represented an obstacle to the development of maritime activities.

TABLE 3 - Available seamen by region in the late 1850s

	Coastal Length	Seamen available	Seamen per km of coast	Surface (square km)	Total population	Density per square km	Seamen/inhabitants
	Km	Num.	Num.	Num.	Num.	Num.	Ratio
Basque Provinces	168	11,683	69.51	4,082.70	317,072	77.65	1/27
Cantabrian Provinces and Galicia	1,086	23,205	25.20	28,353.20	2,144,031	73.61	1/85
Andalusia	1,026	10,468	10.20	60,319.80	2,239,768	37.13	1/214
Spanish Levante	1,053	19,612	18.62	54,603.40	2,972,751	54.44	1/152

Source: Corroza (1863, p. 60).

Moreover, in 1819 Basque authorities managed to ensure that only men exclusively engaged in fishing and sailing were considered eligible for the Navy. Those who, at least theoretically, also worked as farmers or craftsmen were free from naval service.³² From that point on, practically all fishermen identified themselves as fishermen-farmers in censuses. This might help explain Canuto Corroza's affirmations and the presence of Basque fishermen in other Cantabrian ports starting in the 1820s at the request of guilds and local authorities due of the lack of fishermen (Escudero 2006, pp. 634-636).

In the 19th century, the changing status of the *Matrícula de Mar* was directly linked to Spain's turbulent political situation (García Domingo 2017b, pp. 53-60). On 14 January 1812, the *Cortes* of Cádiz decreed the abolition of the *Matrícula*, but it was re-established after the return of absolutism. During the Liberal Triennium, it was again eliminated by the Royal Decree of 8 October 1820, which granted freedom of fishing and navigation to all Spaniards. Nevertheless, the Ordinance of 1802 was again reinstated in 1824. From the 1830s onwards, calls for the abolition of the *Matrícula* and for maritime activities to be governed by civil law rather than by Navy legislation intensified (Memoria... 1856, p. 13). Nonetheless, despite various plans to reform the *Matrícula*, calls to eliminate it, and debates, the registration system and the maritime fishing legislation linked to it remained practically unaltered un-

32. Archivo General de Gipuzkoa, Sección 2 Negociado 12, Legajo 150.

til it was finally reformed at the late date of 1867 and permanently abolished on 26 March 1873.³³

4. Fisheries regulations: the case of *parejas de bou* (sailing pair-trawlers)

The chaotic and often contradictory nature of fishing laws and regulations was another alleged impediment to the functioning of fisheries in Spain. While the definitive triumph of liberalism after the First Carlist War (1833-1840) meant the establishment of a new institutional structure in the country, maritime industries continued administered under a unique system directly inherited from the *Ancien Régime*. This meant that maritime issues fell outside civilian jurisdiction and were overseen by the Navy. Consequently, not only did the Navy control the workforce through the *Matrícula de Mar*, but it also had the authority to set the rules governing the fishing sector.

The first documented attempts to develop fisheries legislation at the national level date from the mid-18th century. In connection with the Ordinances of 1751, regulations were drafted for certain northern provinces, but efforts to include the entire country failed.³⁴ In the last decades of the century, Sáñez Reguart unsuccessfully tried to bring together all existing regulations on fishing gears, fish sales, and related issues in a general fishing law that would apply throughout Spain (García Fajardo and Fernández Pérez 1993, pp. 34-37). Although these proposals failed to be implemented, they are of great interest. They provide insight into the fishing practices of the period and reflect an ideology that served as the basis for the Navy's policies for a long time. The spirit of most regulations on fishing equipment corresponded to a particularly conservative conception of nature and the social environment, which can be glimpsed in works of authors such as Cornide, Sarmiento, and Sáñez Reguart, to name but a few of the leading experts of the period.³⁵ They were all clearly opposed to the use of intensive fishing systems for two reasons. On the one hand, they feared that the greater fishing capacity of these gears could disrupt the existing order in the marine ecosystem, threatening the long-term survival of resources. On the other hand, they were concerned that these technologies

33. <https://www.boe.es/datos/pdfs/BOE//1873/085/A00979-00980.pdf>.

