
The Role of the Canary Islands in the Atlantic Coal Route from the End of the Nineteenth Century to the Beginning of the Twentieth Century: Corporate Strategies

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Introduction

It is widely accepted that transport as “social overhead capital” has been a basic component of economic growth since the Industrial Revolution and that maritime transport in particular has been crucial in the development of trade, a role which was consolidated when ships began to use coal as fuel.¹ The significance of this fuel was such that W.S. Jevons defined it as “the essential cause of modern material civilisation.”² It is thus hardly surprising that the companies which controlled its distribution “often played a decisive role in colonial expansion policy,” since it was the source of the energy used by steamers.³ Still, the generalised use of coal was only possible when two separate circumstances coincided. The first entailed technological advances in high pressure boilers, propellers and turbines which enabled an increase in the range of ships while permitting lower consumption and increased speed. The second was the development of techniques and materials that allowed the construction of the large

¹S.P. Ville, *Transport and the Development of the European Economy, 1750-1918* (London, 1990), 1; and D.C. North, “Ocean Freights and Economic Development, 1750-1913,” *Journal of Economic History*, XVIII (1958), 537-555.

²W.S. Jevons, *The Coal Question. An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of our Coal-mines* (1865; reprint, London, 2000), 73.

³J-L. Miège, *Expansión europea y descolonización de 1870 a nuestros días* (Barcelona, 1975), 5.

infrastructures required by bigger and more complex vessels.⁴ Nonetheless, given the limited range of steamships, convenient supply depots along the length of trade routes were essential if ships' holds were to be filled with goods rather than huge amounts of fuel. The Iberian Atlantic islands (Madeira, the Canaries, Cape Verde and to a lesser degree the Azores), situated as they were at the proximate mid-point on Atlantic trade routes, proved ideal.

Alongside these activities a "differential economic model for islands" was created to permit the islands to develop their own enclave economies in which transportation played an important role.⁵ Douglass North has theorised on this model, in which the export of agricultural products to Europe (bananas, tomatoes, potatoes, etc.) benefited maritime transport fleets by lowering their operating costs, since ships could now exploit the "return" leg of their journey with a cargo to take back to Europe.⁶ This activity was further complemented by passenger transport, either in the form of tourists visiting the islands or as ports of call for emigrants on their way to South America.

The site of the Canary Islands at the crossroads of different maritime trade routes determined their historical importance in international trade and maritime traffic, relegating the archipelagos of the South Atlantic (Ascension Island, St. Helena and the Falklands), which had enjoyed a certain degree of success as coaling stations in the nineteenth century, to secondary roles.⁷ This leads to the hypothesis that the ports of these archipelagos, and in particular those of the Canary Islands, were created as a support to Atlantic trade due to a range of factors, including location, adequate infrastructure, benign climate, size of market and the existence of institutional arrangements which benefited and reduced the costs of commercial transactions, such as franchises and commercial liberties (which took the form of "free ports" in the Canary Islands).

⁴S. Lilley, "El progreso tecnológico y la revolución industrial, 1700-1914," in C.M. Cipolla (ed.), *Historia económica de Europa. III: La revolución industrial* (Barcelona, 1983), 195-264; and G. Jackson, "The Ports," in D.H. Aldcroft and M.J. Freeman (eds.), *Transport in the Industrial Revolutions* (Manchester, 1983).

⁵A.M. Bernal, "Los instrumentos del comercio en el sistema mercantil de las islas atlánticas ibéricas y caribeñas," in *Historia das Ilhas Atlânticas (Actas de Seção de Archivos do IV Coloquio Internacional de Historia das Ilhas Atlânticas)*, VI (1997), 43-87.

⁶North, "Ocean Freights," 537.

⁷W.E. Minchinton, "The Role of the British South Atlantic Islands in Seaborne Commerce in the Nineteenth Century," *Actas del IV Coloquio de Historia Canario-americano* (Las Palmas, 1985), 543-576.

In this study we will analyse a factor which contributed to the maritime transport dynamic in the second half of the nineteenth and the first third of the twentieth century: the supply of coal at Canary Islands' ports to ships on the mid- and South Atlantic routes. In the research carried out thus far the theory of a fully liberalised market in which suppliers were able to compete on price and quality has tended to predominate. According to this theory, the quantities sold by each company were directly related to the prices at which products were offered in the ports. This price, in turn, was fixed in accordance with the current coal purchasing price, to which the cost of transport to the supply docks had to be added, together with loading, freight and import duties, where applicable. In this situation, British coal, which combined low raw material costs with economical haulage rates, almost completely displaced Spanish mainland coal in the Canaries. The coal came mainly from mines near Newcastle and in Wales.

In this essay we will analyse the characteristics of the marketplace and the transportation of this coal designated for maritime trade to the Iberian Atlantic archipelagos from the mid-nineteenth to the mid-twentieth century, when coal ceased to be the main fuel used in shipping. Throughout we will examine the quantities supplied, corporate behaviour and supply conditions, such as prices and haulage. We will thus need to filter certain sets of statistics and add others which are either unknown or unused. The framework is therefore the role of coal in the development of maritime transportation within the context of capitalist expansion from the late nineteenth to the early twentieth century, which we will look at in the second section. We will then move on to the objective of this study: coal supply in the context of Canary Islands' ports in relation to the other ports of the Iberian Atlantic Islands (the Azores, Madeira and Cape Verde), all of which form part of what we might call the "coal route," which will be dealt with in the third section. We will focus on the Canary ports because they came to be the most important coaling stations in the Atlantic and because of the great amount of available evidence. In the fourth section, which is devoted to the companies that handled coal in these ports, we will discuss the dominance of British companies in the Iberian Atlantic coaling business. The fifth section will analyse coal sale and supply conditions, with particular reference to cartel agreements between the different companies. The final section contains some provisional conclusions.

Capitalist Expansion and Coal Supply in the Atlantic

With the economy of Europe in an expansionary phase, and because of changes which originated with the Industrial Revolution and the spread of capitalism, there was an increase in world trade, which made capital available for aggressive investment abroad. This meant that the infrastructure needed for an increase in transportation, be it in the form of ports or railway lines, became the object of

large-scale public and private investment.⁸ At the same time, international maritime traffic depended on an economic framework defined in large measure by coal mining in Britain, particularly in the estuary of the River Tyne and along the Bristol Channel and connected with a burgeoning industrial axis.⁹ This in turn was linked to the outside world through metal working, electro-mechanical engineering and shipbuilding, and finally with the shipping companies which converted Wales and Northeast England into important hubs for international trade. The archipelagos of the Iberian Atlantic were connected to this industrial hub through the numerous shipping lines which used their ports.

The ocean location of these archipelagos provided sufficiently common structural features that we can talk about an original and shared model of growth. On the one hand, they were economically dependent on the European powers, while on the other they continued to belong politically to Spain and Portugal. Nevertheless, from the early nineteenth century commercial relationships between these archipelagos almost ceased to exist, although this did not prevent companies from operating from more than one island. For example, several Madeira-based firms opened branches in the Canaries, and some, like the Blandy Brothers, even moved there. This led to a more intense commercial relationship between the Canaries and Madeira. Furthermore, by the mid-nineteenth century the archipelagos had become obligatory ports of call on the main steamship routes between Europe and other continents. It is thus not surprising that A.W. Kirkaldy, in one of the most commonly cited reference works on maritime traffic at the beginning of the twentieth century, affirmed the importance of English coal at Madeira, Las Palmas and St. Vincent. "On the outward route from Europe to South America," he wrote, "steamers bound for ports on the west coast" departed "after coaling at Las Palmas."¹⁰ Indeed, of the twenty-four trade routes described by the author for the year 1913, one passed by Santa Cruz de Tenerife, another by Funchal in Madeira, seven by San Vicente and twelve by Las Palmas.¹¹ The number of routes incorporating the latter island increased gradually throughout this period. Prior to 1897, British steamers that called in the Islands basically belonged to four shipping companies, two that sailed from London and a pair that departed from Liverpool. The French steamers which frequented the Islands

⁸Ville, *Transport*.

