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Chapter 7. Foreign Companies, Public Intervention, and Ecological Crisis: Water in Seville, 1871-1959

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Abstract

This chapter seeks to analyse, from a business history perspective, the role played by British capital in the management of the water supply in Seville for almost seventy-five years through the company *Seville Waterworks*. Using primary business and public sources, it examines the origin of the company, its shareholding and organisational structure and business results, which were conditioned by demographics and rainfall, the different economic situations, and the public regulations, all within the framework of the evolution of the water sector in Spain and the British investment abroad.

Keywords: water supply, foreign British investment, free standing company, ecological crisis, municipalisation,

1. Introduction

Although Seville was one of the principal Spanish cities, its economic situation in the final decades of the nineteenth century, and to a lesser extent in the first third of the twentieth century, was sluggish. Local investments were focused on property and trade (Posadas 1991). The traditional overcrowding, aggravated by demographic growth (Table 7.1) and the deficiency of the infrastructures led to serious public health problems with high rates of mortality, particularly in the working-class neighbourhoods (González 1984; Barrionuevo 2005). This prompted the implementation, in the second half of the nineteenth century, of the new urban services that symbolised modernity; gas (1854) (González 1981), the railway (1859), the telephone (1880), water (1883), trams (1887), and electricity (1894), in which foreign capital played a leading role (British in water and mule-drawn trams and German in electricity and electric trams). However, these reformist measures clashed with the rent-seeking interests of the powerful Liga de Propietarios de Fincas Rústicas (Association of Rural Property Owners), founded in 1894, opposed to any investment in infrastructure, particularly in the case of water, which represented an increase in the fiscal pressure on property. This opposition was shared by the Chambers of Urban Property of other cities (Braojos, Parias, and Álvarez 1990; Calvo 1994).

Foreign capital played an important role in the implementation and management of the public urban services in Spain and other peripheral countries, due to the reticence of the Spanish capitalists to finance activities that involved high investments and required technological and network management knowledge. In the case of water, the technical restriction was lower, which explains the greater relative presence of local companies. Most of the capital in this activity was French, followed by British and Belgian capital (Costa 1981). The emergence of foreign investments in this sector took place in the last two decades of the nineteenth century, resulting from a convergence of the interests of banks, water management companies and pipe manufacturers (Matés-Barco 2002). From 1920, as in the case of other public services, the majority of foreign capital began to withdraw, particularly from the large cities. On a geographical level, the investments focused on medium and large-sized cities, such as Barcelona, Seville, Alicante, or Las Palmas, where the profit expectations were higher due to economies of scale and possibilities to expand the networks.

Table 7.1. Population of Seville and inter-census growth 1860-1960

Year	Population	Inter-census growth
1860	118,298	
1887	143,182	24,884
1900	148,315	5,133
1910	158,287	9,972
1920	205,529	47,242
1930	228,729	23,200
1940	312,123	83,394
1950	376,627	64,504
1960	442,300	65,673

Source: Population censuses.

British foreign investment in the water sector occurred relatively late, in the period 1885-1914 (Stone 1999). It came about due to an exhaustion of the possibilities of expansion for the sector in the domestic market derived from the intense municipalisation process of the activity carried out in Great Britain in the last third of the nineteenth century (Millward 2007; Hassan 1998). Furthermore, investment in water services was secondary compared to the other urban infrastructures. In the Spanish case, British investment in the water supply was modest, both in absolute and relative terms. It was irregular over time and occupied an intermediate

position among the British interests in Spanish urban infrastructure. In geographical terms, the British focused their initiatives on territories where they already had economic and strategic interests (mines, ports, winemaking), such as Andalusia (Seville, Cadiz, Huelva, Algeciras), Las Palmas, Alicante or Cartagena (Broder 1981).

2. Origin of the Water Services and of Seville Waterworks

The water in Seville had traditionally been obtained from the river Guadalquivir. There were two problems: its brackish nature due to the tides and human contamination. Therefore, it was decided to draw resources from upstream. This supply was limited to the poorest segments of the population, who also used wells, which were also often brackish and unsanitary. From 1172, the wealthiest classes were supplied by the Santa Lucía spring, in the municipality of Alcalá de Guadaira, via a 17-km long aqueduct called "Caños de Carmona". It re-used the Roman aqueduct and constituted the basic water supply system of the pre-industrial city. However, the lack of adequate maintenance led to an alarming reduction in the flow available from the beginning of the nineteenth century, aggravated by the growing contamination of the wells and river. Sanitation was even more precarious. The sewage network was insufficient, with frequent breakages and blockages (Collantes et al. 2011; Fernández 2011). The urban, demographic, and industrial growth resulting from industrialisation worsened these problems. In order to resolve them, in the mid-nineteenth century the aqueduct underwent renovation works, which finished in 1871, and new sources were added to improve the quality of the supply. These measures were insufficient. The city council, therefore, decided to tender the management of the city's water supply.

