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Women entrepreneurs and family networks in Andalusia (Spain) during the second industrial revolution

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ABSTRACT

This article studies the relationship between gender and entrepreneurship in Andalusia, a region in the south of Spain, between 1886 and 1959. The aim of the text is to answer the question: Were women active in entrepreneurship, or merely pieces in the economic strategies of the males who governed their families? To do this, a database built from the commercial registers containing more than 8,000 companies is used. The results obtained, by way of a combination of quantitative and qualitative research, as well as the application of the Social Network Analysis, indicate that the women who participated in the forming of multi-owner firms were subject to the decisions of their male partners, and hardly had any opportunities to develop an active business role. Female subordination is explained by the sociocultural characteristics of the institutional framework as well as the late economic development of the region.


KEYWORDS

Female firm owners; entrepreneurship; business family; Social Network Analysis; Spain

Introduction

Esther Duflo has pointed out that female empowerment and economic progress develop hand in hand (Duflo, 2012). This implies that a society where women can develop their abilities and have equality of access to resources with men will be a more developed society. At the same time a more developed society reinforces the independence of women and increases their access to resources. In this circular relationship, women's participation in entrepreneurship becomes a route to female empowerment, and consequently to economic development.

Entrepreneurship is one of the main sources of wealth creation in capitalist societies. The concept of entrepreneurship refers to the discovery, evaluation, and exploitation of business opportunities (Shane & Venkataraman, 2000), and the start-up of any new economic activity which frequently implies the creation of a new organisation (Reynolds, 2005). Assimilating the founding of a company to the application of an innovation implies a simplification of Schumpeter's theory (Schumpeter, 1934), but instrumentally it allows the identification of entrepreneurs with those people who start businesses.¹ At the end of the twentieth century an interesting debate developed over the reasons that explain why territories differ in their

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degree of entrepreneurship. To some researchers, entrepreneurs were people who presented certain unique 'traits' which allowed them to spot business opportunities. To others, on the other hand, the 'rates' of business focus depended on the characteristics of the environment, which ultimately were what determined a greater or lesser tendency towards business undertakings.² In fact, the bibliography of entrepreneurship pays more attention to the surrounding characteristics. In the different contexts in which entrepreneurs emerge and develop their business activities, institutional, political and cultural elements, as well as access to finance, the formation of human capital and other factors interact and condition the possibilities and the behaviour of entrepreneurs. In the debate between supporters of 'traits' and supporters of 'rates', the role played by women was not considered. However, some researchers had already studied the relationship between gender and entrepreneurship, from the pioneering paper by Eleanor Schwartz (1976); in the 1980s and 1990s, numerous articles were produced on the participation of women in entrepreneurship (Baker et al., 1997; Birley, 1989; Brush, 1992; Kalleberg & Leicht, 1991; Mirchandani, 1999), and with the turn of the century there was a boom in this subject of study.³ More recently, research on gender and entrepreneurship has notably increased, arguing the necessity to incorporate the specific perspective of women (Brush et al., 2017; Henry et al., 2016; Jennings & Brush, 2013).

While the available research on gender is very complete in the area of management, the economic historiography on women entrepreneurs is not as extensive, although there have been relevant contributions (Aston & Di Martino, 2017; Escobar Andrae, 2017; Gálvez-Muñoz & Fernández-Pérez, 2007; Hernández Nicolás & Martínez-Rodríguez, 2019; Khan, 2016; Martínez-Rodríguez, 2020; Rinaldi & Tagliacuzzi, 2021). Normally, the bibliography on women in the world of business has highlighted the close relationship that exists between females and family businesses. In this sense it shows that women in family businesses have been 'invisible' (Cole, 1997), and their role has consisted of supporting the actions of the male members of the family (Cesaroni & Sentuti, 2014). However, this invisibility (for example, at the time of succession to the head of businesses) does not mean that women have not been fundamental in the survival of family businesses (Blondel & Niforos, 2013).⁴ This statement seems especially valid for economies such as Spain, where family businesses have historically been very relevant (Fernández Pérez & Puig Raposo, 2007; Puig & Fernández Pérez, 2009). But, in any case, women have generally taken the reproductive role and the roles related to the sphere of care: producing the next generation, educating future business leaders and transmitting family and business values (Rodríguez-Modroño et al., 2017).⁵ In relation to the reproductive function, many works have highlighted the importance of widows, who took charge of the family business after the death of their husband until their sons came of age or attained the abilities to take charge of running the business (Escobar Andrae, 2017; Hernández Nicolás & Martínez-Rodríguez, 2019; Martínez-Rodríguez, 2020; Solà i Parera, 2012). Likewise, frequently it was women who provided the capital that their spouses needed to start their entrepreneurial activity; but have also been used to forge matrimonial alliances which contributed to increasing the family capital (Blondel & Niforos, 2013; Díaz Morlán, 2009, 2013). Women have therefore contributed to developing the family's social capital, building and maintaining personal networks that can be useful for the family business (Karlsson, 2001). Additionally, these family connections stand out among the relationships of confidence which support the establishment of personal networks, so fundamental to entrepreneurship. Authors such as Granovetter (1992) or Casson (2010) have argued that business activity does not depend on individuals but rather on groups of people, networks

which facilitate the discovery of business opportunities, as well as their financing and putting into operation. Personal networks are frequently the origin of business groups, which are usually associated with imperfect markets or ones that are not well developed.⁶ This makes it necessary to understand precisely what women's participation has been in family networks dedicated to the setting up and running of businesses.

This article studies the relationship between entrepreneurship and women in Andalusia, a region within Southern Spain, between 1886 and 1959. During the period under consideration the region underwent its second industrial revolution, somewhat behind the more advanced industrial nations.⁷ The question in focus is whether the women who started businesses in the region were truly entrepreneurs, or whether their participation in the setting up of the business was mainly due to family strategies directed by their male partners. To answer this, first the 8,300 multi-owner companies established in Andalusia have been analysed, and 2,700 women who participated in their creation have been identified. Subsequently, the links that unite these women with other founding partners have been researched. Finally, the methodology of Social Network Analysis has been applied to understand the role of women in the main networks of entrepreneurs who were active in the region.