⁹P. Fraile Balbín, *Industrialización y grupos de presión. La economía política de la protección en España, 1900-1950* (Barcelona, 1991), 99-100.

¹⁰A.W. Kirkaldy, *British Shipping: Its History, Organisation and Importance* (London, 1919), 465.

¹¹*Ibid.*, 348-372 and 465.

belonged to the *Compagnie Transatlantique* (based in Le Havre), *Chargeurs Réunis* (a Marseilles-based enterprise) and the line covered by *Paquet*, a trading triangle comprised of Marseilles, the ports in Morocco and Gibraltar.

In the years following the Great War, the number of shipping lines using the Iberian island ports continued to grow, as can be seen if we examine the figures for Gran Canaria and Madeira in appendix I. If we take 1929 as a reference point for the first port, which was the most frequently visited by far, the number of shipping lines increased considerably: ten were from the UK, seven were French, seven German, five Spanish and one American. Belgium, Italy and Norway were each represented by two lines. In the case of Madeira in 1931, six shipping lines were British, two were French, Portuguese and German, and Denmark and Holland were represented by one line each.

The Role of the Iberian Atlantic Islands as Coaling Stations

To tend to the needs of these shipping lines, depots were installed on the Atlantic islands, and coal began to be supplied in small quantities from the beginning of the twentieth century. Coal bunkering was initially carried out at various Atlantic archipelago ports, such as Madeira, San Vicente and St. Helena, as well as from several ports on the nearby African coast like Dakar and Casablanca; the Canary Islands played only a limited role. But Canary Island ports soon began to assume an increasing importance, and the hegemony of the Islands in terms of coal supply was confirmed by the 1930s.

The year 1838 marked the beginning of the supply of coal in Canary Island ports: by a Royal Decree of 11 November Santa Cruz was officially given the status of a coaling port, enjoying a regime of practically non-existent tariffs since coal supplies were subject only to a single charge of two percent for storage. Yet even after the declaration of Free Ports in 1852, and more significantly the construction of large port infrastructures in Gran Canaria and Tenerife, only sixty-two steamships (fifty from the UK and twelve from France) visited the ports, generating overall coal sales of just 4837 tonnes. It was not until the construction of major ports at Las Palmas de Gran Canaria and Santa Cruz de Tenerife in the last third of the nineteenth century that large quantities of coal for shipping began to be stored. At this time the British Consul observed that the Canary Islands had:

taken on a major role as a coaling station for companies whose steam ships sailed to Cape Town, New Zealand and South America... The Islands are indeed located in the direct route for all ships sailing southbound. The other important coaling station in the South Atlantic is San Vicente, in the Cape Verde Islands... 800 miles to the south.

Towards the end of the century the island ports became even more important as major Atlantic coaling stations, a fact which is reflected both in the number of vessels calling and the tonnage of coal supplied (see tables 1 and 2).

The supply of coal in Canary Island ports increased without interruption until the First World War. This era may be rightly regarded as the golden age for this business, and Las Palmas alone supplied over a million tonnes of coal per year. But the war years had a negative impact on Island interests, since Atlantic trade and shipping were severely curtailed. When the war ended, coaling operations were re-established, but their days were numbered because of the economic crisis of the 1930s and the introduction of oil-driven motor vessels. This decline continued after World War II, and coaling had almost completely disappeared by the 1950s.¹²

What were the causes of this hegemony enjoyed by the Canary Island ports? The main reason is undoubtedly their geographic location. The strategic position of the ports half-way between Europe and the Americas made them ideal for coaling. As one British consul put it, "it is for coal, and for no other reason, that the majority of ships decide to call in here."¹³

The low price of haulage was also fundamental to the attraction of Canary Island ports to foreign shipping companies and reflected productivity improvements in sea transport. Ships returning to Europe were able to fill their holds with highly desirable consumer goods, which enabled British and German shipping companies to maintain lower haulage costs than those of their Spanish counterparts. The price difference between British coal and coal from Asturias has been measured both in terms of point of origin and port of departure: between 1880 and 1933 the ratios were 1.1 and 2.8 for price at source and 1.0 and 1.6 for ports of departure.¹⁴ In 1882, haulage costs for a tonne of coal transported from Britain to Cadiz were 16.6 percent lower than for coal from Asturias, while the cost of transporting a tonne of coal from Liverpool to Las Palmas was nineteen percent lower than from Barcelona. It has also been calculated that in 1891 coal from Cardiff cost thirty-eight percent less than the finest mainland Spanish coal.¹⁵

¹²M.E. Fletcher, "From Coal to Oil in British Shipping," *Journal of Transport History*, New Series, III, No. 1 (1975), 1-19.

¹³F. Quintana Navarro (ed.), *Informes consulares británicos sobre Canarias (1856-1914)* (Las Palmas, 1992), 398 and 954.

¹⁴S. Coll Martin and C. Sudria y Triay, *El carbón en España, 1770-1961. Una historia Económica* (Madrid, 1987), 484-489.

¹⁵A. Guimerá Ravina, *La Casa Hamilton. Una empresa británica en Canarias, 1837-1987* (Santa Cruz., 1989), 148-150.

Table 1

Annual Movement of Ships in the Iberian Atlantic Ports (number)

-Year	Las Palmas	Santa Cruz	Madeira	Fayal	S. Miguel
1875	111		610	339	332
1876	119		606	395	342
1877	129	403	619	456	351
1878	148	405	585	625	351
1879		453	652	704	270
1880		427	682	893	188
1881			673	959	
1882			715	1125	
1883	236		720		
1884	238	452	811		
1885	236		780		
1886	522	563	733		
1887	660		679		
1888	954	726	751		
1889	1180	786	793		
1890	1441	819	742		
1891	1558	836	680		
1892	1562	843	702		
1893	1719	836	689		
1894	2718	814			343
1895	2887	901	720		350
1896			749		483
1897			796		566
1898	2831	2122	883		619
1899		2706	820		706
1900		2933	1290		688
1901		2919	1211		599
1902	3944	2841	1513		511
1903	3848	2968	1397		120
1904	4103	3199	1257		141
1905	4833	3529	1259		424
1906	4925	3663	1287		446
1907	4992	3538	1365		414
1908	4549	3169	1440		217
1909	4501	3537	1535		219

-Year	Las Palmas	Santa Cruz	Madeira	Fayal	S. Miguel
1910	4393	3642	1391		278
1911	4751	3782	973	1208	296
1912	4888	2484	1507	1660	267
1913	4974	2110	1330	1397	221
1914	3556	1570	1027		200
1915	2740				
1916	2211				
1917	636				
1918	445				
1919	1366				
1920	2112				
1921	2187				
1922	2976				
1923	3318				
1924	3863				
1925	3923				
1926	3762				
1927	4099				
1928	4225				
1929	4492		1026		
1930			1029		
1931	4485		887		
1932			930		
1933			1088		
1934					
1935					
1936					
1937					
1938					
1939					
1940					

Source: Santa Cruz: E. Murcia Navarro, *Santa Cruz de Tenerife, un puerto de escala en el Atlántico. Estudio de Geografía urbana* (Santa Cruz, 1975); and F. Quintana Navarro (ed.), *Informes consulares británicos sobre Canarias (1856-1914)* (Las Palmas, 1992). Others: U. Martín Hernández, "Los archipiélagos atlánticos de Canarias, Madeira, Cabo Verde y Azores 1880-1919. Una aproximación al estudio de sus relaciones a través de los informes consulares británicos," in *Actas del VIII Coloquio de Historia Canario-Americano* (3 vols., Las Palmas, 1991), I, 116-120.