As was usually the case in the system of public services concessions in Spain, a series of projects presented by Spanish engineers and foreign companies (French) ended in failure. They were generally speculative in nature and had little business and financial solvency. Finally, in 1882, the city council approved the proposal presented by Georges Higgin Winfield, an engineer from London who worked in several British mining railway companies in Spain. The 99-year long concession established that the water for domestic use would be drawn from different springs of the Guadaira river basin, about 14 kms from Seville and 2.000 m³ for irrigation would be obtained from the river Guadalquivir. The minimum volume of water to supply would be 100 litres per day per person. This amount was lower than the 150 litres recommended but exceeded the 29-43 litres that, depending on the season, the people of Seville were receiving at that time. The maximum price established was 50 cts/m³ for individuals, 25 for industrial uses and municipal buildings and 15 for municipal irrigation. As was customary

in these processes, in December 1882, Higgin communicated the transfer of the concession to the construction company James Easton and Shaw¹, which, the following year, transferred it to *The Seville Waterworks Company Limited*, the former undertaking the building works, in exchange for £200,000 in shares and £100,000 in bonds. The service began operating in 1885. For the first five years it was managed by Easton & Anderson which paid £21,000 per year in rent to *Seville Waterworks* in exchange for the revenue from the water. Finally, in 1890, *Seville Waterworks* received the concession and installations for 4,961,304 ptas.

The Seville Waterworks Company Limited was founded in 1882 in London as a free standing company. This type of corporate form was frequently used by small British companies operating abroad (Wilkins 1998). Its principal feature was that it was an independent company, not forming part of a business group and its initial vocation was to operate in a foreign country. Another of its features, which was common to the British companies, was that it was financed principally through the capital market and not so much the banking entities as was the case in the German and Belgian companies. It was the oldest water management limited company with the largest capital in Andalusia (Matés-Barco 1997).

The founding capital amounted to 25,000 shares at £20, of which, in 1887, only just over half had been subscribed and paid up, 12,906 shares, that is, £258,120, with a maximum being reached in 1893 with £271,120. Bonds had been issued with a 6% interest for the value of £100,000. The number of shareholders was very high, which was frequent in the developed British capital market and in investments considered as being safe, such as those of public services. The immense majority of the shareholders and, particularly of the shares, were British, some of whom were residents in Seville and a small minority were Spaniards, all of whom lived in Seville. There was not a high concentration of capital, as the five largest shareholders only held 19.3% (Table 7.2).

Table 7.2. Shareholders in 1891

	Number	Number of shares	Shares by shareholder
British	170 (91.4%)	13,164 (98.2%)	77.4
Spanish	16 (8.6%)	242 (1.8%)	15.1
Total	186 (100.0%)	13.406 (100.0%)	72.1
Main shareholders			
Lord Hillingdon		750	

¹ In 1883, Higgin obtained the concession for the tram, which he transferred in 1887 to The Seville Tramways, which had no connection with *Seville Waterworks* (Braojos, Parias, and Álvarez 1990).

C.W. Mills	500	
D. Evans	480	
A.H.Mills	450	
R. Easton	405	

Source: PRO, Seville Waterworks 1891.

Its organisational structure was simple. There was a Board of Directors, based in London, formed by a chairman, secretary and board members and a manager in Seville, in charge of the operating and administrative personnel. The latter managed the day-to-day running of the company but had to consult any important decisions with the directors in London.

The Board of Directors and the management were characterised, overall, by their stability, as the majority of the members remained in their positions for a long period of time, sometimes being replaced by their sons, often only due to death. The chairman was usually one of the members of the board with the most experience. All of this favoured the continuity of the business strategies in a sector which, in any case, did not usually experience complications, given its continually rising demand and the absence of competition. This desire for stability was also exhibited in its financial relations, as its bank was always the same for the whole of its existence, namely Glyn, Mills, Currie and Co. Only in the early years, and most of all, at the end of the company's life was there greater instability among the directors. In the initial phase, due to the sudden disappearance of the only two Spanish members, most probably named to facilitate contact with the Spanish authorities. In the final phase, this instability was due to the internal tension of the moment.

The management and technical side was undertaken by the manager who was always an engineer and British. In addition, at least at certain times, there was a sub-manager and/or assistant manager. They were also engineers and assisted the manager or were responsible for occasional projects. The only presence of Spanish engineers that we have found was that of Joaquín R. Garay after the First World War as a sub-manager. The management of this company, therefore, was always in the hands of British engineers. This was contrary to other British companies in Spain in which a progressive allocation of responsibility was given to Spanish professionals, particularly from the beginning of the twentieth century.

3. From the Start of the Service to the Agreement of 1912 with the City Council, 1885-1912

In the early years, the evolution of the company was positive. The network expanded and in 1896 it began to supply the municipality of Alcalá de Guadaira. All of this led to an increase in the number of users² and the water sold (Figure 7.1). In 1891, the majority of consumption, 82.1% corresponded to free pipe users, that is, at a fixed charge, 11.8% to companies, 4.4% to public thoroughfares and fountains and only 1.7% to contracts with a meter. In monetary values, individual consumption grew from 78.3% in 1890 to 81.6% in 1895. Municipal consumption fell from 20.7% to 17.1% and port consumption grew from 0.8% to 1.1%.