34. The Fisheries Ordinances of the provinces of Pontevedra (1768), La Coruña (1769) and Avilés (1769) are reproduced in Graells (1864, pp. 203-229).

35. Some manuscripts that had long remained unpublished have been partially or totally reproduced in publications in the past few decades. For example, Father Sarmiento's dissertation "De los atunes y de sus transmigraciones y conjeturas sobre la decadencia de las almadrabas y sobre los medios para restituir las" (On tuna and their transmigrations and conjectures on the decline of the *Almadrabas* and the means to restore them), written in 1757, in Arbex and López Linage (1991, pp. 61-98). Sáñez Reguart's study of the natural history of fish has been edited by Isabel García Fajardo and Joaquín Fernández. See Sáñez Reguart (1993).

could directly impact labour supply by reducing demand, leading to social unrest in coastal areas. Sáñez Reguart (1791, p. 333) wrote in his *Diccionario*,

The establishment of (fishing laws) in society is the result of knowledge necessary for the preservation of order. The very moment that some individuals, separating themselves from that centre, went too far in the exploitation of the products of the land and the waters, rules or precepts were indispensable to contain any unevenness contrary to the general good.³⁶

While it would undoubtedly be interesting to examine what these authors had to say about the behaviour and exploitation of fishery resources, this article focuses on their influence on fisheries management (Urteaga 1987; García Fajardo 1990; Arbex and López Linaje 1991). They contributed to the ideological environment reflected in the restrictive policies on allegedly harmful fishing gear that were prevalent in Spanish legislation. Anyone who wanted to use new fishing equipment, or modify existing equipment, had to request permission to do so. Before deciding whether to grant permission, naval authorities consulted their representatives in the area, local authorities, other experts, and, typically, the fishermen who would supposedly be affected by the use of the equipment. However, the result of such practices was not a cohesive fisheries policy but rather a plethora of local edicts, permits, and bans that were of limited relevance on a national scale. There was little consistency, with rules varying from district to district and even between nearby fishing ports. One of the best examples of the situation described here, in terms of duration and geographic scope, can be found in the disputes over trawling fisheries.

The first reliable evidence of pair trawlers (*parejas de bou*) is from Catalonia in the early 18th century. They quickly spread to other regions, and sailing trawl fishing was soon practised on most Mediterranean and South Atlantic shores, generating a wide-ranging and long-lasting dispute with fishermen who used other equipment (López Losa 2021). They accused trawling of endangering the future of fishery resources by catching large numbers of immature fish and destroying their habitat, thus damaging reproduction. As a result, maritime authorities began to introduce restrictions and bans on the use of trawling. In practice, legislation on trawling was as prolific as it was contradictory (Sáñez Reguart 1791, p. 317; Martínez Shaw 1988, pp. 323-325; Vega Domínguez 1991, p. 248; Viruela Martínez 1993, pp. 146-147). As a Fernández Duro (1866, p. 11) pointed out,

36. “El establecimiento de (leyes de pesca) en la Sociedad es el resultado de conocimientos necesarios á la conservación del orden. En el mismo momento que algunos individuos, separándose de aquel centro, excedieron en el esquilmo de los productos de la tierra y de las aguas, fueron indispensables reglas o preceptos para contener todo desnivel opuesto al bien general.”

The Government, anxious to reconcile interests, while an impartial investigation would determine whether the pair trawl fishing is harmful, as its opponents claim, or harmless, as the owners endeavour to prove, has issued contradictory resolutions, which were intended to remedy the greatest evils for the time being, but which have left the matter in the same state until today, if the very large number of dossiers and reports accumulated over such a long time did not complicate it further.³⁷

In 1761, *parejas de bou* were banned in all Spanish ports. This prohibition was reiterated in 1772. However, numerous temporary authorisations were granted between the two bans. Given the failure of these measures, regulatory practices shifted from prohibition to regulation. In 1777, sailing trawling was declared legal only from 10 October through Easter to protect fish reproduction.