Table 2
Tons of Coal Supplied in the Atlantic Ports

Years	Las Palmas	Santa Cruz	Tenerife	Madera	Ascensión	S. Elena	Faklands	San Miguel
1850		5000			702	783		
1853		5000			3913	1732	973	
1856		16,000			2518	1869		
1864		7730			890	1411	1409	
1875					3437	1502	330	
1876					2363	100	1252	
1877					1817	262	271	
1878		5641*			-	468	377	
1879		10,075*			2237	1560	1360	
1880		10,469			1356	786	575	
1881		9547*			2300	1271	766	
1882		18,902*			2001	523	574	
1883		34,674*			1004	874	968	
1884	6700	28,924	25,582		1178	722	704	
1885	18,390	33,963	33,752		1242	1635	499	
1886	38,827	38,046	40,023		1014	283	1943	
1887	78,070	53,277	53,042	76,495	1850	151	850	
1888	130,188	76,913	77,605		-	1620	1204	
1889	166,341	101,432	100,891		2446	2116	1491	
1890	226,409	107,519	1,107,733	67,574	1214	1861	1486	
1891		105,516	104,511		2348	780	752	
1892		99,940	98,589		1129	1684	895	
1893		103,728	103,239		630	1429	727	
1894		77,159	81,678		3320	2060	309	1,134,218
1895	191,174	83,896-	78,022		1320	3625	478	3,357,321
		114,365						
1896		146,574	121,582		3116	30	146	
1897		160,856	139,524		1764	447	1681	
1898		133,480	86,456		2645	927	1744	3,890,661

Years	Las Palmas	Santa Cruz	Tenerife	Madera	Ascensión	S. Elena	Faklands	San Miguel
1899	206,709	158,414	148,414		2511	3303	1847	
1900	400,000	279,383			1873	12,530	799	
1901		232,897			2618	6770	1980	
1902		208,796			679	1601	2263	5,477,621
1903	331,667		123,345		2509	1997	2191	4,085,866
1904	277,331		139,160		2134	4089	758	4,574,806
1905	334,625		139,074		-	1451	1162	4,766,564
1906			189,685		2026	4193	260	4,518,109
1907	375,000		196,247		695	1851	932	5,818,336
1908			122,934		1384	1431	5150	5,367,439
1909					695	1611	15,035	5,522,384
1910	706,475	166,564				4357	21,937	9,046,663
1911	822,231	198,045				2303	30,903	13,310,544
1912	791,985	518,554				4082	34,729	15,082,897
1913	828,376	349,060				4737	28,580	16,083,650
1914	636,523	227,711						11,123,630
1915	299,196	171,575						
1916	249,260	151,832						
1917	25,952	26,898						
1918	5960							
1919	210,114	76,023						
1920	280,000	146,846						
1921	226,857							
1922	342,508							
1923	463,367							
1924	471,373							
1925	352,977							
1926	396,181	161,214						
1927	453,686	187,608						
1928	351,954	178,786						
1929	348,447	164,300						

Years	Las Palmas	Santa Cruz	Tenerife	Madera	Ascensión	S. Elena	Faklands	San Miguel
1930	267,140	128,759						
1931	254,783	120,077						
1932	207,735	92,071						
1933	185,913	85,031						
1935	167,729	87,722						
1936	89,533	55,725						
1937	107,853	61,480						
1938	75,121							
1939	82,084	39,317						
1940	118,547	25,390						

Notes: 1912: The 750,000 tons imported from Las Palmas are 427,803 from Wales and 257,802 from Durham; there was a strike in Wales and so 39,539 were imported from North America and 24,560 from Germany (Quintana Navarro [ed.], *Informes consulares británicos*, 866); 1913: 723.437 tons came from Wales and 436.563 from Durham (*ibid.*, 878)]; 1914: 422.577 tons from Wales and 283,988 from Durham (*ibid.*, 910)], with 13,136 tons of American and 44,300 of German-Welsh origin (*ibid.*, 927)]; San Vicente, 1931: 126,500 metric tonnes; and Madera, 1886: 76,495 metric tonnes and 1890: 67,754 metric tonnes (Great Britain, Foreign Office, Miscellaneous Series, No. 246 [1892]).

Source: Las Palmas: Quintana Navarro (ed.), *Informes consulares británicos*; Spain, Cámara Oficial de Comercio Industria y Navegación (1947 and 1955); and Morris, *Trade and Economic Conditions*, 11; Santa Cruz de Tenerife: Murcia Navarro, *Santa Cruz de Tenerife*; Ascensión, Santa Elena and Falkland: W.E. Minchinton, "The Role of the British South Atlantic Islands in Seaborne Commerce in the Nineteenth Century," *Actas del IV Coloquio de Historia Canario-americano* (Las Palmas, 1985), 559-561.

Added to all these was the institutional component, represented in the Canary Islands by its Free Port status, which gave the ports a considerable advantage over its competitors. Ships arriving in the Islands had to pay hardly any taxes if they entered for “coal, water or victualling.” Moreover, they paid just three shillings and four pence in 1894 to enter and leave port, twenty-eight shillings and two pence for pilotage and four shillings and two pence as a consular fee; in 1896 ships paid just twenty-five shillings per tonne for coal.¹⁶ Nevertheless, each port had to share these benefits with the other island ports, which led to great inter-island competition. This can be seen in the advertising material from this era. The Consul of Tenerife, for example, denied that the increase in traffic in the Canary Islands worked to the detriment of traffic in Madeira; on the contrary, traffic had also increased there, he affirmed, although “on occasion it has been falsely claimed that the increase in maritime traffic and coaling operations in the Canary Islands has been achieved at the expense of other ports. This is not quite true, as can be seen from shipping activity figures from the island of Madeira.” To prove his point he provided the following sets of figures about shipping activity in Funchal: in 1886, 618 vessels with an overall registered tonnage of 8,887,497 tonnes visited the port and were supplied with 76,495 tonnes of coal; four years later, 645 vessels with an overall registered tonnage of 1,002,770 tonnes visited the port and loaded some 67,574 tonnes of coal. In any case the amounts were smaller than those supplied by the Canary Islands ports, which totalled 333,919 tonnes in 1890.¹⁷

Rivalry between the ports varied at certain points of time for several reasons, but competition definitely existed. For example, an increase in tariffs in Madeira in 1880 led to an increase in prices on the part of the supply company, in this case the Blandy Brothers. Port managers resorted to a wide range of tactics, including inventing false reports about the economic situation and bribing captains and chief engineers. At the same time, the coaling companies had a number of ways to attract customers, including price reductions and preferential treatment for ship captains. In any case, competition was relative, since most of the ports were governed by cartels which were the fruit of an agreement known as the Atlantic Islands Depot Arrangement (AIDA), which survived until the 1930s.¹⁸

¹⁶Quintana Navarro (ed.), *Informes consulares británicos*, 293, 307 and 476.

¹⁷Great Britain, Foreign Office, *Miscellaneous Series*, No. 256 (1892), 11.