Logically, revenues also increased, while costs did not rise in the same proportion due to the growing economies of scale. However, the profits expressed in pounds, although positive, were reduced by the negative evolution of the exchange rate. In any event, the economic and financial profitability (ROA and ROE) was the highest in the history of the company, enabling a regular and acceptable distribution of dividends at 3%-5%.

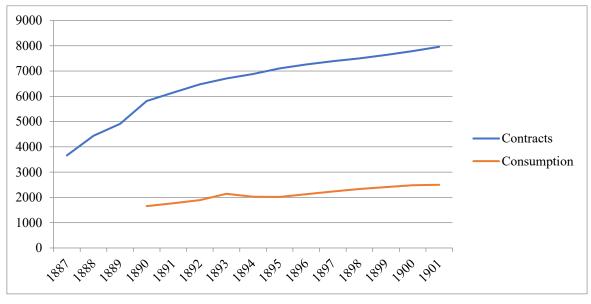


Figure 7.1. Water contracts and consumption, in thousands of m³, 1887-1901

Source: Annual Reports 1887-1901.

The increase in demand and the drought of several years forced the search for new water supplies and placed pressure on the costs of pumping due to the lowering of the water tables. In order to finance the works for the supply, installations and network expansion, the company

² In 1887, the contracts represented 2.6% of the population, increasing to 5.4% in 1901. They were still modest figures, meaning that domestic water was only available to 20%-25% of the population.

issued new bonds, all at 5%: £20,000 in 1890, £10,600 in 1895-1897, £6,300 in 1896-1897. In order to reduce its financial burden, in 1891 it approved the reduction of the interest of the initial bonds from 6% to 5% (Figure 7.2).

The year 1897 marked the beginning of the problems for the company. The Cuban war caused a strong increase in costs, particularly that of coal, as well as the taxes and also a fall in the exchange rate (Figure 7.3). On the other hand, the long drought obliged the company to purchase water from the town council of the Santa Lucía spring for three years.

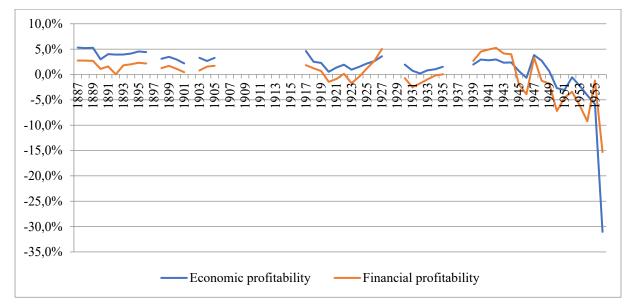
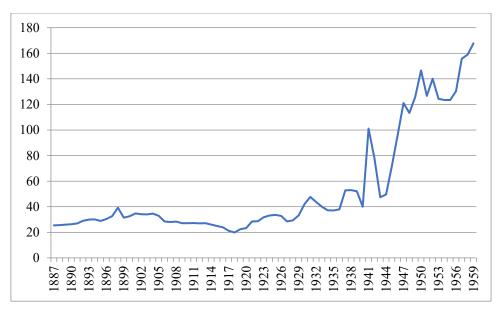


Figure 7.2. Economic and financial profitability, 1887-1956

Source: own elaboration based on Annual Reports 1887-1901.

Figure 7.3. Exchange rate pta/pound, in pesetas per pound, 1887-1959



Source: Carreras and Tafunell 2005, 703-6.

The forecast production in the concession was 20,000 m³, but due to the exhaustion of the initial springs, another three sources had to be used. Even so, they were still insufficient for the increasing demand, which obliged the company to sign a complementary contract with the city council in 1901 to use the "Caños de Carmona" in exchange for undertaking its maintenance and renovation. These waters were of a lower quality and accounted for 20% of the water supplied by the company. In 1912, the city council withdrew this use as the company failed to fulfil its obligations and began to manage it directly (Aparicio, 1990). In the stipulations of 1901, the city council committed to purchase from the company water from the Guadalquivir for irrigation and municipal services. The minimum amount was 731,000 m³ per year at 10 cts/m³ for irrigation and 15 cts for the rest. The rates of the new free pipe contracts for individuals were modified, increasing the number of groups, which ranged from 2.50 ptas per month to 25, depending on the rents. Industrial services would pay 25 cts/m³. The municipal debts with the company would be paid in five years with a surcharge of 6% per year. The conflicts between the public service concessionaire companies and the local governments were commonplace and were usually caused by the accumulated debt, the rates, the quality of the service and the renewals of the concessions.

The increase in the available water also led to an increase in wastewater, making the already previous precarious situation unsustainable. In order to definitively resolve this situation, the city council commissioned the construction of a new and modern sewage network with a length of 150 kms, in 1899 with *Compañía Anónima de Saneamiento y Urbanización*

de Sevilla, created that same year. Due to the delay in the construction works, sanitation was partially municipalised in 1920 and the new network began operating in 1926 (Aparicio 1990).

The situation of the company began to improve with the end of the war and the agreement with the city council in 1901. In order to undertake the new investments (wells, pumping stations), in 1901 the company approved the amortisation of the bonds in circulation and a new issue of £160,000 at 5%.

