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**For Every Law, a Loophole: Flexibility in the Menu of
Spanish Business Forms, 1886-1936**

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For Every Law, a Loophole: Flexibility in the Menu of Spanish Business Forms, 1886-1936

Timothy W. Guinnane and Susana Martínez Rodríguez

Abstract

The Spanish business code allowed firms great flexibility in their organizational form in the late nineteenth and early twentieth century. Until 1920, firms had the same basic choices as in France and some other European countries, namely, the corporation, the ordinary partnership, or the limited partnership. But Spanish law was unusually flexible, allowing firms to adapt the corporation especially to the needs of its owners. Starting in 1920 Spanish firms could also organize as a *Sociedad de Responsabilidad Limitada* (SRL), a form similar to the German GmbH or the British Private Limited Company (PLC). But some firms had already adopted the form prior to 1920. The Spanish code lacked the principle of “*numerus clauses*” that is central to many areas of law. Most business codes allow firms to choose only from a proscribed menu of options. The Spanish code offered these options but also stated that firms could organize in other ways if they wished. This paper uses three empirical sources to study the way firms actually used those possibilities. We find that this flexibility did not make entrepreneurs indifferent across the different organizational forms.

JEL codes: K20, N43, N44

Keywords: Spanish economic history, legal form of enterprise, law and finance

Spain was one of the poorest and least developed countries in western Europe as late as the 1950s. Several sets of reasons have been advanced for this relative poverty. This paper examines a specific version of the view that Spanish institutions constrained economic growth. We study the relationship between company law and the organization of multi-owner firms, first by tracing the evolution of organizational law in Spain from 1886 to 1936, and then by using three different empirical sources to study the way the different organizational forms were used by Spanish business. Our study spans a period that includes the considerable repatriation of capital from the (former) Spanish empire, as well as the introduction of a new legal form for business, the private limited-liability company. We end our study in 1936 because of the Spanish Civil War.

We are interested in two questions. First, Spain was undoubtedly a civil-law country, with heavy borrowing from French law throughout the nineteenth century. Yet, unlike most civil-law countries, the Spanish business code was very flexible. How did this flexibility affect the choice of organizational form? Second, the private company introduced in the 1920s (*Sociedad de Responsabilidad Limitada* or SRL), in some ways did little more than allow Spanish firms to do what Spanish corporations had been doing for decades. Yet we see, empirically, a major shift towards the SRL in the 1920s. Why?

Our story is related to a more general interest in the differences between common-law and civil-law traditions. An influential literature argues that countries with a civil-law legal tradition do worse in fostering a climate that leads to investment, and more generally in economic growth. La Porta et al (1997, 1998, 1999) (or “LLSV”) use cross-country regression models to study differences between countries with civil-law origins and those with common-law origins. They generally find that common-law countries enjoy better protection for corporate investors and other features associated with better capital markets and more rapid economic growth.¹ Their argument echoes a long tradition that emphasizes the ability of common-law judges to devise sensible solutions to new and specific problems implicit in the cases that come before them. This feature of the common law supposedly

¹ Much of the follow-up to their work has debated the precise definition of the relevant legal families. Most research in this literature sees the “German” and “Scandinavian” versions of the civil law as better for economic growth than the “French version.” That distinction is not relevant to our paper; Spain is clearly a “French version” civil-law country.

makes it more flexible than the civil law. The civil-law reliance on statutory changes involves too much time or is too easily hijacked by special interests to produce necessary outcomes, LLSV argue.

LLSV and their critics typically focus on legislation relevant to large corporations and publically-traded securities. The more general law of business organization at issue here provides less comfort to the LLSV argument. Lamoreaux and Rosenthal (2005) show in the context of failed attempts to introduce the limited partnership in the U.S. that the common law can also produce conservatism: if judges are uneasy with a legal innovation, they can construe the new law so narrowly as to make the innovation useless as a real reform. Similarly, Guinnane, Harris, Lamoreaux and Rosenthal (2007) note that a few U.S. states introduced a form similar to the German *Gesellschaft mit beschränkter Haftung* (GmbH) in the 1870s (before the “real” GmbH was introduced in 1892), but that the form was never really used. They argue that this reflects the combination of common-law interpretation and federalism; judges in one state held the new form to be a corporation, while judges in other states held it to be a partnership, making it difficult for business people to know how the law would treat their investments if they used the new form. The German GmbH itself is inconsistent with the LLSV view of the civil law in two ways. First, the GmbH was itself a major innovation, but was introduced first in a civil-law country. Second, a major change that made the GmbH more popular was the product of a court decision in 1911, and not written into the actual statute until 1980.²