¹⁸Quintana Navarro (ed.), *Informes consulares británicos*, 588, 609 and 793; J.P. Trant, *Economic Conditions in the Canary Islands, with an Annex on Rio de Oro* (London, 1931), 33-35; and Guimerá Ravina, *La Casa Hamilton*, 171-173, 217 and 235.

One general feature was that the quantities of coal supplied from the island ports were subject to a set of factors, some of which were beneficial while others were detrimental. The effects of war, for example, are well known. The South American War of 1896 had a very negative impact on Canary Island ports. The end of the Boer War in 1903 was also detrimental because, according to the British Consul, it led to a “decline in traffic” in Las Palmas.¹⁹ The effect of industrial disputes in producer countries also had a knock-on effect. Prices rose, for example, as a direct result of the Welsh miners’ strike in 1898, and rumours of an imminent work stoppage in South Wales “led to a far greater amount of coal than usual being loaded on 1st January 1912.”²⁰ When the dispute came to pass, the effect was striking. Of a total of 750,000 tons of coal imported the previous year, 427,803 tons came from Wales and 257,802 from Durham, but in March and April 1912, these sources were replaced by 39,535 tons of American and 24,560 tons of German coal (see appendix II). In contrast, the strikes in Cape Verde and Tenerife, coupled with a cholera epidemic in Madeira in 1910, were beneficial to Las Palmas.²¹ In the 1930s the continual industrial unrest which led to Las Palmas acquiring the nickname of the “red port” was used by competitors to attract traffic.

The Predominance of British Companies in the Atlantic Coaling Business

Since the coal which supplied the Iberian Atlantic ports came mainly from Wales and Durham, it is hardly surprising that the majority of supply companies were also British (see table 3 and appendix I). The dominance of Welsh and English coal can be explained by their quality and lower price; the latter was due also to lower transport costs. The British Consul in the Canary Islands confirmed this trade domination in his 1904 report, which stated that “five major companies are currently operating. The entire coal handling business in the Port remains in the hands of British companies.”²²

Moreover, since coaling ships were expensive, single-purpose vessels, they were closely linked to industrial and financial interests. Elder Dempster, for example, had connections with trading and cotton companies, as well as with the

¹⁹Quintana Navarro (ed.), *Informes consulares británicos*, 620 and 640.

²⁰*El Tribuno*, 29 July 1912; and Quintana Navarro (ed.), *Informes consulares británicos*, 866 and 793.

²¹Quintana Navarro (ed.), *Informes consulares británicos*, 793.

²²*Ibid.*, 657.

Bank of British West Africa.²³ The companies, which grew in strength due to an increasing tendency to amalgamate, were at the centre of economic decision-making, the point at which business and politics coincided. For example, the Woermann Line enjoyed the strong support of the German *Reichstag*.²⁴ Furthermore, these companies made agreements among themselves, such as that which existed in the 1880s between Elder Dempster, Woermann and others to form the West African Shipping Conference.²⁵ The connection between the economic centres of coal mining and commerce, located in the most highly developed regions of Europe, and the shipping companies provided an important link with international trade. At the same time, the most powerful industrial groups were connected with Cunard, White Star, Peninsular and Orient, Royal Mail, Furness Withy, Ellerman and Alfred Holt, big companies that "maintained a tight control over more than forty smaller companies and which dominated up to the 1920s half of British foreign trade and a third of the world total."²⁶

Table 3
Coaling Companies in Las Palmas

Company	Nationality	Islands with Company Representation			Observations
		Gran Canaria	Tenerife	Madeira	
Blandy Bros and Co. (G.C.) Coaling and Shipping, S.A.	Anglo-Spanish	X	X	X	Represented in London by Blandy Bros.
Compañía General Canaria de Combustibles, S.A.	Anglo-Spanish	X			Subsidiary of Anglo Spanish Coaling, Ltd. (Cardiff)
Compañía Carbonera de Las Palmas	Anglo-Spanish	X			Represented by Hull, Blyth and Co., Ltd., London
Compañía de Combustibles "Oceánica," Ltda.	Anglo-Spanish	X			Subsidiary of Oceanica Coal Co., Ltd.

²³P.N. Davies, *The Trade Makers. Elder Dempster in West Africa, 1852-1972* (London, 1973; reprint, St. John's, 2000); and Davies, *Sir Alfred Lewis Jones, Shipping Entrepreneur Par Excellence* (London, 1978).

²⁴Miège, *Expansión europea*, 5.

²⁵Davies, *Trade Makers*, 72-78 ff.

²⁶Fraile Balbín, *Industrialización y grupos de presión*, 103.

Company	Nationality	Islands with Company Representation			Observations
		Gran Canaria	Tenerife	Ma-deira	
Compañía Nacional de Carbones Minerales	Anglo-Spanish	X			Subsidiary of Wilson, Sons and Co. Ltd. and of Française des Charbonages S.A. de Dakar
Cory Brothers	Anglo-Spanish	X	X	X	Agent of Cory Brothers Co., Ltd. of Cardiff and London
Deutsche Kohlen Depôt Gesellschaft	German		X		
Elder Dempster	British	X	X	X	Branches of the company established in the ports of the Canary Islands to supply coal
George Davidson	British		X		
Guirlanda Hnos.	Spanish		X		
Gran Canary Coaling Co., S.A.	Anglo-Spanish	X			Subsidiary of Atlantic Coaling Co., Ltd. and Elder Dempster
Compañía Hespérides	Anglo-Spanish				Acquired by Wilson
Hamilton and Co., Ltd.	Anglo-Spanish		X		Agent of Lloyd's and Reuter's. Represented in London by Sinclair, Hamilton and Co. and Millers (Canary Islands) Coaling Co., Ltd., London
Miller y Cia, S.A.	Anglo-Spanish	X	X		Represented in London by Millers (Canary Islands) Coaling Co., Ltd.
Tenerife Coaling Co., Ltd.	Anglo-Spanish		X		Subsidiary of Atlantic Coaling Co., Ltd. and Elder Dempster
Wilson and Sons	Anglo-Spanish	X		X	UIT representation in Dakar
Woermann-Linie Ltd.	German	X	X		Subsidiary of Woermann Linie, Ltd.

Source: *España Nueva*, 1934; Las Palmas Registry Book; Morris, *Trade and Economic Conditions*, 27-29; T. Tortella Casares, *Una guía de fuentes sobre inversiones extranjeras en España (1780-1914)* (Madrid, 2000); and A. Guimerá Ravina, *La Casa Hamilton. Una empresa británica en Canarias, 1837-1987* (Santa Cruz, 1989).

These companies normally owned coal mines and ships and either possessed their own coal warehouse facilities in the island ports or reached agreements with local operators. Generally speaking, they were able to provide all the services related to a port of call: the supply of ships in transit, which required fast and efficient “coaling, watering and victuals,” as well as all the operations related to repair work, including construction work for domestic service ships, shipyards and dry docks. In the case of the Canary Islands (and for Spanish ports as a whole) the formula for setting up and offering a coal supply store was based on a licensing system regulated by the 1880 Spanish Ports Law. This meant that it was impossible to establish a business without the permission of the Ministry of Public Works and the Economy, which led to collusion, interest-seeking and many irregularities. For example, some construction programmes were begun without the necessary authorisation with a view to negotiating a solution with the public authorities at a later stage.²⁷

The aim of the coaling companies was to possess a network of coal depositories throughout the archipelagos to supply ships on the West African and South American trade routes.²⁸ At the turn of the nineteenth century there were nine British and two German depositories in Canary Islands ports. In Las Palmas the most important coaling companies started trading between the end of the eighteenth and the beginning of the twentieth century, and the port soon enjoyed a near monopoly over this activity.

