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Abstract		This study addresses the strategy followed by different English entrepreneurs to develop the gas industry in several countries of Latin Europe during the nineteenth century. Specifically, it analyses different cases, such as the projects to implement the gas industry of Aaron Manby and Daniel Wilson in France, John Grafton and Edmund Goldsmith in Italy, and Edward Oliver Manby and William Partington Hurts in Spain, among others.
Keywords (separated by “ - ”)	Internationalisation - Foreign investment - Gas industry - United Kingdom - Latin Europe	

The Internationalisation of the British Gas Industry in Latin Europe in the Nineteenth Century

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Abstract This study addresses the strategy followed by different English entrepreneurs to develop the gas industry in several countries of Latin Europe during the nineteenth century. Specifically, it analyses different cases, such as the projects to implement the gas industry of Aaron Manby and Daniel Wilson in France, John Grafton and Edmund Goldsmith in Italy, and Edward Oliver Manby and William Partington Hurts in Spain, among others.

Keywords Internationalisation · Foreign investment · Gas industry · United Kingdom · Latin Europe

1 Introduction

The gas industry began to be developed in Europe at the end of the eighteenth century. The Englishman William Murdoch (1754–1839) and the Frenchman Philippe Lebon (1767–1804) were its precursors. The German-born Friedrich Albrecht Winzer (1763–1830), better known as Frederick Albert Winsor, was the entrepreneur of this business after seeing its potential and requested the British parliament authorisation to create a public gas lighting company in 1809. The company Gas Light and Coke Company was established by the Royal Decree of 30 April 1812, with a social capital of 200,000 pounds, divided into 4000 shares of 50 pounds each, and began to light London with gas in 1813. Samuel Clegg (1781–1861) was its chief engineer and developed the basic technology of this industry (Clegg, 1841; Falkus, 1982).

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26 The internationalisation process of this business began rapidly and was initiated
27 by Winsor, who, in 1817, founded the Société des Interesses pour l'éclairage au Gaz
28 to illuminate Paris. It was dissolved in 1819 due to the lack of profitability (Castro-
29 Valdivia, Matés-Barco & Vázquez-Fariñas, 2023, pp. 59–60). From this moment,
30 different English and French entrepreneurs began to globalise the public gas light-
31 ing industry.

32 The instrumentalisation of the direct British investment throughout the rest of the
33 world during the period of study was based on the Free-Standing Company (FSC)
34 (Corley, 1998). According to the definition of Mira Wilkins (1988, pp. 262-263;
35 1998, p. 3), these companies had been created in order to obtain finance so as to
36 make investments abroad in potentially profitable activities. They were not related
37 to any existing companies and were established in the United Kingdom in order to
38 assure the British investors interested in these businesses abroad that they would be
39 subject to British law. Furthermore, as the shares were denominated in pounds ster-
40 ling, this enabled them to access the London stock market, increasing the liquidity
41 of these shares and minimising the risk of the investors. The first company of this
42 kind in the public gas lighting industry was Imperial Continental Gas Association,
43 founded in London in 1824 by Sir Moses Montefiore (1784–1885) and other part-
44 ners, with a social capital of 2,000,000 pounds sterling, divided into 20,000 shares
45 of 100 pounds each, and with the objective of introducing public gas lighting into
46 the European continent (*The Monthly Magazine*, 1825, p. 148). In 1825, it pur-
47 chased the Gante gas factory, illuminating the city in 1827 and, from then, expand-
48 ing its activity to Germany, Austria, France, and the Netherlands (Moreau, 2010,
49 p. 937).

50 Within this context, we believe that it is necessary to analyse the principal strate-
51 gies followed by different English entrepreneurs to develop the gas industry in sev-
52 eral countries of Latin Europe during the nineteenth century. Specifically, we will
53 analyse the British presence in the gas industry of France, Italy, and Spain. To do
54 this, after this introduction there are three sections, one for each country studied.
55 The chapter finishes with general considerations in a conclusions section followed
56 by the corresponding references consulted for developing the research.