Throughout its long history, the manager's reports frequently referred to the level of rainfall, particularly in times of drought, as a highly relevant element in the capacity of the company to provide the service. The Mediterranean climate of Seville did not help to replenish the aquifers. In the period 1880-1950, the annual average rainfall was only 522 mm, but the irregularity was highly pronounced, as the standard deviation was 156.5 mm and the coefficient of variation was 27.4%. Furthermore, there was a sharp fall in rainfall during the summer (Figure 7.4).

The overwhelming predominance of the free pipe contracts represented an incentive for abusive water consumption and aggravated the always threatening gap between supply and demand. Aware of this, the company began a campaign to install meters in homes³. In other cities, this measure was highly conflictive due to the opposition of the users and owners with the abandonment of the free pipe system due to its cheapness and lack of control (Calvo 1994).

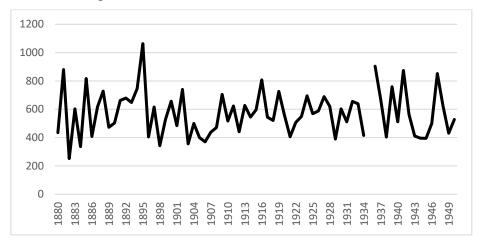


Figure 7.4. Rainfall in Seville, 1880-1950, in mm

Source: Resumen de las observaciones meteorológicas efectuadas en las estaciones del Servicio Meteorológico Español durante el año... 1880-1925 and Principales valores climáticos mensuales y anuales de...1926-1950.

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³ On 31/3/1903, only 6.5% of contracts were with a meter, on 31/3/1905 this percentage had risen to 11%.

4. From the 1912 Agreement to the Civil War, 1912-1936

Contrary to the demographic stagnation of the eighteenth and nineteenth centuries, the population grew significantly during the first third of the twentieth century due to the intraprovincial migratory movements, attracted by an incipient industrialisation and the Ibero-American Exhibition of 1929. This would have aggravated the traditional housing and sanitation problems. This meant that the preparation for the international exhibition had to include an ambitious urban remodelling which was coordinated with the hydraulic plans (supply, sanitation, and flood control) (Braojos, Parias, and Álvarez 1990).

The local tax office experienced two major phases. First, from the end of the nineteenth century until 1918 there was a stagnation in income and an imbalance due to growing costs (personnel, water supply, flood defence, Ibero-American Exhibition). Second, between 1919 and 1930, per capita income tripled thanks to the reform of the municipal tax system, which gave rise to an enormous increase in the investment capacity of the local government, also based on heavy indebtedness which, with the crisis of the 1930s, had to be partially written off by the government (Braojos, Parias, and Álvarez 1990).

Due to the growing mismatch between supply (reduction in the flow of the springs) and demand (demographic and industrial growth) and after laborious negotiations, a new agreement was reached between the company and the city council on 26 October 1912 to extend the supply. A double pipe and supply system was established: drinking water for human consumption taken from the Alcores (Alcalá de Guadaira) and filtered water from the Guadalquivir for irrigation and fire hydrants. The city council would have one million m³ per year for 225,000 ptas. The debt of 24,000 ptas of the city council with the company would be paid in eight yearly instalments of 3,000 ptas.

The First World War complicated the application of this agreement and the very financial stability of the company. The maritime transport problems hindered and increased the cost of the import of materials (pipes, coal). Inflationary pressure, in terms of materials and wages, worsened in the post-war period, which made it very difficult to maintain a balance of the exploitation with the rates agreed in 1912. Therefore, the company negotiated a price increase with the city council. Despite the increase obtained in 1918, it was insufficient due to the continuous increases in costs.

Within this context, in 1922, a new agreement was signed with the city council to increase the volume of water taken from the river. The city council made a debt issue to finance the works. Meanwhile, the company began to exploit new wells and had to adapt the installations and extend and improve the distribution network. During this modernisation

process of the installations, the electrification of the pumping stations began and was completed in 1927, generating a significant reduction in costs. Measurement instruments were installed which enabled any failure in the overall efficiency of the system to be located. The maintenance of the meters was reinforced and sterilisation with chlorine began in compliance with the new regulations. Despite the extensions and improvements, the reality was that the daily supply per inhabitant was practically the same as at the end of the nineteenth century and was still a long way off from the minimum of 100 litres stipulated in the concession⁴.

In parallel, the city council contemplated a possible municipalisation of the service, in line with the debate open in Spain from the second decade of the twentieth century, with a certain delay with respect to other European countries (principally, Great Britain, Germany and Italy) where the municipalisation of services had been a reality since the end of the nineteenth century. Also influential was the context of the mass withdrawal of foreign capital in local public services between 1918 and 1923. For this reason, the municipal technicians elaborated a report in 1925. They valued the installations of the company at 9.5 million pesetas. The network of the Guadaira was 150 kms and that of the Guadalquivir 100 kms. They considered that the financial situation of the company was critical. Municipalisation would oblige the city council to issue capital worth 12 million pesetas, install mandatory meters and increase the rates to 75 cts/m³. The alternative in order to maintain the equilibrium of the exploitation would be to authorise an increase in the rates to the concessionaire or for the city council to assume the costs of extending the supply. Finally, the city council opted for a middle path: it municipalised only the supply of the water from the river in 1925.