Some companies operated from a single port only. The oldest of the coaling companies in Gran Canaria was Miller and Co., founded in 1854.²⁹ This firm was transformed into one of the most modern operators from its origins as a modest trading house. This is a good example of a firm which diversified to an extraordinary extent. It started by exporting *orchilla* and cochineal, to which it then added a shipping agency, insurance and commissions; coaling; victualling; and stevedoring. Repair work and chandlery were also provided, and the firm owned both shipyards and dry docks. It even provided banking and export warehouse facilities where fertilisers, agricultural machinery, nautical equipment, liquor, cloth, ironmongery and grain could be stored.

The coal business started comparatively early, at a time when the old San Telmo dock was still being used. (This was Las Palmas’ first dock and was later

²⁷M. Rodríguez y Díaz de Quintana, *Miller y compañía: Cien años de Historia* (Las Palmas, 1989), 101.

²⁸Information on this topic was gleaned from files in Companies House, Cardiff, and the Archives of the Banco del España.

²⁹Rodríguez y Díaz de Quintana, *Miller y compañía*; and B. Miller, *Canary Saga. The Miller Family in Las Palmas* (Las Palmas, 1988).

replaced by more modern facilities at La Luz). The business started to become truly prosperous with the construction of new dock infrastructure in Las Palmas and supplied up to 100,000 tonnes per year by 1909.³⁰ The firm also specialised in the sale of coal for the local market, and in 1910 it introduced so-called “kitchen coal,” which came from Newcastle and was more suitable for domestic purposes than Welsh coal. The company was also the first to recognise the importance of liquid fuels and in 1922 became the representative Shell, the first liquid fuel company to be established in Las Palmas.

The Compañía Carbonera de Las Palmas (Las Palmas Coaling Company) was established in 1909 when it became apparent that trade was growing. As a shipping agent, it represented the Dutch *Mala Real* fleet.

The Cía General Canaria de Combustibles (General Canary Islands Fuel Company) began to operate in Las Palmas in the 1920s. This firm was a subsidiary of the Compañía General de Carbones (General Coal Company), which was already operating in the Spanish ports of Cádiz and Barcelona. The company was founded in Barcelona in 1914 as an agent for the Anglo Spanish Coaling Co. Ltd. (established in Cardiff in 1913) and was designed for coal provision, storage and victualling in the ports along the Bay of Cádiz, but it also had representation in the majority of mainland Spanish harbours.³¹

Oceánica was established in Las Palmas in the 1920s and provided coal to the vessels of its parent company, the Oceanic Fuels Company, which was of British origin. This firm pioneered the introduction of modern coaling methods using floating, steam-driven cranes to unload coal from lighters and deposit it directly into ships’ holds, a faster technique which was greatly appreciated by shipowners. The method was introduced by the local entrepreneur Bernardo de la Torre, whose son B. de la Torre Millares would later become president of the Administration Board in 1932. The company also owned its own tugboats.

In the port of Santa Cruz de Tenerife there is evidence of the existence of three companies devoted to coal import and supply by the end of the nineteenth century: Hamilton and Co., George Davidson and the Guirlanda Bros. The first was the most important and was possibly the very first coaling company to operate in the Canary Islands.³² George Davidson disappeared at the turn of the century, and new companies were set up which would eventually enjoy an absolute monopoly in the port and cause great controversy and unrest. These were British companies which displaced local operators to such an extent that Hamilton

³⁰Guimerá Ravina, *La Casa Hamilton*, 145.

³¹T. Tortella Casares, *Una guía de fuentes sobre inversiones extranjeras en España (1780-1914)* (Madrid, 2000) 86-87.

³²See Guimerá Ravina, *La Casa Hamilton*.

and Co. alone supplied half of all the coal provided in the port between 1903 and 1911. The Tenerife Coaling Co. Ltd. (1896) meanwhile accounted for thirty-six percent of the market and Cory Brothers, operating as an independent company after breaking away from Hamilton in 1920, had the remaining ten percent of the market. But these companies lost their monopoly in favour of Grand Canary companies during the so-called "coal war" which began in 1910.³³

The most important companies established branches in several ports. Elder Dempster, for example, entered the Canary Islands coal trade via its subsidiary company the Grand Canary Coaling Co. (1886). It became a vertically-integrated organisation, since it possessed coal mines in Wales as well as a shipping line with interests in West Africa. The branch managed by Alfred L. Jones was one of the very first coaling companies in Las Palmas and in its heyday supplied up to 168,000 metric tonnes of coal. Although the company acquired great prestige during the Boer War, its primary function was to supply the West African trade, where Elder Dempster had important commercial interests. As a business strategy the firm attempted to diversify, building its own dry dock and repair workshop.³⁴

An example of a company with interests in several archipelagos was Blandy.³⁵ The company obtained an operating license for Las Palmas in 1885, but since 1811 it had been in Madeira, where it was involved in the wine trade. The company opened an office in London in 1838, and eight years later Blandy opened a branch in Lisbon. The firm played an important role in the development of several businesses in Las Palmas, making a major contribution to the coal and fruit trades. It insured ships as a representative of the Alliance Insurance Co. Ltd., the Royal Exchange and the Board of Underwriters of New York. It was also a member of the maritime committee of Lloyds of London and acted as agent for Blue Funnel, Orient and Canadian Pacific, among others.³⁶

In this second phase, the Blandy Company enjoyed its heyday under the directorship of Carlos Mauricio (1872-1940), in the 1930s becoming a limited-liability company known as Blandy Brothers and Cia. (Grand Canary) Coal and Shipping S.A., part of the coal merchants' trust. After the Spanish Civil War and the Second World War, Blandy opened a branch in Tenerife, made changes to its

³³*Ibid.*; and U. Martín Hernández, *Tenerife y el expansionismo ultramarino europeo (1880-1919)* (Santa Cruz, 1988), 179-208.

³⁴Davies, *Trade Makers*, 475. See also Hoy, 25 June 1933; and Guimerá Ravina, *La Casa Hamilton*, 145.

³⁵See *The Blandy Family of Companies. Our First 150 years, 1811-1961* (Madeira, 1961).

³⁶See *La España Nueva*, 1935.

structure and diversified. It now acts as a shipping agent and travel agency under the name of Blandy Brothers Shipping and Agency S.A. (1954).³⁷

The Compañía Nacional de Carbones (National Coaling Company) is a subsidiary of Wilson and Sons. This company bought out Carbonera Hespérides and set up in Las Palmas in 1895 under the directorship of James Nelson Bates as a subsidiary of the Compañía Nacional de Carbones Minerales. The firm owned its own dry docks and repair workshop. The parent company, Wilson & Ocean Merthy Ltd., had business interests in various ports in Africa, South America and Madeira, and owned coal mines in Wales to provide for the company's fleet.³⁸

Cory Brothers was the main coal exporting company for South Wales but had its headquarters in Liverpool. In 1913 it owned eighty coaling stations around the world. The firm became involved in coaling in Gran Canaria in 1904, while in Tenerife it worked in association with Hamilton and Co. between 1884 and 1909 before setting up independently.³⁹ The company possessed coal mines in Cardiff and supplied Royal Navy vessels from various Atlantic ports.