57 2 France

58 Paris was the first city of Latin Europe where the presence of English entrepreneurs
59 in the gas industry can be detected. After Winsor, the well-known company
60 Compagnie Anglaise was established on 4 August 1821 by the Englishman Aaron
61 Manby (1776–1850), the Frenchman Jean Henry, and the Irishman Daniel Wilson,
62 with the name Manby, Henry, Wilson et C^e. It had a social capital of 700,000 French
63 francs. Its gas factory was constructed in the west of Paris and lighted the neigh-
64 bourhood of Courcelles (Williot, 1999, pp. 50–64; Castro-Valdivia, Matés-Barco &
65 Vázquez-Fariñas, 2023, pp. 59–60).

On 30 August 1827, its director Jean Henry decided to cut ties with the company which then became known as Manby, Wilson et C^e on 20 November 1832. In 1834, this company acquired the Compagnie Royale, created by Louis XVIII in 1819 and privatised in 1822 under the name Société pour l'exploitation de l'Usine Royale d'éclairage. It became the largest gas company of Paris of the six existing in 1855, when they merged to form the Compagnie Parisienne d'éclairage et de chauffage par le Gaz. The recognised capital of Compagnie Anglaise at the time of the merger was 11,300,000 francs, which meant that in its 34 years of operation it had experienced an asset growth of 15.14% (*Bulletin des Lois*, 1856, pp. 1167–1168; Williot, 1999, p. 61).

On the other hand, the death of Daniel Wilson, the director of the company from 1827, gave rise to a new corporate change. Aaron Manby appointed Louis Margueritte for this position and the company was named Manby, Margueritte et C^e. from 13 October 1849. One year later, after the death of Aaron Manby, on 1 December 1850 Louis Margueritte became the sole administrator of the company. From 13 January 1854, the company became known as Louis Margueritte et C^{ie}., with two gas factories in the French capital, one at number 27 of Trudaine Avenue, originally of the Compagnie Royale, and another between the exterior boulevard of the Courcelles neighbourhood and Dames street, known as the Thermes factory (*Bulletin des Lois*, 1856, pp. 1168 y 1174–1175; Fabregas, 2003, p. 92).

The British influence in disseminating the gas industry in France began to lose strength as the nineteenth century progressed. Initially, the first proposals were related to English engineers and entrepreneurs until the dissemination of the technology enabled local entrepreneurs and those from other countries to bid for the public gas lighting concessions. After Paris, Bordeaux and Lille were the next French cities to have gas factories. In both cases, they were managed by the company Imperial Continental Gas Association (Quehen, 1955, p. 202).

The Royal Order of 23 June 1824 authorised the constitution in Bordeaux of a public limited company for supplying gas lighting to this city for 30 years, called Compagnie d'éclairage de la ville de Bordeaux par le gaz hydrogen and Jean Benel, a local trader, was its director (*Bulletin des Lois*, 1825, pp. 1–5 del n. 684 bis; *Le Guide*, 1827, p. 419).

By way of the municipal decree of 25 October 1825, this company was authorised to lay gas pipelines in several streets. The factory was in Caudéran and initially only supplied private individuals. The local council was interested in this type of lighting and signed a contract with this company on 11 September 1829 to light with gas the Louis XVI square and the Louis-Philippe I square, today known as Quinconces square. This lighting began to be supplied in October 1830. The service was extended in 1832 with the signing of a new contract with Benel on 19 July to light the Allées de Tourny (*Bordeaux*, 1892, pp. 328–329).

In 1836, the local council elaborated a list of specifications in order to extend the lighting to other parts of the city. It was modified in 1838 and approved by the municipal plenary of 21 September of the same year. This concession was granted on 28 August 1839 to the Imperial Continental Gas Association for 1 year as of 1 January 1842. The company renegotiated the conditions of the concession on

111 several occasions and was able to maintain the concession until 31 December 1875
112 (*Société de Géographie commerciale de Bordeaux*, 1876, pp. 50–51; *Bordeaux*,
113 1892, pp. 330–333).