In the 1930s, the situation worsened for the company due to a change in the economic situation and the new socio-political context. The economic failure of the Exhibition, coupled with the Depression led to a high level of bad debt, shared by other public services. This debt was mostly accrued by the users who received common water in the new urban development Ciudad Jardín, of the developer Nervión. The company bought the Ciudad Jardín network from Nervión in 1934 and progressively signed contracts for individual meters with these people (550 contracts). The city council could not make the payments for the water consumed or pay the interests of its bonds, the majority in the hands of the company.

To all of this we must add the wage increases derived from the labour disputes, the new charges and fines for not supplying the quantity stipulated in the concession, the strong

⁴ 80.2 in 1890, 83.7 in 1927, although in the latter case the filtered water from the Guadalquivir managed by the city council would have to be added.

fall in the exchange rate and the prolonged droughts. This latter factor reduced the water reserves, necessitating the digging of new and deeper wells in Clavinque. The company attempted to improve the efficiency of the system, intensifying the inspections of the meters to prevent leaks and illegal diversions, reviewing the long-term contracts for low-income homes and establishing controls to prevent the entrance of refuse in the distribution network. It also requested an increase in the prices, although unsuccessfully.

On the other hand, and to prevent the loss of currencies and a greater deterioration in the exchange rate, the Spanish authorities blocked the outflow of capital. This prevented transfers in pounds of the business profits from Seville to London. In view of this critical situation, the company approved a three-year moratorium which was extended several times (until 30 September 1936) on the payment in cash of interests and the amortisation of the bond.

In 1933, the municipal technicians elaborated a report relating to the complementary water supply project. At that time, the city had three types of water service:

- 1. Those derived from the Caños de Carmona. This was an old, 12km-long aqueduct, half of which was in poor condition. It provided an average daily flow of 5,000 m³. The waters were contaminated downstream from Alcalá de Guadaira. The pressure was insufficient for the water to reach the flats. The city council was responsible for the conservation and distribution.
- 2. *The Seville Waterworks*. Water collected by filtering galleries close to Alcalá de Guadaira or through wells in the Clavinque estate. Average daily flow of 15,000 m³. Deficient and intermittent service. In general, the water did not reach the flats.
- 3. Municipal service. Filtered water from the Guadalquivir. Filtering installations for 25,000 m³ per day. Highly variable chemical conditions depending on the seasons and river flow. These waters had to be replaced by the waters whose collection was being planned.

5. From the Civil War to the Municipalisation of the Service, 1936-1959

The Spanish Civil War and the subsequent World War hindered and increased the cost of obtaining energy and all types of materials. The autarchic and interventionist policy of the new regime altered the change process and working conditions. The exchange rate of the peseta was fixed by the government with different values depending on the purpose. The outflow of currency required government authorisation. In order to compensate the high inflation of the whole period, the paternalistic labour policy drove wage increases and different social securities. On the other hand, the intense migratory flows from the countryside to the city

accelerated in the 1950s, leading to a persistent and significant increase in the demand for water.

Within this context of cost inflation (labour, electricity), pressure from the demand and strong state interventionism, the company had to act and repeatedly requested price increases. They were granted but only in small amounts and with long delays due to the governmental policy of controlling inflation. Therefore, they were insufficient. All of this deteriorated the financial position of the company, until it became clear that the best option for all parties would be the municipalisation of the service. The question now was the amount that should be paid by the city council for the early rescue of the concession. The situation of the local tax office did not allow it to undertake this type of spending. Therefore, the municipal authorities were protracting the negotiations, most probably because the economic suffocation of the company forced it to negotiate downwards. In the light of this impasse, the company recurred to the British embassy for it to mediate with the Spanish government so as to accelerate the decisionmaking with respect to the municipalisation of the service and to approve the increases in rates that were essential to prevent bankruptcy. As in the case of other British companies with difficulties in Spain (Martínez-López 2020), the embassy of the United Kingdom in Madrid took the issue very seriously and took action with the different Spanish ministries involved (Finance, Home Affairs, Foreign Affairs), expressing, with a measured and diplomatic tone, the points of view of the company. All of this was done after previously informing the Foreign Office in London and obtaining its acquiescence. This office also maintained close contact with the Board of Directors of the company. Below, we will analyse how this process developed.

The city council constructed the Algaba dam in 1937 to collect water from the river Rivera de Huelva, close to Seville, and not dependent on the Guadalquivir. The following year, it approved the project of the new water supply for which the Minilla reservoir was constructed. It became partially operative in 1946, enabling the storage of 20.000 Hm³, together with certain sections of the piping channel to the city (González 1981). Due to the insufficiency of the municipal resources, the *Confederación Hidrográfica del Guadalquivir* intervened, which elaborated a Supply Plan in 1950. This Plan established a supply of 250 litres per day per person in the city. The works consisted in the finalisation of the Minilla reservoir, operative in 1957, the 42 km-long piping channel, the processing station and the headwater pond of 200,000 m³ (Aparicio 1990).

From 1940, the company obtained authorisation to send, at the exchange rate and amounts fixed by the government, the profits to London. This enabled it to pay the interests of the debentures and the accumulated delays, although the moratorium continued to be extended.