The structure of the text is as follows: in the next section the relationship between entrepreneurial activity and gender in modern Spain is examined from a comparative perspective in relation to other countries of the western world. The third epigraph presents the sources used and the methodology: the Books of Firms (*Libros de Sociedades*) in the public register from the Andalusian Business Registers, and the Social Network Analysis. The fourth section offers two perspectives, one quantitative, the other qualitative, on the role of women in the setting up of businesses and on the business networks respectively. The text finishes with some brief conclusions.

Women and business activity in Spain, nineteenth and twentieth centuries

Although there were some previous exceptions, it was from the 1990s that research of a historical nature into women and the world of business began to appear, basically referring to 'anglo-saxon' countries (Barker, 2006; Beachy et al., 2006; Gamber, 1998; Kay, 2009; Kwolek-Folland 1998).⁸ These works shed some light on the female presence in the world of business, and their contribution to commercial development in countries that were more advanced in their adoption of manufacturing systems from the end of the eighteenth century. In contrast, until recent times, few works dealt with the same topic in other contexts, such as the European periphery or the countries that industrialised later (Picciaia, 2017).

In the case of Spain, Gálvez-Muñoz and Fernández-Pérez (2007) have analysed some of the factors which conditioned female entrepreneurship in the last two centuries.⁹ Even if they only talk about the service sector and about non-proprietary entrepreneurship, the characteristics of the institutional framework they highlight are valid in their explanation of the low participation of women in business activity; the gender difference in economic activity; the inequality in access to education; and the restrictive legal framework of women's rights. To these elements must be added others of a cultural nature and a conservative mentality—in respect to gender, of families, as well as of businesses, unions, and professional organisations.

The international statistics show that in Spain the incorporation of women into economic activity took place later than in the majority of developed countries. In the 1970s

one third of women aged between 16 and 64 were engaged in some economic activity, while in the United States, Britain, Japan, France or Germany the percentage was higher than 50%, a figure which Spain only reached at the beginning of the twenty-first century. The public census indicates that between 1877 and 1960, the period covered by this article, the proportion of women in respect of the total active population in Spain hardly reached 20%.¹⁰ However, empirical research into the subject has indicated that women were under-represented in official statistics, these have since been corrected upwards for some regions or localities, and indicate an important presence of women in certain sectors.¹¹ The underestimation of the official data is common in the registers of other countries (Solà I Parera et al., 2016). Besides this, qualitatively female work has been less documented because, apart from the enforced invisibility that is always the tendency, it has also been concentrated in less well-paid activities than those of men, with greater levels of informality and temporariness.

One of the factors which has conditioned the professional segregation of Spanish women, and which has affected their relationship with entrepreneurship, is that of training. In relation to formal education, in the middle of the nineteenth century 70% of Spanish women had never been to school, whereas this figure was 50% for men. Parity was only achieved in the 1950s, but still with high levels of male non-schooling, around 40% (Núñez, 2005). According to the public census, the level of basic literacy for women in 1887 was 19%, and only rose to 50% in 1920. With these low levels of schooling and basic literacy, it is not to be expected that there would be a large presence of women in secondary or higher education. In fact, until 1910 female students were not legally permitted to attend university (Gálvez-Muñoz & Fernández-Pérez, 2007). Although there was a notable increase in women studying at university in the 1920s, after the Civil War (1936–1939) there was a regression which affected all levels of education, the Francoist regime did not even institutionalise universal primary education until after 1960.¹² In respect of informal education, that which children receive in the family, it served to reinforce the gender based roles which connected women to domestic activities and childcare, and males to salaried work (Sarasúa & Gálvez-Muñoz, 2003). Another aspect of informal training, that obtained in the learning of a trade, also reinforced the same occupational segregation.

The third element which influences the level of participation of women in business and entrepreneurship, is the legal framework. Spanish laws of inheritance have been considered a factor that favoured female entrepreneurship, by not discriminating against daughters in relation to sons, as historically happened in other countries (Martínez-Rodríguez, 2020).¹³ Therefore, women could inherit a share of the family business, or the capital necessary to invest in a new venture. During the period under consideration in this paper, between the end of the nineteenth century and the mid-twentieth century, there were no direct legal restrictions on female participation in the share capital of businesses, nor were there any on their participation as founding partners in new companies, as long as they had the agreement of their husbands or fathers (Hernández Nicolás & Martínez-Rodríguez, 2019). However, in contrast to these comparatively positive aspects of the Spanish legislation, there were others that were clearly negative. The same Civil Code (1889) that prohibited women from being involved in business without the consent of their husbands, also gave the husbands legal control over the joint assets shared with their spouses. The labour legislation of the second half of the twentieth century gave women the same status as children, supposedly with the intention of 'protecting' them from the dangers of work, but in practice it reinforced

gender segregation (Nielfa, 2003). To this we must add the legislation relating to education, which has already been mentioned. Although during the brief period of the Second Republic (1931–1936) legal equality between women and men was decreed, as was universal suffrage, these rights were suppressed by the Franco regime and were not recognised until the advent of democracy, after 1977, much later than in the rest of western European countries.¹⁴

The fourth of these elements which are considered to explain feminine entrepreneurship in Spain is the sociocultural setting. Aspects related to culture and mentality have already been mentioned, such as formal education or sociability within the family; these can also be seen in the ‘protecting’ discourses on women’s labour that followed from the middle of the nineteenth century. The sum of these factors gave rise to the construction of gender identities in which the setting up or running of businesses did not fit with the role assigned to women.¹⁵ In this sense, the cultural context of Spain has been very similar to other countries of Mediterranean Europe, like Italy, where the negative impact that this still has on entrepreneurship has been highlighted (Cesaroni & Sentuti, 2014). The difference in Spain was that Francoism, which lasted until the end of the 1970s, established a discourse which reinforced the idea of women’s inferiority (Gálvez-Muñoz & Fernández-Pérez, 2007).

The factors which, consequently, have affected female entrepreneurship in Spain from the negative point of view will have been: (1) the diminished presence of women in the labour market, and their concentration in specific activities; (2) the difficulty in receiving a formal and informal education necessary to run a business, which continued until well into the second half of the twentieth century, (3) the legal framework which did not recognise equality between men and women, forcing women into a subordinate position; and (4) the sociocultural context which recreated a female identity associated with caring tasks. On the other hand, from the positive point of view, certain aspects of the law came into play, like the equality in inheritance and the possibility of women setting up or being partners in a business as long as they counted on the support of a male of the family.