The only coaling company operating in Canary Island ports which did not have a British connection was Woermann Linie. Still, this shipping line was associated with Elder Dempster in the West African Shipping Conference. The line was based in Hamburg and its policy of opening up the Africa trade was given active support by the *Reischstag*. It set up in Las Palmas in 1906, and from 1913 operated from Santa Cruz, where it was able to secure a share of the market under the name Deutsche Kohlen Depot Gesellschaft.⁴⁰

It is possible to identify certain common characteristics among coal supplying companies operating from the archipelago ports. We must distinguish, however, between the companies established locally from the early nineteenth century, such as Blandy, Hamilton and Miller, and those such as Elder Dempster, Wilson, Cory and Woermann, which had huge capital backing and were based outside the islands. A common feature of most was a tendency to diversify (Miller, Elder Dempster and Blandy). Others were organised vertically: Elder Dempster and Cory Brothers possessed coal mines in Wales, and as well as operating as shipping lines they could provide the services of a shipping agency

³⁷These developments are discussed in detail in *Blandy Family*.

³⁸Tortella Casares, *Una guía de fuentes*, 46 and 287; Companies House, Cardiff; and the Archives of the Banco de España.

³⁹See W.E. Minchinton, "The Canaries as Ports of Call," in *Actas del VI Coloquio de Historia Canario-americano* (3 vols., Las Palmas, 1987), III, 273-300; Guimerá Ravina, *La Casa Hamilton*, 165 and 188; and *España Nueva*, April 1933.

⁴⁰Quintana Navarro (ed.), *Informes consulares británicos*, 849.

and had their own drydocks and/or shipyards. The Grand Canary Co. and Blandy offered the last three of these services. The companies frequently worked in concert and often reached agreements with a view to carving up the market, as was the case in AIDA. It is also worth noting that by the 1920s the process of modernising the various management structures was complete, and modern management methods began to be introduced. By this time almost all were limited-liability companies.

An interesting aspect of company thinking at that time was that the coaling companies operating in Las Palmas participated actively in the prevailing trend towards association formation by becoming members of the Shipping Agents' Association.⁴¹ This organisation was responsible for harmonizing members' interests and managing administrative aspects, such as workers' retirement payments. It also acted as a tool to defend the interests of the business community. For example, it challenged attempts to withdraw trading licenses, intervened before the Fair Trade Committee, drew up work plans and negotiated with trade unions on behalf of the employers.

The Limitation to Free Trading: The Formation of Trade Cartels

Despite operating in a market which was theoretically governed by free trade principles, the data available for the Atlantic islands suggest that during the last third of the nineteenth century and the first quarter of the twentieth coaling companies adopted several strategies involving the formation of trade cartels, drawn up collectively to distribute market shares as and when the need arose. The agreement they reached for sharing the local coal supply trade was AIDA, which from the early twentieth century fixed a single price for all fuel provided in the ports of the Atlantic archipelagos, along with a number of additional jointly-agreed provisions which were respected up to the 1930s.

While there is no extant documentation dealing with this agreement, its existence has been corroborated through indirect references in company documents and consular reports. An example would be this extract taken from internal correspondence between the Hamilton and Cory partners:

our losses must be down to the profits we have made in the coaling trade, which is not as profitable as it ought to be due to the large contributions which we are obliged to make to the consortium. I enclose a note which details the payments which we have made since the constitution of the Atlantic Islands

⁴¹La Asociación Patronal de Consignatarios de Buques del Puerto de Las Palmas was formed in 1925; see M. Suárez Bosa, "Trabajadores y empresarios en el Puerto de La Luz y de Las Palmas. La organización del trabajo, 1891-1980" (1996).

Deposit. I have fought constantly and with no outside support against these exorbitant dues but with little success.⁴²

A similar set of figures detailing the contributions made by two other companies which were part of the cartel, Hamilton and Co. and Cory Bros. in Tenerife, is shown in table 4 and provides irrefutable evidence of the existence of the agreement.

Table 4
Contributions Made to the AIDA by Hamilton and Cory
(£ Sterling)

Year	Hamilton (5/8)	Cory Bros. (3/8)	Total
1903 (1/29)	341	204	546
1904	2101	1260	3361
1905	4573	2743	7317
1906	7403	4521	11,924
1907	5571	3343	8914

Source: Hamilton internal company correspondence, taken from Guimerá Ravina, *La Casa Hamilton*, 217.

The AIDA agreement was initially signed by Miller, Grand Canary and Blandy but was gradually extended to include all remaining companies. Under its terms each participant was assigned a percentage of total trade, and a system of compensation was established: whoever sold the most over the course of a given year was obliged to compensate those that sold less. Successful firms would pay three shillings into a common fund when they exceeded their quota, and the proceeds would be shared among those which had failed to attain their share.⁴³

But while the prices agreed from the beginning of the twentieth century were similar for all the islands, they could vary substantially. Thus, in 1901 prices were somewhat lower in Madeira, while in 1912 coal was cheaper in the Canaries than in the other islands or many mainland Spanish ports: while Welsh and Durham coal cost twenty-two and nineteen shillings per metric ton in Las Palmas and Puerto de La Luz, respectively, in Bilbao it was 24/6; in Lisbon 24/3

⁴²Guimerá Ravina, *La Casa Hamilton*, 269-270.

⁴³The agreement was broken between 1910 and 1913. See Miller, *Canary Saga*; and Rodríguez y Díaz de Quintana, *Miller y compañía*, 110-114.

and twenty-two shillings; and in San Vicente as high as thirty-one shillings.⁴⁴ In 1933 the price of coal in the Canary ports was 30/6 in Las Palmas and 28/6 in Tenerife, rather more expensive than in Madeira, where the price stood at thirty shillings for Welsh and twenty-eight shillings for Durham coal, but cheaper than that on offer in San Vicente (thirty-three shillings for Welsh coal and twenty-eight shillings for Durham coal), Dakar (thirty-three shillings for Welsh coal), Sierra Leone (32/6 for Welsh coal) or Gibraltar (£1/2/6 for coal from Cardiff and £1/0/6 for Newcastle coal).⁴⁵ Nevertheless, the evolution of coal prices in table 5 shows that prices fell in Las Palmas during the period in which the agreement was broken (1910-1913), while coal prices remained high as long as the agreement functioned. Price variations should not obscure the existence of the accord.

The price war that began in 1910 was short-lived but caused a tempest in the previous sea of tranquillity. As a diplomat reported:

a ferocious tariff war caused by the actions of one of the seven coaling companies operating in the Port of Las Palmas. This company had previously broken the terms of the agreement by charging less for coal than had been stipulated for the year in question, which was one pound and four shillings per ton f.o.b. In order to face up to the new situation which had been created the other companies lowered their prices on the 14th April to one pound two shillings and sixpence, on the 24th March to one pound and on the 23rd September to seventeen shillings and sixpence per ton f.o.b.⁴⁶

⁴⁴At the European ports coal was generally cheaper, but these harbours were not as well located. In Amsterdam, a metric ton cost thirteen to nineteen *chelines*; in Antwerp, thirteen *chelines*; in Gibraltar, twenty-three *chelines* for Welsh coal and twenty-one for the Furham product; in La Havre, twenty-one *chelines* and sixteen *chelines*, respectively. The data are taken from Kirkaldy, *British Shipping*, 600-610. In 1933 the prices in *chelines* were: Liverpool, nineteen, and Hull, fourteen, according to data from "Expediente en averiguación de la causa de retirada de líneas de vapores de este Puerto de La Luz," file of the official Camera of Commerce Industries and Navigation of Las Palmas, Legajo "Comunicaciones e infraestructura," box 200.

⁴⁵The data for Elder Dempster in 1933 are from "Expediente." It is possible that the company obtained the cheapest coal because in its answer it indicated that the information was confidential. Thus, for example, the official price in Madeira was thirty-three *chelines* per metric ton.

⁴⁶Quintana Navarro (ed.), *Informes consulares británicos*, 79.