The distribution network was expanded to meet the growing demand and urban expansion to new neighbourhoods. However, this clashed with the difficulty to obtain pipes and other types of materials. In 1942, the government approved the replacement of the free pipe contracts with meters and a minimum consumption. The new flat rate would be 0.56 ptas/m³, as opposed to the previous 0.32-0.50 pesetas. In 1945, all of the more than 7,000 free pipe contracts had been transferred to meters.

The water rates in Seville were frozen from 1918. In 1936, the company requested a rise and, after arduous negotiations, obtained an increase considered to be insufficient. In around 1938, the Seville water rates were the seventh cheapest of 35 Spanish cities. The civil and world wars postponed new appeals. At the end of 1944, the company renewed its request. The rate requested was 0.75 ptas/m³. Immediately after the world war, the first appeal for help from the company to the British government was made with respect to this matter. From September 1945, interviews were held between the manager and Spanish authorities (mayor, Undersecretary for Industry), and the commercial attaché to the British embassy in Madrid (with the Undersecretary of Trade, Industry, Ministry of Industry and Trade, Ministry of Foreign Affairs) and much written correspondence between the embassy, the Foreign Office and, to a lesser extent, the company took place. The usual dynamics consisted in the company transmitting its request for help to the Foreign Office, which passed it on to the embassy in Madrid, which made a confidential report based on the information that it could gather and the actions it could take with mostly second-level officials of the ministries involved. Finally, the Foreign Office informed, after filtering the internal comments, the company of the actions taken. In the final stage of the negotiations, the Foreign Office consulted the Treasury.

The Spanish authorities were aware that the delay in the approval of increase in rates could be interpreted as a deliberate manoeuvre to financially suffocate a foreign company. Within a context of a desire for the new regime to break the international isolation, the Ministry of Industry maintained a diplomatic attitude with the British embassy, ensuring that there was no such discrimination, and that the decision was speeded up. At the end of 1945, the new rate of 0.75 ptas/m³ was approved, increasing from the former 0.50 ptas. Further increases were subsequently obtained: 1.13 (1947), 1.22 (1949), 1.65 (1951). However, the company considered them to be insufficient and that they had been adopted too late. It alleged that while the wage increases and social norms had to be applied immediately, the authorisation of new rates suffered a very long delay, a period in which the company operated with losses.

The growing labour costs constituted a serious problem for the company. Between 1937 and 1949, the administrative staff in Seville had doubled and the cost had multiplied by five

due to the increase in the workload (growth in the number of users, switching from free pipe to meter contracts) and wage and social improvements. Another significant problem was the progressive deterioration of the exchange rate, in response to which the company attempted to speed up the sending of remittances. The frequent power cuts, particularly during the summer drought, negatively affected the pumping stations and reduced the water supply. The losses in distribution continued to be high. A significant part was due to small leaks inside the homes, which did not compensate the replacement of meters. From 1950, considerable losses were incurred, and the company could not meet the payments of the interests of the bonds, The prolonged lack of profitability for the shareholders led to growing internal tension.

From 1951, the company was fully aware of the economic non-viability of continuing to manage the service under these conditions, particularly with the scarce and decreasing availability of water in the Clavinque basin. This was the structural cause of its problems, together with an expanding demand. Therefore, with the support of the embassy, it attempted to open negotiations with the city council and Spanish authorities for the early rescue of the concession and the temporary approval of a rate that would prevent its bankruptcy. The delicate financial situation of the British company was not an exception. The majority of the public services companies in Spain, particularly essential services such as water, had serious financial problems due mainly to the mismatch between the continuous cost inflation and the approval of clearly insufficient rates. This led to the municipalisation, with governmental financial support, of many local water concessions in the 1950s.

It is important to note that, in response to the widespread historiographic opinion of the Franco regime's animosity to foreign capital, the embassy expressly denied, also in the internal confidential reports, that the case could be interpreted as an attack on a foreign company. However, there were nuances in the British position. While the embassy, particularly in its trade department, was highly cautious, it denied discrimination on the grounds of origin and considered that no more could be done for the company. The central services of the Foreign Office deemed as intolerable that a British company was deliberately led to bankruptcy and recommended that the highest level of pressure be applied, although it consulted the Treasury. The Treasury agreed but considered that the ambassador should be correctly advised in view of the probable objections of the Spanish authorities to the rate of the company being 2.5 higher than that of the city council and one of the highest of Andalusia and that it was not acceptable to include the high costs of the London-based office. They could also argue that the early rescue would not have to involve a compensation to the company, given that it was operating without profits.

In order to prepare the negotiating strategy, representatives of the company, the Foreign Office and the Treasury met in London on 28 July 1952. At this stage, and aware of its weak position, the company only aspired to a modest economic compensation⁵ and was willing for the compensation to be deducted from the net income derived from the price increase that it was requesting. Despite the British dealings with the Ministry of Foreign Affairs, the Ministry of Industry continued to refuse to authorise price increase until the company had reached an agreement with the city council, although it was evident that the latter was in no hurry to do so, leading to a dead end.