The result was the scant representation of women amongst entrepreneurs, which brought with it, returning to Duflo, less possibilities for women to develop their abilities, and a less opportunity for the country to accelerate its economic development.

Sources and methodology: business registers and social network analysis

To measure the impact of women in the setting up of businesses in a relatively backward economy in Western Europe during the first half of the twentieth century, the case of Andalusia has been selected. Andalusia is a less developed region of a country that was late to incorporate the industrialising process.¹⁶ In the period studied—from 1886 to 1959—the region almost doubled in population, increasing from 3.3 million to 5.9 million inhabitants (approximately one fifth of the national population). However, its GDP per capita was 25% lower than the average, at 67% of the Spanish average (Lizárraga Mollinedo, 2009).

In 1885, a new Commerce Code was enacted in Spain, making obligatory the inscription of all main acts of a legal nature of companies in a public Registry. The following year the provincial registers began to function, in which companies constituted in front of a sworn notary were inscribed, providing information about their registered name, address, economic activity and capital, among other data. The names of partners, their contribution to the firm’s capital, as well as other personal details, such as their place of residence or their profession, also had to be registered. The Business Registry, with the same purpose of encouraging

economic activity, is still in operation today. The documentation of the Registry, which in principle had a legal nature, has subsequently served as a historical source, used to carry out studies generally of a regional or local scope.¹⁷ Its information is very valuable, since it contains all the firms that were created in a territory; but it has the drawback that data collection requires a great deal of effort on the part of the researchers.¹⁸

In Andalusia eight Business Registers were established, one for each province. A research team made up of eight people devoted three years to compiling information from the Books of Firms of all Andalusian Registers for the period 1886–1959. With this documentation a database was constructed, known as SERMA ('Socios y Empresas de los Registros Mercantiles Andaluces'—Partners and Companies on the Andalusian Business Registers). This has been used carry out sector studies, identifying the main firms and businessmen and situating their business activity.¹⁹

In recent years, the database has been revised and has been used to learn more about entrepreneurship in the region, the firms, and businessmen.

In this paper, a new revision and rectification of the source has been carried out. The database includes practically all the firms that were created in the region, as long as they adopted the legal form of multi-owner firms.²⁰ In total, the research is based on the 8,300 legally constituted companies with economic activity in the Andalusian provinces. The Books of Firms in the Business Registers allow the identification of the people who created the companies—that is, their initial owners. After carrying out a demanding process of homogenisation of the names of these owners, almost 36,000 people have been identified, of which more than 2,700 were women. Nevertheless, as other authors have pointed out, there was greater concealment in the economic activities carried out by women, than in the legal ownership of the firms in which they took part.

The information from the Business Registers allows the quantifying of the number of women who participated in the setting up of companies, but it also offers an even more interesting possibility. It serves to understand how women participated in the business creation networks that operated in the region. To do this, we use a methodology known as Social Networks Analysis (SNA), a set of theoretical concepts and methodological tools which allow the detection of networks, the definition of their configuration, and the identification of their principal actors, facilitating statistical indicators and images. SNA was developed particularly in the second half of the twentieth century, because of the efforts of sociologists, mathematicians, anthropologists, and social psychologists.²¹ Among historians, the concept of social network is often used metaphorically, but the use of SNA has spread widely since the 2010s.²²

In recent years, the field of Economic History has also been incorporating SNA. Thus, it has been used in studies on merchants and companies (Haggerty & Haggerty, 2019; Lamikiz, 2010; Ribeiro, 2017), on colonial trade networks (Erikson, 2014; Haggerty & Haggerty, 2017), on commercial relations between ports (Erikson & Samila, 2015), or on the links between international finance and export sectors (Benjamin, 2019). Relevant contributions to Economic History have been made by applying SNA to the technique known as interlocking directorates (IDs), which detects the relationships between two large companies starting from the coincidence of one director on their Boards of Directors.²³ IDs studies have a long tradition and have been used to understand the evolution of corporate power in many nations. From theory, authors such as Granovetter have upheld that economic activity is embedded in networks of social relations (Granovetter, 1985). Mark Casson, one of the

leading specialists in entrepreneurship, has argued that this is not an individual task, but depends on networks of individuals (Casson, 2010).²⁴ Empirical studies, such as those by Lamoreaux, have pointed out the importance of networks for the financing of innovations (Lamoreaux et al., 2006). In this paper, SNA is applied to identify networks of entrepreneurs, in a similar way to IDs studies, but considering company founders and not directors or managers.²⁵ With a smaller number of actors, the identification of this type of network has been carried out for other Spanish regions (Badia Miró et al., 2010; Catalán Martínez et al., 2017; Etxabe, 2018). Likewise, in the case of Andalusia, previous researches have been carried out that, using SNA, have detected the business creation networks that have acted in the region (Garrués-Irurzun et al., 2013; Garrués-Irurzun & Rubio-Mondéjar, 2012; Rubio-Mondéjar, 2014; Rubio-Mondéjar & Garrués-Irurzun, 2017, 2018).

In the following sections, once the networks of entrepreneurs have been identified, the role women played in those companies is examined in order to understand whether their participation was active as an entrepreneur, or to the contrary, whether it responded to family strategies for the reproduction of capital. In relation to these strategies Martínez-Rodríguez (2020) considers that the presence of women was frequently due to the necessity to maintain entrepreneurial unity when one of the partners dies. The widow became part of the company until the male heirs could take charge of the business.²⁶

Entrepreneurial women in Andalusia

A quantitative estimate

Between 1886 and 1959 more than 8,300 multi-owner firms were established and registered in Andalusia. In the deeds of constitution of these companies there are almost 31,600 partners, of whom 2,700 were women, 8.6% of the total. The annual evolution of this percentage provides additional information: in the period prior to the Civil War, women made up 6.1% of Andalusian entrepreneurs; however, during the first period of Francoism (1937–1959) this percentage doubled to 13% (Figure 1).