114 In 1825, this company began work to illuminate the city of Lille, constructing a
115 factory in Caserne street, in the Saint-André neighbourhood, appointing N. Parvillez
116 as director (*Calendrier de Lille*, 1830, p. 87). As well as lighting the streets of Lille
117 for a good part of the nineteenth century, this company also illuminated Marseille
118 between 1837 and 1855 and Toulouse from 1840 to 1856 (*Le Gaz*, 1857a, pp. 91–94;
119 1857c, pp. 107–112; 1858, p. 28). In 1897, the company had a social capital worth
120 3,800,000 pounds and T. H. Goodwin Newton was its chairman. The company
121 requested voluntary liquidation on 29 April 1987 (*The Journal of Gas Lighting*,
122 1849–1850, p. 55; Skinner, 1879, p. 171; *The Gas & Electric Lighting Companies*,
123 1897, p. 301; *The London Gazette*, 1987, pp. 6151 and 6153).

124 On the other hand, European Gas Company, founded in London in 1835 with a
125 social capital of 200,000 pounds sterling, divided into 10,000 shares of 20 pounds
126 each and with the objective of providing public gas streetlighting in different
127 European cities, also participated in the dissemination of the gas industry in France.
128 Specifically, before 1840 it supplied lighting to the following French towns: Amiens,
129 Boulogne-sur-Mer, Caen, Havre, Nantes, and Rouen. In 1897, the capital paid
130 amounted to 751,635 pounds and J. B. Gill was the chairman. The company
131 requested voluntary liquidation on 10 April 1952 (*The Journal of Gas Lighting*,
132 1849–1850, pp. 54–55; *Le Gaz*, 1857b, p. 100; *The Gas & Electric Lighting*
133 *Companies*, 1897, p. 298; *The London Gazette*, 1952, p. 2129).

134 On 12 November 1861, the Corsican & Mediterranean Gas Company Limited
135 was registered with a social capital of 25,000 pounds, divided into 2500 shares of 10
136 pounds each, with its business address at 2, Great St. Helen's in London. Its first
137 chairman was R. E. Davidson and its chief engineer was George Anderson. The
138 objective of the company was to supply gas to the towns of Bastia and Ajaccio on
139 the island of Corsica. The company was removed from the register and dissolved on
140 7 March 1882. However, the service continued to operate and in 1897 it was sup-
141 plied by Clarke & Anderson, a company with its address at 4, St. Dunstan's Alley in
142 London (*The Journal of Gas Lighting*, 1861, p. 802; 1865, p. 334; *The London*
143 *Gazette*, 1882, p. 1106; *The Gas & Electric Lighting Companies*, 1897, p. 291).

144 Finally, On 12 November 1861, the Continental Union Gas Company Limited
145 was registered with a social capital of 400,000 pounds, divided into 20,000 shares
146 at 20 pounds each, with its business address at 29, Great St. Helen's in London. Its
147 first chairman was Lewis Cubitt (1799–1883). The objective of the company was to
148 obtain the exclusive exploitation of gas lighting concessions in different French and
149 Italian cities. In 1866 it managed the service in 15 towns. In France, it provided the
150 service in Albi, Beaucaire, Cette-Eygun, Montargis, Nîmes, Roanne, Rueil-
151 Malmaison, Strasbourg, and Vienne. In 1877, the capital paid by the company
152 amounted to 1,000,000 pounds. After more than sixty years in the market, on 27
153 March 1929 the company was dissolved voluntarily (*The Journal of Gas Lighting*,
154 1866, p. 860; *The Financial Register*, 1877, p. 607; *The London Gazette*, 1929,
155 p. 2265).

3 Italy

156

Turin was the first Italian city to install a public gas lighting service in 1837 (Castro-Valdivia, Matés-Barco & Vázquez-Fariñas, 2023, pp. 66–67). The British presence in the Italian gas industry before unification was scarce, only prevailing in the most populated cities of the former Papal States, Bologna and Rome.