Nonetheless, the situation was complex, and local circumstances often carried more weight than general laws. The case of the port of Málaga is a prime example of the ups and downs of fishing legislation on trawling. In 1777, the fishermen's guild and local authorities managed to force fishermen from other ports who fished in Málaga's waters to use the same systems and fishing gear as local fishermen, in effect banning trawling. The offensive against trawling continued, and the guild managed to forbid the use of the three *parejas de bou* that existed in the city. However, in 1814, the Count of Lalaing had no problem getting the city council to grant him the privilege to use two trawling pairs. Two years later, the fishermen's guild went so far as to ask the city council to oblige the then Countess of Lalaing to lease them the two pairs in order to take them out of service, promising to pay the amount of money it was estimated they brought in (Fernández Duro 1866, pp. 20-23).

This same scenario of total prohibitions and partial authorisations was repeated in the first decades of the 19th century when the attempts at total prohibition of 1817 and 1828 were diluted by an abundant number of local provisional permits (Sáñez Reguart 1791, 384; Fernández Duro 1866, pp. 17-20).³⁸ As Martínez Shaw (1988, 324) explained, authorisations and prohibitions, limitations, and individual exemptions for the use of trawling nets reflected the concept of privilege, "very much in the spirit of the *Ancien Régime*".³⁹

37. "El Gobierno, deseoso de conciliar los intereses, mientras que una investigación imparcial determinara si la pesca del Bou es perjudicial, como aseguran sus impugnadores, o inofensiva, cual se esfuerzan en probar sus armadores, ha dictado resoluciones contradictorias, propias para remediar de momento los mayores males, pero que han dejado hasta hoy la cuestión en el mismo estado, si no lo complicasen más el crecidísimo número de expedientes é informes acumulados en tanto tiempo."

38. AMDAB, Pesca, Generalidad, leg. 2021. Matrículas, Generalidad, leg. 1905.

39. The justifications for enabling vessel owners to fish with trawl pairs to provide for "the royal tables" or to ensure supplies during Holy Weeks are very telling. For example, AMDAB, Pesca, Generalidad, legs. 1950-1951.

Nevertheless, these controversies hid a more complex dispute. The interests of the Navy in protecting the supply of sailors and of fishermen in eliminating competition conflicted with the interests of municipalities in securing food supplies and of those who saw investment in *parejas de bou* as a business opportunity, especially in areas with large urban populations. Sáñez Reguart (1791, pp. 339-340) had no doubt that trawling was superior to other fishing methods. In his opinion, the problem was that higher productivity meant less work, which pushed fishermen into poverty, drew them to other trades and, in the end, reduced the number of available seamen.⁴⁰ This argument, along with the destruction of fishing nurseries and grounds, was the leitmotiv of practically all objections to *parejas de bou* on the Spanish coasts. Conversely, those who supported trawling countered that it was far from proven that this system of fishing caused fish scarcity or the depletion of grounds. In addition, they argued that the liberalisation of trawling would provide two significant advantages. Firstly, it would supply consumers with more fish at lower prices, putting an end to the monopoly of fishermen's associations that sold fish at high prices. Secondly, allowing trawling would not reduce but rather increase labour participation, providing the Navy with men who were trained for deep-sea navigation, unlike those engaged in coastal fishing.⁴¹

Attitudes towards trawling did not change much in the 19th century. The dominant ideology remained contrary to intensive fishing methods, but local elites lobbied for fishing permits and overlooked bans with the complicity of local civil and naval authorities. Such was the situation when a final attempt was made to legislate against trawling. In 1865, the *Reglamento para la pesca con el arte denominado Parejas de Bou* (Regulations on fishing with the equipment known as *Parejas de Bou*) was enacted. From then on, the objective was to progressively phase it out. The construction of new sailing boats for trawling and the repair of existing boats that had reached the final third of their useful life were banned. In addition, the use of steamers in trawl fishing was expressly forbidden.⁴² Again, this legislation failed to achieve the intended outcome. Although the expansion of *parejas de bou* was limited, they continued to be used in the Mediterranean and the Andalusian Atlantic, generating further controversies.