According to census sources, in England women constituted 10% of the owners of companies in 1901 (Aston & Di Martino, 2017), 11.6% in 1891, and 13.5% in 1911 (Bennett et al., 2020). Gamber, compiling information from other studies, asserts that women represented at least one tenth of urban entrepreneurs in the United States in the mid-nineteenth century, even if he does echo the difficulty in making reliable estimates of the number (Gamber, 1998). For Spain there is research which suggests similar percentages of around 10%. Such is the case for Bilbao, where women represented a tenth of all the industrial and commercial taxpayers in the year 1900 (Pareja Alonso 2012).²⁷ Comparing this with two developed economies, those of England and the United States, as well as with an industrial city in the North of Spain, the 6% of women entrepreneurs in Andalusia, which remained constant between 1886 and 1936, was notably lower. Surprisingly, however, in the period after 1936 the percentage of women setting up businesses in Andalusia doubled, at a historic time when the legislation of the Francoist dictatorship established the subordinate role of women in relation to men.

Martínez-Rodríguez has measured the participation of women in multi-owner companies in a different way. This author constructed a database from a sample of 1,381 companies, taken at random from the enterprises registered in 15 Business Registers of Spain, one third of the total number of provinces, between 1886 and 1936. The indicator used was the number

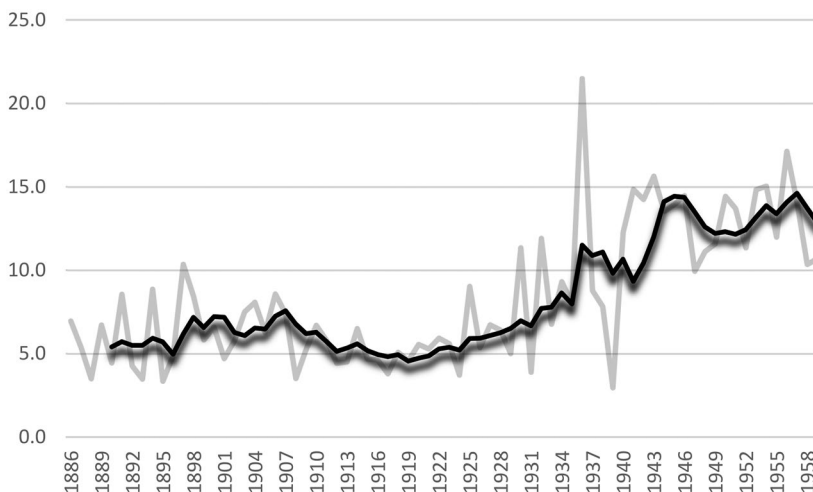


Figure 1. Percentage (%) of women among the promoting partners of multi-owner firms in Andalusia. Source: Own elaboration from the SERMA.

of multi-owner companies that had at least one female as partner, which was estimated at 11.2% of the total (Martínez-Rodríguez, 2020). For the same period the information from the Business Registers of the Andalusian provinces counted 5,504 companies, of which 13.4% had a woman as a founding partner. The difference between this percentage and that of Andalusia is small, although it is notable that a relatively less-developed region actually had a female participation that was higher than the national average.

Comparing the evolution of the presence of women in setting up businesses in Andalusia, and in Spain, one can see that before 1920 Andalusian women were more active than the national average, and only in the period 1920–1936 was the national average slightly higher than that of Andalusia (Table 1).

Once again, the large increase in the involvement of women in the setting up of businesses in Andalusia between 1937 and 1959 is surprising, as it practically doubled in relation to the previous period. Unfortunately, comparison of this Southern region with the rest of the country is not possible for this period. It has been explained previously how the legal framework between the mid-nineteenth century and the Spanish Civil War (1936–1939) was not particularly favourable for the participation of women in business. The Code of Commerce of 1829 and the later one of 1885 made authorisation by the husband obligatory for married women who wished to participate in a commercial activity. This authorisation was also necessary for the signing of any type of contract. The Constitution of the Second Republic (1931) introduced the principle of legal equality between men and women, but the Republican period was short, and ended with the Civil War victory of General Franco. He installed an ultraconservative dictatorship which annulled the Republican legislation and reintroduced the obligation of marital consent. A new labour law, the *Fuero del Trabajo* (1938), prohibited women from working once their spouse reached a certain level of income, and the laws of ‘Reglamentaciones’ (1942) and the ‘Contrato de Trabajo’ (1944) imposed an obligation on women to stop work on marrying, and the need for consent from their husbands to return.²⁸ However, in these years of restrictive policies it seems paradoxical that women participated in the setting up of a quarter of all companies.

Table 1. Companies with women partners in Andalusia and in Spain.

Andalusia	Firms			Spain	Firms		
	Total	With at least one female owner	%		Total	With at least one female owner	%
1886–1959	8,300	1,435	17.3	1886–1959	–	–	–
1886–1936	5,504	718	13.0	1886–1936	1,226	155	12.6
1886–1899	1,417	165	11.6	1886–1899	318	26	8.2
1900–1919	2,772	375	13.5	1900–1919	505	63	12.5
1920–1936	1,315	178	13.5	1920–1936	403	66	16.4
1937–1959	2,796	717	25.6		–	–	–

Source: Own elaboration. The data for Andalusia, from SERMA; data for Spain, by Martínez-Rodríguez (2020).

Although there are no comparable studies for either the whole of Spain or other Spanish provinces, the statistics for Andalusia show that women concentrated their work in commerce or the food industry during the period under study (Figure 2). However, the preference for these types of activity was not constant throughout the period. Before 1936 more than one third of all the Andalusian businesses set up with female participation were dedicated to commerce, they were also present in the food industry, and other activities such as banking, electricity, the textile industry, and mining. After that year their representation in these sectors diminished notably, except in the food industry, where it gained strength in agriculture, coinciding with the economic orientation of the region in the new context of the dictatorship.