In Bologna, the concession was obtained by Enrico Saint Cyr and Adriano Trouvé, together with the English engineers John Grafton (1796–1872) and Edmund Goldsmith, on 22 June 1846. They lit the city from 1847 to 1862, when the city council of Bologna cancelled the contract (Del Curto & Landi, 2008, p. 16; Tappi, 2014, p. 29).

On the other hand, the process began in Rome on 10 March 1847, with an edict from Pope Pius IX announcing the tender for introducing gas lighting in the city. A few days beforehand, on 6 March, the solicitation document of this service was presented (*Capitolato di appalto*, 1847).

The papal edict gave a term of forty days for the presentation of offers that fulfilled or improved the solicitation document to construct a gas factory outside the city walls and the corresponding distribution network. Two proposals were received. That of the Italian Guiuseppe Mazio, who had been the concessionaire of the oil lighting system in Rome since 1833 together with the Frenchman Jean De Dreigiérie. The other proposal was led by Adriano Trouvé and his brothers with the support of his partners in Bologna, Cyr, Grafon, and Goldsmith. The result of the tender was unexpected as Mazio was the most likely winner, as he had preferential rights over the new concession. However, the contract was signed with Trouvé on 3 December 1847 (Tappi, 2014, pp. 27–28).

The period of execution of the works was 18 months, but political and financial circumstances prevented this from being fulfilled, obliging the concessionaire to seek assistance from English capital once again. The constitution of the Imperial City of Rome and Italian Gas Light and Coke Company in February 1849, registered in London on 16 March of the same year (British Parliament, 1869, p. 4), enabled Trouvé to renegotiate the concession and sign a new contract with the city council of Rome in December 1851 (Tappi, 2014, pp. 27–28).

In November 1850, the English company appointed the English engineer James Sheperd, who directed the gas factories in Bologna and Rome on behalf of Trouvé, as its representative in Rome. In the spring of 1852, the construction of the gas factory of Rome began and, in July of the same year, Trouvé transferred the rights of the Roman concession to Shepherd. In order to obtain this concession, the English engineer negotiated a new contract with the city council on behalf of the Imperial City of Rome, which was signed on 30 July 1852. In this agreement, the company was granted a concession for 25 years from when the lighting service came into operation (Tappi, 2014, pp. 27–28).

Rome inaugurated its new lighting system on 1 January 1854. In order to manage the concession, the Imperial City of Rome was established as a limited partnership on 6 November 1852 with the name Società Anglo-Romana per l'illuminazione di

199 Roma col. gaz ed. altri sistema, and with its head office in Rome. It had a capital of
200 10,000,000 Italian liras, divided into 20,000 shares of 500 liras each and was known
201 in the English-speaking world as the Anglo-Romana Gas Company (Tappi, 2014,
202 pp. 36–40).

203 The presence of British companies in the gas lighting services of the Italian cities
204 after the unification of the country (with the creation of the Kingdom of Italy on 17
205 March 1861) increased significantly. At the end of the nineteenth century, around 25
206 Italian cities were supplied with gas by several English companies.

207 The first company detected was the Malta and Mediterranean Gas Company. It
208 was registered in London on 29 May 1861 with a social capital of 60,000 pounds,
209 divided into 12,000 shares of 5 pounds each. The extraordinary general shareholders'
210 meeting held on 15 November 1865 approved the signing of concessions, the
211 gas lighting of the Sicilian towns of Trapani and Marsala. In the case of the former,
212 the duration of the contract would be 30 years and in the latter, 40 years (*The Journal
213 of Gas Lighting*, 1865, pp. 855–856).