40. To reinforce this idea, he used the example of another gear dispute in Galicia, which had similar results. Sáñez Reguart (1791, pp. 342-343).

41. On debates between supporters and opponents of *parejas de bou*, see Martínez de Mora (1779); Sáñez Reguart (1791); Marín (1806); *Observaciones sobre la pesca llamada de Parejas de Bou* (1821); Miravent y Soler (1835); Fernández Duro (1866, 1868). In addition, the Navy Archives (AMDAB and Naval Museum) house numerous files on disputes over trawling.

42. However, that same year, at the request of a shipowner from Cádiz, the Navy allowed steam trawling on fishing banks close to the coast of Morocco; later, in 1866, permission was extended to fifteen miles off the Spanish coast. Fernández Duro (1866, pp. 53-56).

Ultimately, the pragmatism seen in the application of many of these measures was due to the incapacity of maritime authorities to enforce the established rules. “‘The sea is inexhaustible’, some say with natural or affected and self-interested candour”, Salas and García Solá (1876, p. LIII) ironically wrote of those who defended intensive fishing methods. They were highly critical of trawling, which they accused of depleting resources, but also of the government, which “set out to defend vested interests” because “the main interested parties, as promoters of this method of fishing, are the wealthiest (residents) of the cities and towns where it exists” (Salas and García Solá 1876, pp. 192-193). The impact of policies on trawling fisheries is difficult to quantify. Although bans were unsuccessful, it is highly likely that the restrictive policies in force until the end of the 19th century reduced investment and prevented further expansion of this system of fishing.

TABLE 4 - *Number of sailing vessels employed in trawling fishing in Spain*

1865	729
1874	655
1878	715
1907	1,740
1915	1,560

Source: López Losa (1997a, p. 175).

5. Conclusions

During the 18th and 19th centuries, the interests and needs of the state, the Navy and the fishing industry often came into conflict in Spain. It is difficult to evaluate the direct impact of the Royal Salt Monopoly, the *Matrícula de Mar*, and fishing legislation on the performance of Spanish fisheries because their effects cannot be wholly separated from other factors relating to technology and the country’s overall level of development. Future research should focus on quantitatively estimating their impact. Nevertheless, if we are to believe what fishermen, fish manufacturers, and a number of publicists claimed, they had an unquestionably detrimental impact.

Saltfish manufacturers, whose most important markets were on the densely populated Mediterranean coast, benefitted from grace prices via maritime exports but complained that high salt prices reduced competitiveness. However, frequent calls for price reductions and the end of the salt monopoly were not a matter of competing in foreign markets, but rather principally of ex-

panding domestic markets. The demands of Asturian cured hake producers also focused on the domestic market, as they asked for the same grace prices for fish transported by land. They believed that a more affordable salt price would boost hake fishing and that cured hake could compete with imported cod, given the similarity of the two products.⁴³

Though this conclusion must be taken with some reservations, the elimination of the *Estanco de la sal* likely contributed to a decrease in costs and an increase in the export of salted fish. Carmona Badía (1983, pp. 414; 425-426) calculated that the volume of salted sardines exported abroad from Galicia compared to those sent to domestic markets progressively increased starting in the mid-19th century onwards. However, when the *Estanco* was abolished in 1869, the salting sector in Galicia was already in decline and the modern canning industry was just getting under way. At the same time, salted anchovy exports from the Bay of Biscay and tuna exports from southern Spain flourished beginning in the last decades of the century (Carmona Badía 1985; López Losa 1997b; Escudero Domínguez 2007; Ríos Jiménez 2005).