The Spanish legislation distinguishes between two types of multi-owner companies, in relation to liability for partners' assets. In the period under study the most common were two forms of company with unlimited liability (regular partnerships and limited partnerships), and two forms of limited companies (joint stock companies and private limited liability companies). Limited liability is normally associated with the modernisation of an economy, and it has even been linked to the democratisation of access to business of certain groups. In the case of Spain, Martínez-Rodríguez, although analysing the period before 1936, suggests that the extension in the forms of limited liability companies favoured the presence of women as partners in companies (Martínez-Rodríguez, 2020). In Andalusia, as in the rest of Spain, companies with limited liability became a larger proportion of the total number of companies as the twentieth century advanced, so this explanation seems plausible. If we compare the evolution of the forms of multi-owner firms in Spain and Andalusia (Appendix 1, online [supplementary material](#)) we see the slow diffusion of companies of limited liability in Andalusia prior to the twentieth century: a phase of acceleration with percentages slightly higher than the national average before the First World War; a new divergence between 1920 and 1936, which above all affected limited companies and which took time to come in to use in the region, given that it replaced regular partnerships and limited partnerships. Notwithstanding, differences can be appreciated in the data for the participation of women between Andalusia and Spain. In Spain, before 1936, one third of the women who played a part in the constitution of multi-owner firms did so in joint stock companies or private limited liability companies; in the same period, in Andalusia the percentage was slightly lower (27%). What is significant is that 22% of the Andalusian businesses in which women were involved were joint stock companies, five percent higher than the national level. This would become a regional pattern: in Andalusia women's participation in joint stock companies was three or four times higher than the national average

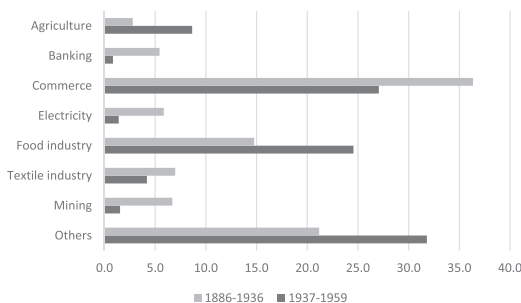


Figure 2. Percentage of companies with women partners, by sectors.

Source: Own elaboration, from SERMA. 'Others' includes construction, transport, chemical industry, building materials, machinery, paper, and metal products.

for the periods 1886–1899 and 1900–1919 respectively. Once the juridical form of the private limited liability company was permitted (1919) its adoption was much lower in the Andalusian cases where women participated than in Spain in general, while in contrast joint stock companies were more common. Another interesting point is that between 1886 and 1959, except during the years 1900–1919, in Andalusia, the percentage of joint stock companies among the firms in which at least one woman participated was higher than the percentage of joint stock companies in which no woman participated. It appears clear that limited liability companies were favourable for the presence of women in the world of business; in the case of Andalusia, women's participation was concentrated even more than the Spanish average in joint stock companies. On the other hand, stating this fact does not explain why this happened. Why between 1937 and 1959 was there a much higher percentage of joint stock companies among the multi-owner companies where women were present than among those run solely by men?

The qualitative importance of female Andalusian entrepreneurs: their role in the business networks

Companies with limited liability reduce the risk to partners and, especially joint stock companies, make possible the accumulation of capital necessary to take on greater investment than other types of company. Compared to the other types, the possession of shares in the capital of a company with limited liability does not necessarily imply involvement in the running of the company. This could be the reason for the presence of women in the setting up of trading companies, within the framework of family strategies for the reproduction of capital. This does not mean that in companies with unlimited liability these strategies were not considered, but the diffusion of limited liability companies in the last period, 1937–1959, became parallel to the increase in female participation in Andalusian businesses.

On the whole, the information collected in the provincial registers does not allow us to understand the management function of each of the partners. Therefore, one cannot know

if the people who participated in setting up a company were going to participate in its management, at least in a general way. Undoubtedly, many women would play an active role in the direction of the companies' activities.²⁹ Previously, we have noted the presence of widows in partnerships which had been set up by their husbands, a presence justified to maintain the family participation until the time when the sons were in a position to take over. Other women would be investors in family businesses: the father could involve the daughters in the business by making them participants in the firm capital; or they could support the business venture of their husbands, or brothers or other members of the family.

A close-up of these family strategies can be made by calculating the number of multi-owner firms in which women figure in their constitution along with other members of their families. It is not a simple task, although the fact that in Spain two surnames are used, that of the father and the mother, and the fact that the mother does not lose her surname when she marries is of assistance. The deeds of constitution of the 1,435 firms with women's participation between 1886 and 1959 have been checked, and using the names of the partners involved three categories have been discerned: firms in which the women were partners of a member of their family; firms in which there were no direct family relatives of the women involved; and firms where it is not possible to know whether the women participants were related to any of the other partners (Table 2).³⁰ In this latter case there could be couples who cannot be identified as such by consulting the information in the constitution.

In the period analysed, it was found that in 26% of companies with women's participation, it is not possible to state whether they were accompanied by a family member. However, even with this limitation, it can be affirmed that in 3 out of 4 companies set up by women there was a family member.

In most cases the women who set up companies did so with members of their direct family: fathers, husbands, brothers, mothers or children, and to a lesser degree with cousins, fathers-in-law or brothers-in-law. Above all, the companies in which the women participated along with their siblings but without the presence of their parents, and those where the mother features with her children but without her husband, stand out (Figure 3). These two groups, women with siblings, and mothers with children but without the father, refer to the subject of inheritance and family patrimony inherited from fathers or husbands. These two elements are important. On one hand, as has been mentioned, the Spanish legislation did not discriminate against women in the sharing of the wealth of their fathers, this meant that they would receive inheritances which could later be invested in businesses set-up by members of their family. On the other hand, the presence of women with their children in the new companies generally indicated the continuity of the family business after the death of the father. It was normal for widows to participate in the company founded by their husband at least until the sons came of age and could take charge of running the business.

Table 2. Companies with family relatives of the women partners (%).

Año	No	Yes	N/A	Total	Total
1886–1959	3.4	70.5	26.1	100	1,435
1886–1899	1.8	70.1	28.0	100	164
1900–1919	2.1	65.2	32.7	100	376
1920–1936	2.8	67.4	29.8	100	178
1937–1959	4.6	74.2	21.3	100	717

Source: Own elaboration, from SERMA.

It appears clear that the presence of women in the constitution of firms should be linked to family strategies for the reproduction of capital. The mere statistical quantification of family relationships, however, does not provide much insight into the role of women and their functions in the new companies. Were they an active part of the entrepreneurship? This is to ask whether they intervened in the search for business opportunities and in the later management of the companies' activities, or did they simply provide the capital for businesses that emerged from the ideas of their husbands, fathers, or brothers. To answer these questions, it would be necessary to have access not only to the documentation of the companies themselves, but also to the people who established them. Given that this is not possible, it is necessary to resort to indirect methods.