The Undersecretary of Industry confidentially informed the British commercial attaché that the reticence of the mayor to reach an agreement was due to local politics. Through its daily newspaper, the Phalange party in Seville launched a nationalist campaign against the company, alleging that the concession should be cancelled without compensation, as it had failed to fulfil the terms of the contract regarding the pressure and amount of water. Therefore, the company, as suggested by the manager, approved the hiring of the services of a Spaniard who was well connected with the local Phalange circles who, as well as receiving a commission would be authorised to pay bribes to facilitate the negotiations. These services proved to be unfruitful⁶.

Due to its accelerated financial decline and maybe as an element of pressure, the company communicated that in a few months it would not be able to pay the wages or continue providing the service. Within this situation of uncertainty, a representation of the employees of the company met in Madrid at the end of 1952 with ministerial representatives in order to transmit their concerns about the labour situation, which constituted an element of pressure on the Spanish authorities to speed up the resolution of the matter.

The embassy considered that Spain would not accept including the interests of the bonds or the expenses of London. The Treasury proposed alternatives of "creative accounting" such as inflating the authorised amortisation or the costs of Seville, including those of London. Despite the insistence of the company, the Foreign Office gave precise instructions to the embassy to not enter into details regarding the economic compensation requested by the company.

⁵ The company was reticent to talk about specific figures, even with the Foreign Office. However, on a confidential basis, the manager informed the commercial attaché that in 1952 the Board of Directors had approved the claiming for 180,000 pounds (around 20 million pesetas). This figure was much lower than previously predicted.

⁶ This person could have been Antonio Gamero Martín, an administrative employee of the company, a councillor of the Unión Patriótica in Seville during the dictatorship of Primo de Rivera, chairman of the Colegio Pericial Mercantil and the Unión de Empleados de Escritorio, and who, surprisingly appeared in 1952 as a "representative" of the company undertaking different actions with the city council and the government.

The city council needed the distribution network of the company but was less interested in the facilities in Clavinque as it had its own water resources. Therefore, the company placed its hope in them being acquired by the United States military authorities to supply the air base of Morón de la Frontera (Seville) within the context of the bilateral agreements of 1953. However, the United States considered it more appropriate to negotiate with the city council, not the company.

Meanwhile, the Guadaira basin was running dry due to the increase in the extraction of water as a result of the expansion of irrigation, with an increasing number of wells and a higher extraction capacity of the pumping systems. Excluding evaporation and that absorbed by plants, the rainfall received was incapable of meeting the requirements, which was giving rise to a situation of water stress.

The Board of Directors resigned in 1952 due to its inability to reach sufficient price increases and open negotiations with the city council. Over the course of this year, there were several resignations and appointments of board members. The new Board of Directors favoured the adoption of a more belligerent position with respect to the city council, sending it an ultimatum. This clashed with the more prudent attitude of the manager and the recommendations of the embassy which, at this crisis point, received timely information from the consulate in Seville. The internal tension in the company intensified due to the accumulation of losses and the lack of perspectives for its future. The shareholders seemed to have assumed that they would not recover their capital as they had not received dividends since 1930. But now the novelty was that this idea was spreading to the bondholders who in the previous years were also subject to continual delays in the collection of their coupons and the amortisation of their securities. This led to their mobilisation and in the turbulent General Assembly of 1953, the elderly Scottish General Macpherson was elected. He possessed a large package of bonds but had no experience in foreign investment. He considered that this matter required firmness and efficiency and called for the reduction of the wages and pensions of the employees. The new president bombarded the manager, Adams, with bitter and continuous criticism and degraded him, which may have led to his resignation. This decision was taken by the Secretary Raine for the same reason⁷. The attitude of the new president aggravated the delicate situation of the company even further and its internal division weakened its negotiating position with the city council. In the light of the above, the bondholder committee, created on 21 July 1953, obliged him to resign at the end of this year. Probably due to the influence of this

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⁷ The board member Sparrow and A.G. Bibb, assistant to the manager, also resigned.

committee, the moratorium on the payment of interests of the bonds, which had been extended since the 1930s and expired on 30 September 1953, was not renewed.

At the end of 1955, the negotiations, in which a representative of the bondholders also participated, accelerated, within a critical financial context for the company as the creditors (principally Sevillana de electricidad, the manufacture of the meters and the Ministry of Finance) increased their pressure. In February 1956, the company sent the city council a valuation of its assets undertaken by independent experts. The city council rejected it and proposed a price of 13,324,393 ptas (131,131 pounds), which was accepted by the company. The payments were to be made in pesetas, a third in cash and the rest in four equal annual payments with an interest of 4%. The city council took possession of the assets on 31 December 1956. It also acquired the warehouses of Seville and two lorries, which were not included in the concession and valued at 1.5 million pesetas, a third in cash and the rest in four years with interest. It took over the workforce in Seville in exchange for 500,000 ptas from the company. Also taking into account the net balance of the water sold by the company to the city council and of the filtered water sold by the city council to the company, the latter received a total of 10 million net pesetas from the Seville city council. The total received was only enough to pay the priority creditors and a small proportion of the bonds (6%) but was insufficient to amortise the bonds (5%) or the ordinary or preferential shares.