Other stakeholders in Spanish fisheries complained about the lack of freedom in using labour and capital. The case of trawling is paradigmatic. Although the scarcity of resources and the complicated relations between different actors made it difficult to enforce restrictive legislation, trawling would probably have been more successful in a more supportive environment.

The dismantling of the pre-liberal maritime institutional structure facilitated the beginning of the development of Spanish fisheries. This process began with the permanent abolition of maritime guilds in 1864, the elimination of the Royal Salt Monopoly in 1869, and the end of the *Matrícula de Mar* in 1873. The first significant step towards the liberalisation of the fishing industry came in 1885 with the *Reglamento de libertad de pesca reglamentada* (Regulations on Freedom of Regulated Fishing), which established freedom of fishing more than three miles from the coastline. In the case of trawling fisheries, complete liberalisation did not come until in 1898, with the *Reglamento para la pesca con el arte de bou y demás redes de arrastre remolcadas por embarcaciones* (Regulations for fishing with pair trawling gear and other trawls towed by boats). These regulations eliminated the restrictions that the Regulations of 1865 had imposed on *parejas de bou* and the ban on steam trawling within 15 miles of the Spanish coastline (López Losa 1997a).

At the turn of the 19th to the 20th century, a more favourable institutional environment, domestic market expansion driven by urban growth, and the expansion of the railway network, together with growing foreign demand for canned and salted fish, drove forward the modernisation and growth of the

43. Diario de Sesiones, Apéndice octavo núm. 20, 12/04/1841, p. 333.

Spanish fishing industry.⁴⁴ From that point on, as Carmona Badía stated in his introduction to Giráldez's book (1996, p. 21), few economic sectors in Spain have been as innovative and dynamic, in comparative perspective, as the fishing industry.

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44. Giráldez Rivero (1996, 1997, 2008); López Losa (1997a, 2008); López Losa y Amorim (2012); Carmona Badía (1994); García Alonso (1993); Paz Andrade (1973).

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Frens institucionals al desenvolupament del sector pesquer a Espanya (segles XVIII i XIX)

RESUM

Abans de l'arribada del vapor, les restriccions de caràcter tecnològic limitaven la capacitat de captura i comercialització del peix. A més, un marc institucional particular també obstaculitzava el funcionament del sector pesquer espanyol. Els costos de fabricació elevats atribuïts al monopoli de la sal, les restriccions a l'oferta de mà d'obra generades per la Matricula de Mar i una legislació contradictòria van contribuir a reduir la participació laboral i la inversió. La indústria pesquera només es va veure lliure de limitacions institucionals a finals del segle XIX, després d'un llarg procés de desmantellament de la normativa marítima i pesquera de l'Antic Règim.

PARAULES CLAU: pesca, institucions de l'Antic Règim, recursos pesquers.

CODIS JEL: N43, N54



Frenos institucionales al desarrollo del sector pesquero en España (siglos XVIII y XIX)

RESUMEN

Antes de la aparición del vapor, restricciones de carácter tecnológico constreñían la capacidad de captura y comercialización del pescado. Además, un marco institucional particular también obstaculizaba el funcionamiento del sector pesquero español. Los elevados costes de fabricación atribuidos al monopolio de la sal, las restricciones a la oferta de mano de obra generadas por la Matrícula de Mar y una legislación contradictoria contribuyeron a reducir la participación laboral y la inversión. La industria pesquera solo se vio libre de limitaciones institucionales tras un largo proceso de desmantelamiento de la normativa marítimo-pesquera del Antiguo Régimen a finales del siglo XIX.

PALABRAS CLAVE: pesca, instituciones del Antiguo Régimen, recursos pesqueros.

CÓDIGOS JEL: N43, N54



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