The Social Network Analysis allows us to evaluate the influence of women in Andalusian entrepreneurship. Other research has identified a large network behind the setting up of companies in Andalusia in the period under study (Garrués-Irurzun & Rubio-Mondéjar, 2012; Rubio-Mondéjar, 2014). Now, going one step further, the presence of women in the Andalusian network can be shown, graphically, in Figures 4 and 5.

Two indicators provided by the SNA are especially useful to understand how central the participants are in a network. One of these is known as 'degree', a measure related to the number of connections a participant has.³¹ In the case of networks of entrepreneurs, the degree will be greater depending on the number of people with whom an entrepreneur participates in the setting up of different firms. The women who set up companies in Andalusia had an average degree which almost doubled the average of the total number of participants in the network (Table 3). That is to say that when a woman participated in a network setting up businesses, normally more contacts went through her than through the men who were part of the same network. The second important measure is the 'betweenness', which is associated with the capacity of an individual to involve other players.³² This is a particularly interesting measurement when it is applied to entrepreneurship, because it is identified with the possibility of communicating information necessary for the setting up of a company. The betweenness average of the women involved was one tenth of the average

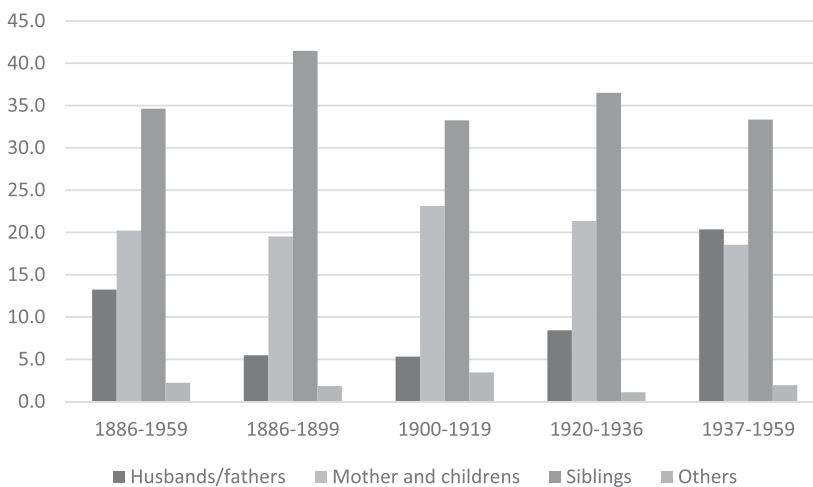


Figure 3. Women and their relatives in the setting up of Andalusian businesses (%), 1886–1959. Source: Own elaboration, from SERMA. % of the total number of firms with women.

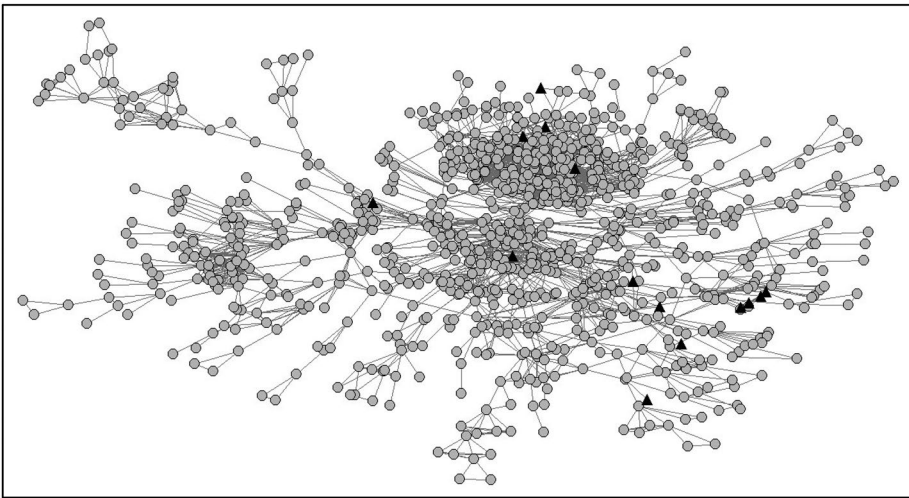


Figure 4. Andalusian Network (1886–1936).

Source: Own elaboration. The triangular nodes represent the women, the circles the men.

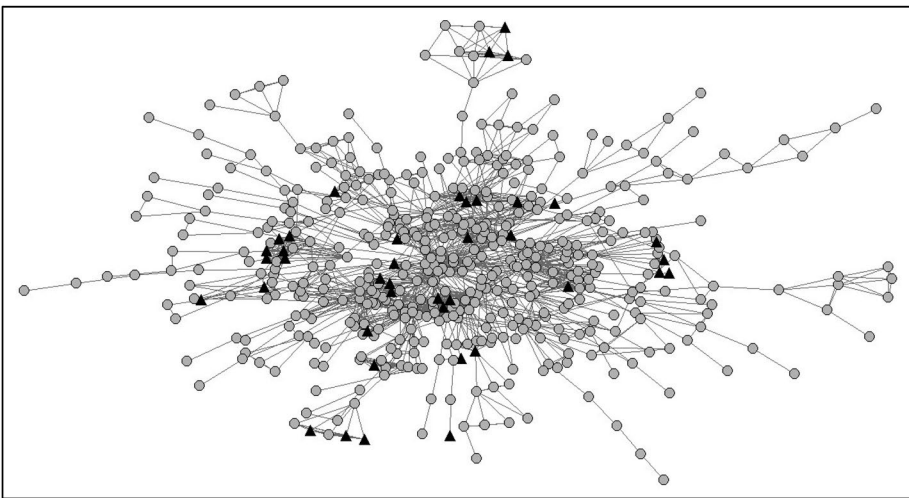


Figure 5. Andalusian Network (1937–1959).

Source: Own elaboration. The triangular nodes represent the women, the circles the men.

of the other participants who took part in the network of company establishment in the region. Interpreting both measurements together, women on average had twice as many contacts as the average of the total number of members of the network; but, at the same time their capacity for interconnection was ten times lower than the average. In other words, the women involved in setting up companies connected with more network participants than the males involved, but they did not find it easy to be the bridge for communicating to connect other participants in the network between each other. Additionally, when the development of the variables is observed over time, it is possible to appreciate what the period after 1937 was like, when this outline became consolidated.

Table 3. Measurements of the centrality of women in Andalusian networks.