214 In Cagliari, the capital of the island of Sardinia, the water and gas services were
215 provided by Cagliari Gas and Water Company Limited, founded in 1862 with a
216 social capital of 150,000 pounds, divided into 7500 shares at 20 pounds each and
217 with its business address at 2, Moorgate Street in London. Its first chairman was
218 Erasmus Wilson (1809–1884). At the end of the nineteenth century, its chairman
219 was John Aird (1833–1911) and its chief engineer Sophus Simmelkjoer (1836–1913).
220 The extraordinary general shareholders' meeting of 21 November 1908 decided to
221 sell the concession to the town council of Cagliari, and on 16 February 1909 it
222 approved the voluntary liquidation of the company, naming as liquidators William
223 Barclay Peat (1852–1936) and Sophus Simmelkjoer, secretary and engineer of the
224 company, respectively (*The Financial Register*, 1876, p. 609; *The London Gazette*,
225 1909, p. 1592).

226 La Continental Union Gas Company Limited, mentioned in the preceding text,
227 was established in 1864 and had six concessions in Italy. In 1866, it provided ser-
228 vices in Alessandria, Genoa, Messina, Milan, Modena, and Parma (*The Journal of
229 Gas Lighting*, 1866, p. 860).

230 Finally, the Tuscan Gas Company Limited was constituted on 22 June 1876 in
231 London with a social capital of 25,000 pounds, divided into 2500 shares of 10
232 pounds each. By way of the Decree of 24 April 1879, it was authorised to operate in
233 the Kingdom of Italy, establishing its representation of this country in the Tuscany
234 town of Prato (*Gazzetta Ufficiale*, 1879, p. 2211). In 1897, the company supplied
235 gas in the Italian towns of Acqui, Bari, Civita Vecchia, Fossano, Lecce, Lucca,
236 Mondovi, Nizza Monferrato, Pinerolo, Prato, Saluzzo, San Remo, Savigliano,
237 Vercelli, Voltri, and Ventimiglia. C. Horsley was its chairman and A. F. Philips its
238 chief engineer. Its business address was at 38, Parliament Street in London. The
239 capital paid amounted to 179,380 pounds and 152,280 pounds were issued in debentures
240 (*The Gas & Electric Lighting Companies'*, 1897, p. 811).

4 Spain

241

The gas industry was introduced in Spain by the Frenchman Charles Lebon (1799–1877), who, on 17 May 1841, obtained the concession from the city council of Barcelona to provide a gas lighting service (Castro-Valdivia, Matés-Barco & Vázquez-Fariñas, 2023, pp. 63–64). In the same way as Italy, and as we shall see in Portugal, the English and French entrepreneurs competed to obtain the public gas lighting concessions. In the Spanish case, the French presence was highly significant, as 82.6% of the foreign investment carried out in the gas industry during the nineteenth century came from France. However, there was a greater British presence in this industry than one would expect (Costa, 1981, pp. 55–57; Martínez-López & Mirás-Araujo, 2021, pp. 114–116; Castro-Valdivia and Matés-Barco, 2020, pp. 223–224).

In Madrid, the English engineers Edward Oliver Manby (1816–1864) and William Partington Hurts (1814–1908) acquired the former concession of Viejo Medrano, which, in the 1830s, had failed in its attempt to illuminate the streets of the city. On 5 March 1846, the Sociedad Madrileña de alumbrado por gas was established with the objective of constructing a gas factory and its respective pipelines. The Spanish capital began to be lit by gas in July 1847. This company had financial difficulties and ended up in the hands of the Pereire brothers in 1856, through its financial entity Crédito Mobiliario (Sudrià, 1983, p. 104; Arroyo, 2002; Fàbregas, 2003, p. 16; Fernández-Paradas & Pinto Tortosa, 2020, p. 355; Martínez-López, 2020, pp. 2–3; Fernández-Paradas, Larrinaga-Rodríguez and Matés-Barco, 2020, pp. 53–55; Martínez-López & Mirás-Araujo, 2021, pp. 117–119).

These same English entrepreneurs founded the Compañía General Peninsular para el Alumbrado de Gas in June 1846. It complemented the previous venture in order to extend the business across Spain. In the same year, the concession of Valencia was acquired and the construction of the gas factory of Seville began. In the following year, in 1847, the company began to operate the concessions of this service in Cádiz, Málaga, and Santander. The financial problems of the company led it to bankruptcy in 1852 and it was liquidated in 1856 in the same way as the Sociedad Madrileña de alumbrado por gas (Sudrià, 1983, p. 105; Fàbregas, 2003, pp. 17–18; Fernández-Paradas & Pinto Tortosa, 2020, pp. 356–357; Martínez-López & Mirás-Araujo, 2021, pp. 117–119).