Table 5
Prices of Coal and Haulage in Canary Island Ports, 1891-1933

Year	Pounds/ton	Pesetas/ton	Constant Pesetas	Haulage (Pounds)	Haulage (Pesetas)	Constant Pesetas
1891	0.66-0.6145	17.76-16.42	06.39-05.91	0.3291	08.85	3.18
1892	0.4722-0.416	06.47-05.02	02.39-01.85	0.3291	09.55	3.53
1893	0.4270	12.79	04.60	0.3291	09.85	3.54
1894	0.5104-0.5520	15.36-16.62	05.22-05.65	0.3291	09.90	3.36
1895	0.4270-0.4687	12.33-13.54	04.56-05.00	0.3291	09.50	3.68
1896	0.7708	23.42	08.19	0.3291	10.00	3.50
1897				0.3291	10.71	3.96
1900	1.375-1.4375	44.77-46.80	19.69-20.59			
1903	1.2-1.3	40.78-45.05	18.35-20.27	0.2916-0.3541	09.91-12.03	04.45-05.41
1904	1.15-1.35	39.85-46.79	18.33-21.52	0.2875-0.3	09.96-10.39	04.58-04.77
1905	1.175-1.225	38.66-40.31	17.78-18.54	0.2666-0.3875	08.77-12.75	04.03-05.86
1906	1.275-1.5	33.38-42.61	14.68-18.74	0.325-0.3625	09.23-10.29	04.06-04.52
1907	1.5	42.13	19.37	0.2875-0.375	08.07-10.53	03.71-04.84
1908	1.2-1.55	34.06-4400	15.32-19.80	0.2625-0.35	07.45-09.93	03.35-04.46
1909	1.2-1.25	32.58-33.93	14.33-14.92	0.275-0.4	07.46-10.86	03.28-04.77
1910	0.86-1.25	23.30-33.87	10.48-15.26	0.3-0.4	08.13-10.84	03.65-04.87
1911	1-1.55	27.24-42.22	11.71-18.15	0.35-0.8375	09.53-22.81	04.09-09.80
1912	1-2.5	26.97-67.42	12.13-30.33	0.4875-0.8375	13.14-22.58	05.91-10.16
1913	1.45-1.6	39.28-43.34	18.06-19.93	0.4-0.475	10.83-12.86	04.98-15.91
1914	1.55-2.35	40.42061.28	18.99-28.80	0.325-1.4	08.47-36.51	03.98-17.15

Year	Pounds/ton	Pesetas/ton	Constant Pesetas	Haulage (Pounds)	Haulage (Pesetas)	Constant Pesetas
1915	1.9-3.6375	47.31-90.57	26.49-50.71	1.125-1.5	28.08-37.35	15.68-20.91
1916	3.2-5-3	76.57-126.82	50.53-83.70	1.25-2.8	29.91-67.00	19.74-44.22
1917	4.5-10	95.26-211.7	74.30-165.12	1.875-3.75	39.69-79.38	30.95-61.91
1918	4.9-6.65	97.31-132.06	93.41-126.77			
1919	7.3-8.05	163.52-180.32	156.97-166.18	1.625-2.5	36.40-56.00	34.94-53.76
1920	3.8	88.54	92.08	0.875-2.375	20.38-55.33	21.19-54
1921				0.6	17.10	15.21
1933	1.525 (Wales)	60.96	45.72			
	1.425	56.97	42.72			

Notes: 1900 prices are with contract; without contract they were £1/12/6. The prices for 1891-1895 are f.o.b. from Cardiff. Exchange rates for the peseta against sterling are taken from A. Carreras Odriozola (comp.), *Estadísticas histórica de España. Siglos XIX y XX* (Madrid, 1989), 390-392. The price deflator is taken from J. Aixala Pasto, *La peseta y los precios. Un análisis de largo plazo* (1868-1915).; and the *Spanish Statistical Annual Report*, which was kindly supplied by Luis Cabrera Armas.

Sources: 1891-1909: Quintana Navarro (ed.), *Informes consulares británicos*; 1910-1920: Morris, *Trade and Economic Conditions*, 12; and 1933: Archives of the Las Palmas Official Chamber of Commerce, Industry and Navigation.

The causes of the price war and the identity of the company which started it are unclear. According to Peter Davies, the dispute began when the new owner of Elder Dempster, Owen Philipps, decided to try to achieve a greater share of the market for Elder's coaling companies in the Canary Islands.⁴⁷ Other writers, however, believe that the war broke out when the coaling companies attempted to reduce the participation of Miller by making the company agree to a smaller market share. Miller refused to comply and in 1910 lowered its price to £1/4 per ton. In response, the other members dropped their prices on 14 April to £1/2/6 and on 23 September to 17/6 per ton. They had by now gone to the extreme of offering coal for sale at prices lower than at the pit-head in Wales, where coal was being sold for one pound a ton. This obviously meant that the Canary coaling companies were taking a loss of four or five shillings per ton.

Miller was able to survive due in part to its substantial fleet of barges, which enabled the company to offer a far more efficient and economical service.⁴⁸ Furthermore, because of its network of associated companies in London, the firm was guaranteed a supply of coal. It made contact with Townley and Mickley (according to one of the descendants of the Miller family) and acquired a stock of 350,000 tons for a year.⁴⁹ The companies also chartered a fleet of Norwegian coaling vessels for the same period, thus guaranteeing a supply of first-class coal. Indeed, the operation was so successful that 3500 tons of coal were supplied within a twenty-four hour period, and according to surviving records ships were queuing up in Puerto de la Luz to take on coal. This undoubtedly led to the arrival of an unprecedented number of steamships at Las Palmas harbour to fill their holds with bunkers; when seen in conjunction with the strikes which were common in Tenerife and San Vicente, and the cholera epidemic in Madeira, this goes a long way to explaining the enormous sales increases enjoyed in Gran Canaria. Taking advantage of the low prices on offer at the port, ships left the UK with only enough coal to reach the Canary Islands, where they then took on whatever coal they required to reach their final destination.

It is clear that this situation could not be maintained indefinitely, and the coaling companies consequently sought to reach a new agreement. A new pact was reached toward the end of 1913, and coal prices were fixed so that top quality Welsh coal was sold for £1/12 and top quality coal from the north of

⁴⁷Davies, *Trade Makers*, 1945.

⁴⁸In the case of the port of Las Palmas the possession of barges served as a "parameter of analysis to determine what controlled the business of coal." Not by chance, they were all in the hands of foreign companies. F. Quintana Navarro, *Barcos, negocios y burgueses en el Puerto de la Luz. 1883-1913* (Las Palmas, 1985), 57.

⁴⁹Miller, *Canary Saga*.

England at £1/9 per ton. One significant detail is that the coal tonnage sold at Las Palmas was maintained due mainly to the free publicity the port received during the trade war as an accessible and efficient coaling station.