Years	nDegree (average)		nBetweenness (average)	
	Overall (×100)	Women (×100)	Overall (×100)	Women (×100)
1886–1959	0.015	0.031	6.029	0.668
1886–1936	0.050	0.046	4.500	0.317
1937–1959	0.067	0.124	6.600	1.545

Source: Own elaboration.

Table 4. Networks including women setting up companies.

Network	Women/ Partners	% In-laws	Province	Firms	Sector	Legal form	Kinship
Caballero Noguera	2/5	100	Cádiz	7	Wine	JS	Siblings
Beca	1/4	50	Sevilla	12	Agriculture	PLLC	Siblings
Vega	1/3	66	Sevilla	7	Services	JS	Husbands
Navarro	1/3	100	Cádiz	3	Food industry	JS	Mother and children
Silva	1/2	100	Málaga	4	Olive oil trade	PLLC	Siblings
Lúquez	1/2	100	Sevilla	3	Diverse	JS	Cousins
Borrero Hortal	1/2	100	Sevilla	3	Food industry	JS	Siblings

Source: Own elaboration from SERMA. JSC: joint stock companies. PLLC: private limited liability companies. All of the networks are from the period from 1937 to 1959. The networks with female participation specialised in the agricultural sector and in the food industry, and were concentrated in the western provinces of the region.

There is another way of evaluating the participation of women in Andalusian entrepreneurship, as well as their connections to the family strategies. From the same information of the Business Registers that is used here, Rubio-Mondéjar and Garrués-Irurzun (2018) identified 27 networks for the establishment of companies made up of three or more partners, and 62 pairs—two person partnerships—which were active in Andalusia between 1886 and 1959. To identify them they established the criterion that the partners should coincide in the setting up of at least three firms, taking this as representing the continuity of a network rather than just a coincidence that happens in business. The family character of Andalusian entrepreneurship was obvious: of the 27 networks, in 80% of cases at least half the partners were connected by family ties; of the 62 pairs, 32 were formed by parents, children or brothers and sisters.

Starting from these networks and pairs (from now referred to as just networks) associated with ‘high-level entrepreneurship’—that is a minimum of at least three companies set up together—the women have been identified and an attempt has been made to discern what their function in the companies was (Table 4). From this analysis proof of three points has been obtained. The first being that they had little impact on the networks. Of the 2,700 plus women who participated in setting up companies, only eight of them were involved in networks that set up more than three firms.³³ The second point is that all the networks in which women participated were created after 1936. The third point being that limited liability companies, and specifically joint stock companies, were important in this. Of the seven networks with female presence,³⁴ in five of them the main legal form was the joint stock company, and in two it was private limited liability companies. In relation to the previous point, it appears clear that the spread of joint stock companies in the period between 1937 and 1959 facilitated the entry of women into networks setting up companies. It is difficult to know if these women played a central role in the networks identified or if

they were merely companions of the other members. In five of them the women shared the network with brothers or sisters; in one there was a mother and son; in another a male and female cousin; and in the last a married couple. However, even in the cases where the women were the main entrepreneurs in their respective networks, there were very few of them.

Conclusions

The previous pages have analysed the relationship between women and entrepreneurship in Andalusia, a relatively backward region of Spain, a country that, until well into the second half of the twentieth century, was far from the level of economic development of Western European countries. In Spain, the weak relationship of women with entrepreneurship has traditionally been explained by four factors: a sociocultural framework that placed them in the care sphere; the gender difference in economic activity; the inequality in access to education; and a legal system that, although it did not prevent women from creating companies, did subject them to male tutelage. The study of female entrepreneurship in a region like Andalusia offers the possibility of advancing some explanatory hypotheses and answering the question of whether women were active in entrepreneurship or mere pieces of the strategies of the men who governed their families.

From the methodological point of view, this article makes two contributions to the historical study of the phenomenon of female entrepreneurship. The first is that it quantifies, for different stages, the number of women who created new companies. While numerous studies on the topic have been published in recent years, few attempts to offer percentages or numbers. Instead, this text does it using a solid database that includes all the mercantile companies created in the region between 1886 and 1959 — more than eight thousand multi-owner firms and more than 31,600 partners. A second methodological contribution is the application of social network analysis, which makes it possible to statistically evaluate the role played by women in the networks for the creation of multi-owner firms.

In addition to the methodological contributions, this article adds a new case study to the existing bibliography on female entrepreneurship and provides a complementary interpretive vision to those existing up to now. Combining the quantitative analysis and the network analysis shows that, although the female presence in the creation of companies in Andalusia was relatively significant with respect to the “invisible” -for undocumented- managerial functions of women, their participation was more testimonial than real. The institutional framework led women to be subject to family strategies for the reproduction of capital, strategies managed by the male members of the families. As many studies have pointed out, the participation of women in the business world at this time cannot be separated from family issues and, therefore, from the family business.

The preferred business sectors for female participation were the most traditional, commerce and the food industry, anticipating the deficient specialization to which the Andalusian region was forced during the Francoist autarky. Although it may seem paradoxical, the presence of women in the creation of multi-owner firms increased considerably in the first stage (1939-1959) of a deeply conservative and retrograde dictatorship. This was not due so much to the multiplication of limited liability business forms, as to the fact that these

legal forms better served capital reproduction strategies, since they made it possible for the capital inherited by women to be better integrated into male-run companies.

The identification of business creation networks and the position women occupied within them corroborate the fact that female participation was clearly embedded in dominant male strategies. This explains how the greater relative inclination of women to participate in networks did not correspond to a greater centrality in the networks. The same can be said when it is observed that women hardly formed high-quality networks, and that when they did so they were under the influence of their fathers, brothers, children, or husbands.

In short, in Andalusia, as in most of the Spanish territory, the women who participated in the creation of multi-owner firms did so subject to the decisions of their male partners; thus, they could hardly develop an active role in business; and this was a differential element in economic development. However, there is still a long way to go to understand the relationship of women with entrepreneurship. After accounting, qualitative case studies must be added, based on the analysis of the business documentation itself, and other complementary sources, and that allow women to be clearly visible in the business world.