Another two English engineers who were present in Spain, as in the case of Italy, were John Grafton and Edmund Goldsmith, who, together with Charles Lebon, were awarded the concession of Cádiz on 28 February 1845. Among the proposals presented to this tender were those of another two British entrepreneurs: John Burnett Stears and Diego Federico Gregory. The latter bought the gas factory of Seville from William Partington Hurts in 1850, which was sold 2 years later to John Oliver York & Cía. (Fernández-Paradas, 2015, pp. 37–39; Martínez-López & Mirás-Araujo, 2021, p. 118).

The presence of British entrepreneurs has also been detected in other cities, but their proposals were not consolidated. In 1858, the company John Oliver York &

284 Cía. presented a project in Córdoba. Duncan Saw also made a proposal in this city
285 in 1861 as did the London-based company William Knight & Co. in 1863. This
286 same company was awarded the concessions of Murcia and Ferrol in 1864, although
287 it rapidly transferred its rights to other companies (Fernández-Paradas, 2009,
288 pp. 34–35; Martínez-López & Mirás-Araujo, 2021, p. 118).

289 The company Colonial and General Gas Company Limited was registered in
290 London on 1 July 1864, with a social capital of 250,000 pounds, divided into 10,000
291 shares at 25 pounds each, with the objective of supplying gas to the towns of Ferrol
292 and Murcia in Spain, St. Espiritos in Portugal, and Ajaccio and Bastia in France.
293 The company did not fulfil its objective in any of these cases and declared voluntary
294 liquidation on 24 May 1867. Edwin H. Galsworthy was appointed as its liquidator
295 and the company was removed from the register on 6 October 1882. In the case of
296 Murcia, the only concession acquired by this company, the rights were transferred
297 to the Murcia-born Sebastián Servet Brugarolas and Eladio Nolla Oriols, who began
298 lighting the city on 1 September 1867. They sold the concession to Charles Lebon
299 in mid-1868 (British Parliament, 1869, pp. 32–33; Ranea de Osés, 2019, p. 104).

300 The company Huelva Gas Company Limited was created in 1878 with a social
301 capital of 25,000 pounds, divided into 2500 shares at 10 pounds each and with its
302 business address in Glasgow (Scotland). The contract of the public gas lighting
303 concession was signed on 2 May 1877 and the factory began to operate in 1879 or
304 1880. On 17 November 1896, the company modified its statutes so as to be able to
305 supply electricity and expand to other cities (*The Edinburgh Gazzete*, 1882, p. 1099;
306 Martínez-López, 2017a, pp. 219–223; Martínez-López & Mirás-Araujo, 2021,
307 p. 120).

308 Finally, the Anglo-Spanish Gas Company was constituted in 1886 with a social
309 capital of 200,000 pounds, divided into 40,000 shares of 5 pounds each. In 1897, the
310 company had a capital paid of 12,490 pounds, loans worth 6000 pounds, it paid an
311 annual dividend of 2.5%, and its business address was at 1, Pancras Lane in London.
312 W. C. Parkinson was its chairman and F. A. Phillips its engineer (*The Gas & Electric
313 Lighting Companies*, 1897, p. 290). This company had the objective of supplying
314 gas to different Spanish cities, although it only obtained the concessions of Denia
315 and Xátiva, both in 1887 (Martínez-López, 2017b, p. 82). The extraordinary general
316 shareholders' meeting of 30 December 1909, chaired by William Pike Gibbons,
317 agreed with the voluntary liquidation of the company. The company was removed
318 from the register in 1929 (*The London Gazette*, 1910, p. 892; Martínez-López,
319 2017b, p. 96; Martínez-López & Mirás-Araujo, 2021, pp. 122–123).