In 1957, the land of Alcalá de Guadaira was sold for 844,892 ptas. In the following year, an agreement was reached with the town council of Guadaira for the sale of the asset for 825,000 ptas: initial payment of 225,000 and three yearly payments of 200,000 ptas at 4% interest. While being much lower than the real value, the valuation was considered to be the best possible option. On 26 May 1959, the 73rd Ordinary General Shareholder's Meeting was held, which was presumably the last. In short, the company had to sell its assets for an amount that was much lower than their book value⁸, but this was the least harmful alternative, as it could have been seized without compensation due to its inability to continue providing the service. The new municipalised services functioned poorly due to the lack of coordination between the technical and administrative sides, until the *Servicio Municipal de Aguas* was created in 1968 with its own budget and autonomous management (Aparicio 1990).

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⁸ The company would have received a total net amount of 11,669,892 ptas, equivalent to 106,090 pounds at the exchange rate used by the company in 1957 of 110 ptas/pound, although this amount was most probably lower due to the payments being spaced over four years and the deterioration of the exchange rate during that period. In 1956, the net book value of its fixed assets was 463,897 pounds.

6. Conclusions

Sevilla Waterworks was the longest living foreign water company in Spain. It was a free-standing company, a model that was frequently adopted by British companies operating abroad, which gave them great flexibility. Its financing (shares and debentures) came from the wide British capital market, the incipient "popular capitalism" which had begun to form at the end of the nineteenth century. Its shareholder, director and management structure were characterised by stability.

Throughout its long history, the company experienced several phases, which were common to all the public service companies. It had a golden era until the First World War. The continued, but assimilable, expansion of demand and the availability of financial and water resources enabled the service and distribution network to be expanded, reducing the unit costs due to the growing exploitation of economies of scale. Price stability allowed the rates charged to generate profits that could be distributed among the shareholders in the form of dividends. However, the deterioration of the exchange rate in certain situations, such as the Cuban war, negatively affected the results expressed in pounds.

The difficulty to obtain materials, the exchange imbalances and, particularly the inflation of costs due to the Great War and post-war period in an activity of a frozen and regulated unit revenue (rates) seriously affected the financial equilibrium of the company. In the 1920s, the company's response was to attempt to contain the costs by improving efficiency and modernising its facilities. The Depression and socio-political agitation of the 1930s led to an increase in defaults and wage demands. The political economy, foreign exchange and labour policy of the Franco regime constituted the final blow for the company. The high and prolonged inflation of costs (labour, energy, etc.) rendered the operations unfeasible, despite the continual rate increases which were delayed and insufficient. To this, we should add an exchange rate that was arbitrarily fixed by the government, and which had a highly negative effect on the results in pounds. As a backdrop, over the company's long lifespan, becoming worse in the final decades, was the exhaustion of the water resources of the company. In light of all of this, the only alternative was the municipalisation of the service, which would enable the joining of the greater water resources of the city council with the company's distribution network. The lack of financial resources and political will of the city council deliberately extended the negotiations in which the British embassy intervened. Finally, in 1957, the city council took possession of the facilities for a price that was significantly lower than their book value, seriously harming the bondholders and particularly the shareholders, who lost all of their capital.

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Appendix

Board of Directors, 1882-1959

Director	Position/years		
Adam, John Mackay	M 1933-1959	D 1953-1959	
Bithell, John J.	M 1908-1921		
Blaber, William	D 1891-1903		
Calzada, T. de la	D 1882-1885		
Castañeda, Tiburcio	D 1900-1910		
Compton-Bracebridge, J.E.	D 1882-1885		
Crew, Charles	S 1886-1894		
Curry, T.C.	M 1922-1924		
Devonshire, Easton	D 1896-1910		
Dickinson, Arthur	D 1909-1921		
Dickinson, William	D 1922-1935	P 1936-1947	
Easton, James Rammel	D 1939-1951		
Emsheimer, Rudolf	D 1953-1956		
Evans, David	D 1882-1890	P 1891-1901	
Filgate, Macartney E.	D 1917-1919	P 1920-1925	
Friend Tynell, Charles A.	M 1882-1907		
Grace, Oliver Jelf	P 1953-1956		
Gray, George Wynter	D 1931-1941		
Hamilton, Gerard Montague	D 1933-1947	P 1948-1952	
Hamilton, John Montague	S 1895-1925	D 1926-1932	
Horner, Edward	P 1886-1890		
Jackson,Frank S.	D 1888-1921		

Johnston, E.F.	D 1882-1890			
Lambert, Cowley	D 1882-1901	P 1902-1917		
Lawford, Evelyn Godfrey	D 1942-1952			
Mitchell, A.J.	S 1939-1945			
Mowat, Thomas Flett	S 1926-1935			
Raine, G.N.	S 1946-1959			
Schrimiton, George Ernest	D 1948-1952			
Segovia, G.	D 1882-1885			
Tufnell, Carleton F.	D 1920-1926	P 1927-1935		
Walter, Vivian Lucas	D 1953-1959			
West, P.	M 1925-1932			
Wilson, T. Perceval	D 1902-1909			
Young, Robert M.	S 1882-1885			
P: President; D: Director; S: Secretary; M: Manager				

Source: Annual Reports 1887-1956.