Notes

1. A theoretical reflection on entrepreneurship in Cuervo et al. (2007).
2. Other authors, such as Shane (2003) defend the necessity to combine features from both tendencies to be able to explain in a convincing way the phenomenon of entrepreneurship.
3. See De Bruin et al. (2007).
4. Blondel and Niforos refer to women as 'invisible pillars' of the endurance of the family business. On the invisibility of women in the succession process in the family business, see Dumas (1989).
5. The 'invisibility' of women in family businesses, or, one could say, their presence in the shadows of the males in the family, makes it difficult to find sources that permit an analysis of the subject (Cesaroni & Sentuti, 2014).
6. Granovetter (1992) disputes the opinion of those who believe that business groups based on personal relationships disappear as markets become more complex.
7. It is normally assumed that the second industrial revolution took place between 1870 and 1914 approximately. For Andalusia, as for other Spanish and European regions, Parejo Barranco (2009) considers it more correct to use the period 1880–1960.
8. A prior bibliographical revision and a compilation of texts on the subject, for different latitudes, in Yeager (1999).
9. Studies on businesswomen in some Spanish Cities in (Nielfa, 1986), Romero Marín (2006), Pareja Alonso (2012) or Solà Parera (2019).
10. Between 1910 and 1940 the percentage varied between 12–13%.
11. The research into the role of women in Spanish labour markets has only taken place for two decades, see Sarasúa (1997) y Sarasúa and Gálvez-Muñoz (2003). There are also some studies of interest on the working conditions of women in large businesses (Borderías, 1985; Gálvez-Muñoz, 2000).
12. Besides the greater or lesser presence of women in the different phases of the educational system, the type of training they received must be taken into account. In university studies, women were concentrated in the subjects that were considered to be appropriate for women, especially those connected with care, namely education or nursing. In primary education, the legislation in force from the middle of the nineteenth century established education that was differentiated for girls, preparing them for domestic roles (Sarasúa, 2002).
13. An interesting study by Fernández Pérez (1997) on commercial networks relates the laws of Castilian inheritance, women and businesses in the Eighteenth Century. British law, for example, gave fed widows (Nazzari 1995). In France, after the enact of the Napoleonic Code (1804),

- inheritance laws were more egalitarian; however, if the husband died without testament, the widow could receive nothing (Khan, 2016).
14. The relationship between the Francoist regime and women, in Sarasúa and Molinero Ruiz (2009).
 15. Cultural elements as an explanation for the gender-based division of work in Spain.
 16. In 2021 Andalusia was one of the regions with the lowest GDP per capita in Spain, around 66% of the European Union average.
 17. On the characteristics of the source, see Martín Rodríguez et al. (2003).
 18. In Spain there is a source with characteristics similar to those of Business Registers, even richer from a qualitative point of view. These are the notarial protocols, which include the company creation agreements signed before a notary public, prior to their registration in the registries. The problem it presents is that its compilation is very complicated, so it is not valid for quantitative analysis such as the one offered in this text. However, for smaller geographical environments, Notarial Records has served as the basis for the elaboration of important investigations referring to the Seventeenth-Nineteenth centuries, for example those of Casey (2007) or Fernández Pérez (1997).
 19. See, for example, Garrués-Irurzun et al. (2002).
 20. Does not include all the firms: excluded many businesses dedicated to agriculture, which tended to be one individual running a business, and some large companies both Spanish and foreign, which were registered in cities like Madrid, Barcelona or Bilbao, despite basing their activity in Andalusia.
 21. On the development of the SNA and its application in social sciences, see Freeman (2004) and Kadushin (2012).
 22. The article that is usually considered pioneering as an application of the SNA to History is the one by Padgett and Ansell (1993) on the relations of the Medici family in medieval Italy. Today the importance of ARS in the field of History is growing, as evidenced by the existence of research groups like Historical Network Research (<https://historicalnetworkresearch.org/>), Réseaux et Historie (<https://reshist.hypotheses.org/>) o The Connected Past (<https://connectedpast.net/>) that have specific publications and hold workshops and regular meetings.
 23. On interlocking directorates in economic history, see David and Westerhuis (2014).
 24. Casson has also called for more attention to network configuration, which leads directly to SNA (Casson & Giusta, 2007).
 25. The network of entrepreneurs is reconstructed through the presence of the same person in the constitution of a minimum of two companies. It is an exercise that requires more work, because it is necessary to extract and homogenize the names of all the founding partners of companies, while in the case of interlocking directorate studies, they usually work only with a selection of the largest companies in a nation, which means considering a much smaller number of actors.
 26. In a study carried out from a sample from the same source, Hernández Nicolás and Martínez-Rodríguez (2019) conclude that this is the most common case among widows who appear in the constitution of mercantile companies; much rarer would be those women who participated actively in the decision-making of the company.
 27. Other works permit the calculation of the importance of women in business sectors and certain cities, see Solà I Parera et al. (2016).
 28. Sarasúa and Molinero (2009) compared the Francoist legislation in relation to women with that of fascist Italy, less flexible than that of Nazi Germany or Vichy France, who were in need of labour.
 29. One of the main banking houses which operated in the region in the 19th and 20th centuries, the Bank Rodríguez Acosta, originated in the business affairs of a female entrepreneur, Teresa de Acosta, begun in 1831.
 30. To identify the relationship between the women and the remaining partners of the more than 1,400 companies that feature at least one woman, different sources have been consulted.

Among them, besides the inscriptions in Registers, local and sectorial history books, bibliography, and genealogical webs have been utilised, as well as obituaries and news in the press.

31. *Degree* (C_D): is the number of actors in the network with whom an individual has a direct relationship. Here it is presented as a normalised degree (nDegree), that is to say, as a percentage of the number of actors with whom the person is directly related, compared to the total number of participants in the network.

$$C'_D(v_k) = \frac{\sum_{i=1}^n a(v_i, v_k)}{n-1}$$

In the formula of the nDegree (C_D), a is the number of connections and v the actors or vertex.

32. *Betweenness* (C_B): is the number of geodesic paths that pass through a node; it measures the capacity of a player to connect with others, to be an intermediary in the flow of information. Like the degree of centrality, it is presented as a percentage (nBetweenness).

$$C_B(v_k) = \sum_{b \neq j \neq k} \frac{\sigma_{bk(j)}}{\sigma_{bk}}$$

where σ_{bk} is the total number of geodesic paths between the nodes b y k , $\sigma_{bk}(j)$ the number of these that pass through j .

33. In these networks there were 217 men, the women made up 3.5% of the total.
34. One of the networks with the highest presence of women is shown in Appendix 2.

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