Thereafter the strategy of unity was maintained, albeit with diverse ramifications or characteristics, to such an extent that, once the First World War had ended, the British Consul reported that a commercial agreement among the companies was operating in 1920.⁵⁰ Indeed, the coaling companies based in Las Palmas drew up a more far-reaching agreement in 1930, forming a trust which was directed from London by Ernest Wooton Summerlin, who had been the British Consul to Gran Canaria, and by Gerard Miller in Gran Canaria. This pact was motivated first as a strategy to counter the economic crisis of the 1930s and second to counter the structural transformations being caused by the substitution of liquid fuel for coal. A third factor was the generational change occurring within the companies. Moreover, we should not ignore the fact that Puerto de la Luz became one of the most conflict-ridden ports during the Second Spanish Republic.⁵¹

This agreement modified the market in Las Palmas. Since the companies were certain that competition was bad in a declining market, they considered that forming an association was in their interests, and all offered both their facilities and staffs for the common good. The British Consul reported in 1930 that:

a central administrative organisation was formed of six of the British coaling firms and a fuel oil agency doing business there, for the purpose of effecting economies in management and operation, as well as in the first cost of the coal. This leaves three coaling companies at that port, one British, one partly British and one German, outside the combine, and these continue to operate independently as heretofore.⁵²

After complex negotiations an Anglo-Canarian holding company was established comprising Miller and Co., Blandy Bros. Coaling and Shipping, S.A., Grand Canary Coaling and Co., Compañía Carbonera de Las Palmas, S.A. and Compañía Nacional de Carbones Minerales, S.A. Cory Brothers and Co. Ltd. did not join until 1946, a delay which can be explained by incompatibilities with

⁵⁰"The Principal Firms Belonging to this Association, Known as the Canary Islands Committee, with their local representatives." See T.J. Morris, *Trade and Economic Conditions of the Canary Islands* (London, 1921), 6.

⁵¹Suárez Bosa, "Trabajadores y empresarios."

⁵²*Hoy*, 24 May 1934, 5; and Report of Consul J.P. Trant, 1931, 37.

respect to liquid fuels, since Miller acted as agent for Shell (this was still not established by name in Las Palmas at this stage) while Cory sold British Petroleum products. The German company Woermann and its affiliates and the British company Oceánica did not join the agreement either. As was to be expected this led to a series of informal problems due to the multitude of new relationships which had to be forged between managers and staff, and external difficulties due to the response of unions to the new labour and unemployment problems.

Conclusions

Available data confirm that between the end of the nineteenth century and the beginning of the twentieth, the ports of the Canary Islands became the principal coaling stations for ships on the Atlantic trade route. Coal supplied from the Canary ports increased relatively constantly to the point that over one million tons were provided by a single port. The causes for this lie in the spatial location of the archipelago, low transport costs and favourable institutional conditions, which reduced operating costs and attracted companies to offer efficient services.

Nevertheless, the coal supply business in the Canary ports did not follow the traditional strictures of the free market, since for much of the time the supply was controlled by an English-owned cartel with limited participation by people of other nationalities. The framework of trading freedom was thus limited by the strategies of foreign companies operating within the AIDA agreement, and in the case of Las Palmas they even formed a trust in 1930. An interest group known as the Ship Agents' Management Association was also involved in this agreement, further increasing the price of the coal supply.

Appendix I
Relation of Navigation Sealines with Stopovers in Las Palmas (1929) and
Madeira (1931)

Port of Las Palmas

Nationality	Company	Origin	Destination
USA	United States Shipping Board	New York	Western and Southern Africa
Germany	Hamburg Sudamerikanische Dampis Ges	Hamburg	South America
	Hamburg Amerika Linie Hamburg	Hamburg	South America
	Woermann Linie Act. Ges.	Hamburg	Western Africa
	Deutsche Ost Afrika Linie	Hamburg	South Africa
	Horddeutscher lloyd	Hamburg	
	Oldenburg Portngiesische Dampis Rhed	Hambrug	
	Norddeutscher Lloyd	Hamburg	South Africa
Belgium	Lloyd Royal Belga, S.A.	Amberes/Marseille	South America/South Africa
	Armemment Deppe	Amberes	South America
Spain	Cía Transmediterránea	Cádiz/Seville	Marocco/South America
	Cía Transatlántica	Cádiz/Seville	Gulf of Guinea/South
	Miguel M. de Pinillos	Cádiz/Seville	
	Ybarra y Cía, S. en C.	Cádiz/Seville	South of America
	Cía Correos Interinsulares Canarios	Tenerife/La Palma	Marocco
France	Sociedad General de Transport Maritimes a Vapor	El Havre	South of America
	Cía Générale Trasatlantique		Central America
	Cía de Navegation Paquet	Marseille/El Havre	Western Africa
	Sociedad Maritime Auxiliare de Transports	Burdeos/Marsella	
	Cía Française de Navegation a Vapor	Burdeos/Marsella	
	Andrew Weir y Cía		Western Occidental
	Cáia Marseills de Navegation a Vapor		Dákar
Holland	Hollansche Stoomboot Maats		Western Africa
	Van Nievelt condrian y Com. Stoomv.	Marseille	South America
	Koninklijke Hollandsche Lloyd		South America
Italy	Cosulich Soc, Triestina di Nav.	Trieste	South America
	Sociedad Libera Triestina	Trieste	Western Africa
U.K.	Yeoward Bros.	Liverpool	
	Royal Mail Steam Packet Com.		
	Elder Dempster y Co. Ltd.	Liverpool/Southampton	South America/Western Africa
	Peninsular y Oriental Steam Nav. Co.	London/Liverpool	

Nationality	Company	Origin	Destination
	T. and S. Harrison	London	Australia
	Anglo Saxon Petroleum Co. Ltd.	London	Central America
	Federal Steam Nav. Co., Ltd.	London	Australia
	Lamport y Holt Ltd.	London	South America
	Union Castle Mail S.S. Co., Ltd.	London	Australia
	Houlder Bros. Y Co., Ltd.	London	South America
Norway	Fred Olsen Linie		
	Dep. Bergenske D/S		South America

Port of Funchal (1931)

Nationality	Company	Destination	Observations
British	Blues Star	Liverpool	London
British	Booth S.S. Co.	Liverpool	
British	Elder Dempster	Liverpool	
British	Royal Mail Lines, Ltd.	Southampton	Lisbon
British	Union Castel Mail S.S. Co.	Southampton	
British	Yeoward Line	Liverpool	Lisbon
French	Chargeurs Reunis		
French	Cyprien Fabre Line		
Portuguese	Companhia colonial de Navegação		
Portuguese	Companhia Nacional de Navegação		
Danish	Det Forenede Samskibs-Selskap		
German	Hamburg Amerika Linie		
German	Norddeutscher Lloyd		
Dutch	Koninklijke Nederlandsche Stoomboot-Maatschappi		

Sources: Las Palmas: Junta De Obras De Los Puertos De La Luz Y De Las Palmas. *Memoria correspondiente al año 1928* (Madrid, 1928); and Madeira: J.B. Browne, "Report on Economic Conditions in Madeira," in A.H.W. King, *Economic conditions in Portugal. Together with annexes on Madeira and The Cape Verde Islands* (London, 1932), 76.

Appendix II

Origin of the Coal Supplied in the Canaries

	British			German			Others	Total
	Las Palmas	Tenerife	Total British	Las Palmas	Tenerife	Total German		
1891		105,516	100,516					
1892		99,940	98,940					
1893		103,728	103,728					
1894		77,159	77,159					
1895		114,365	114,365					
1896		146,673	146,673					
1897		160,859	160,859					
1898	213,000	133,480	133,480					
1899		206,709	206,709					
1900								
1901								
1902								
1903	331,667						33	
1904	277,331			170			12	
1905	273,000							595,000
1906	343,625	199,875	543,500	51,500		51,500		633,000
1907			575,000	58,000		58,000		537,000
1908			484,000	53,000		53,000		537,000
1909			423,000	61,000		61,000		484,000
1910			941,000	141,643		141,643		1,082,631
1911			952,369	120,631		120,631		1,073,000
1912	828,482	410,054	1,238,536	108,500		108,500		1,347,036
1913			974,904			185,096		1,160,000
1914			636,478			70,087		706,565

Sources: Quintana Navarro (ed.), *Informes consulares británicos*; and Morris, *Trade and Economic Conditions*.