320 5 Conclusions

321 The gas lighting business began in the United Kingdom in 1812. From then, the gas
322 industry internationalised rapidly. In 1817, Winsor created the Société des Interesses
323 pour l'éclairage au Gaz to light Paris, although it had to be liquidated in 1819 due to
324 the lack of profitability. This bad experience did not prevent other British engineers

from making a new attempt in Paris. In 1821, the Compagnie Anglaise was founded, led by Aaron Manby and Daniel Wilson, and was the most important gas company of that city for the first half of the nineteenth century.

In addition to the traditional individual initiatives, usually led by engineers, British capitalism directed a large part of its direct investment towards the rest of the world in the form of FSCs. The first company of this kind in the gas lighting industry was the Imperial Continental Gas Association, constituted in London in 1824 with the objective of introducing public gas lighting in the European continent. It operated in Germany, Austria, France, and the Netherlands during the period contemplated in this study.

France was the first country of those analysed where there was a presence of British entrepreneurs. Specifically, in the first half of the nineteenth century, two FSCs appeared in its territory, the afore-mentioned Imperial Continental Gas Association and the European Gas Company, constituted in London in 1835. After Paris, gas lighting was taken to several French cities by these companies. First, Imperial managed the concessions of Lille (1825–1890), Marseille (1837–1855), Bordeaux (1839–1875), and Toulouse (1840–1856). On the other hand, Europeans brought gas lighting to the towns of Amiens, Boulogne-sur-Mer, Caen, Havre, Nantes, and Rouen before 1840. During the second half of the nineteenth century, another two FSCs were established, Corsican & Mediterranean Gas Company Limited (1861), which provided gas lighting to the Corsica towns of Bastia and Ajaccio and Continental Union Gas Company Limited (1864), which in 1866 lit the town of Albi, Beaucaire, Cette-Eygun, Montargis, Nîmes, Roanne, Rueil-Malmaison, Strasbourg, and Vienne.

In the rest of the countries studied, the presence of British entrepreneurship can also be observed after 1845. Initially, there was a group of English engineers, who, usually in association with local investors attempted to obtain the concessions for gas lighting in different cities. Specifically, John Grafton and Edmund Goldsmith were related to the concessions of Bologna and Rome in Italy and Cádiz in Spain. Edward Oliver Manby and William Partington Hurts decided to invest in Madrid, Valencia, Cádiz, Seville, and Santander in Spain.

In the second half of the nineteenth century, British FSCs had a presence in Italy and Spain, in that order. The companies operating in Italy were the Imperial City of Rome and Italian Gas Light and Coke Company (1849) and the Società Anglo-Romana per l'illuminazione di Roma col. gaz ed. altri sistema (1852) in Rome, the Malta and Mediterranean Gas Company (1861) provided gas lighting in the Sicilian towns of Trapani and Marsala, and Cagliari Gas and the Water Company Limited (1862) illuminated Cagliari, the capital of the island of Sardinia. Furthermore, the Continental Union Gas Company Limited (1864) (which also managed concessions in France) provided the service in 1866 to Alessandria, Genoa, Messina, Milan, Modena, and Parma, while the Tuscan Gas Company Limited (1876) supplied gas to Acqui, Bari, Civita Vecchia, Fossano, Lecce, Lucca, Mondovi, Nizza Monferrato, Pinerolo, Prato, Saluzzo, San Remo, Savigliano, Vercelli, Voltri, and Ventimiglia. In Spain there were three companies of this type. The ephemeral Colonial and General

369 Gas Company Limited (1864), Huelva Gas Company Limited (1878), and the
370 Anglo-Spanish Gas Company (1886).

371 Finally, it should be indicated that the internationalisation process of the British
372 gas industry in the countries studied peaked in the last third of the nineteenth cen-
373 tury and that the business expectations were dampened by the competition from
374 electricity. Consequently, the majority of the afore-mentioned companies sold their
375 businesses before the First World War to local investors.

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