At the heart of the LLSV argument is the idea that codified law is inherently rigid. Because common-law judges can make decisions that either overrule or anticipate statutory law, the argument goes, business people in common-law countries can expect the legal order to adapt more rapidly to their needs. This literature relies heavily on a particular characterization of “civil law” and “common” law traditions. We show that the Spanish case does not fit the LLSV image of civil-law rigidity. Two differences between Spanish law and the civil-law template (as described by LLSV) are especially important. First, the Spanish business law lacks the *numerus clausus* feature that in most civil-law countries limits the range of organizational forms to those specified in the code. Spanish firms could create their own legal form. In most other civil-law jurisdictions, a business firm had to choose from a

² The change in question is allowing legal persons such as the GmbH to be a partner in a partnership. This legalized the GmbH & Co. KG, which is now one of the most popular legal forms in Germany.

fixed menu of legal forms. Second, Spanish company law in practice was very malleable. Notaries in some cases enabled clients to adopt practices that were at best legally dubious, and these same notaries were effective at lobbying the legislature for the legal changes their clients wanted. This great flexibility is reflected in the way the SRL was created. *Without any changes in the commercial code*, the Commercial Register announced in 1919 that it would approve registration of SRLs. Inscription in the Commercial Register is fundamental, as it gives the firm legal existence. Thus from 1919 the SRL was a real fact, even if it was not mentioned in the commercial law. The SRL did not appear in any legislation until 1951.

Our discussion is divided into three parts. We first explain how the menu of permitted forms affects the decisions entrepreneurs make in setting up multi-owner firms. We then turn to a brief survey of Spanish commercial law, focusing on the treatment of companies and enterprise form. We then use three distinct empirical sources to study the way Spanish firms used these choices.

1. Why enterprise form matters

The legal form of enterprise frames the way investors in multi-owner firms combine their assets and effort to create new companies and thus promote economic growth.³ We organize our discussion around a trade-off detailed in Guinnane, Harris, Lamoreaux and Rosenthal (2007, 2008). Firms face two central contracting issues: the problem of untimely dissolution and the problem of minority oppression. Untimely dissolution means that firm-specific, illiquid investments may not realize their full return if the death or withdrawal of an investor can provoke the firm's demise. More importantly, if an investor can threaten to withdraw from the enterprise and thus provoke the firm's end as a way to secure a greater share of the firm's profits, then the enterprise may be unworkable from the start. Minority oppression arises when one group of investors cannot prevent others from engaging in actions with private benefits that at the same time reduce the value of the shares owned by the minority. The oppressor can be other investors, the firm's management, or both.

³ Throughout we discuss multi-owner firms only, since our focus is on contracting problems. We acknowledge that multi-owner firms were a minority of all businesses.

Partnerships, because they are essentially contracts between one or more people, are always vulnerable to untimely dissolution. On the other hand, investors in this form can limit the possibility of minority oppression, because partners are free to contract on key matters such as the right to make decisions. Corporations represent the opposite extreme in both dimensions. Investments in corporations are locked-in. Investors can only withdraw their capital by selling their shares to someone else. On the other hand, corporations are especially vulnerable to minority oppression. Their concentrated management allows the management to abuse their insider status against all owners, and, depending on the voting rules associated with shares, majority owners can shape firm policy to suit private ends.

In most countries, firms had to select from one or the other extreme of this trade off. Only with the introduction of more flexible limited-liability forms could all investors enjoy limited liability and also contract flexibly to achieve the structure that most suited their firm.⁴ In Spain the situation was different. Prior to the introduction of the SRL in 1919, Spanish firms also had to choose between corporations and partnerships. And, just as elsewhere, the Spanish version of the PLLC (the SRL) allowed firms to manage the trade-off between untimely dissolution and minority oppression more precisely. On the other hand, even Spanish corporations enjoyed a great deal of flexibility. So while the SRL mattered (as we show empirically) it represented a less dramatic change in the trade-off than was the case with the introduction of the German GmbH or the British PLC.

2. The legal framework

The tremendous attention given throughout the 19th century to commercial legislation in Spain was disproportionate to the country's weak industrial development. At several points, Spain adopted decisions that ran far in advance of law in other, more developed countries, but these innovations failed to lead to the hoped-for results. Before the first real Commercial Code of 1829, Spain had a plural *corpus juris*. Most accounts stress the priority of the "Bilbao Ordinance," promulgated by the Bilbao Consular Trade Office, which enjoyed international prestige in part because of Bilbao's

⁴ Guinnane et al (2007) use the general rubric "Private Limited-Liability Company" (PLLC) for the British Private Limited Company, the German *Gesellschaft mit beschränkter Haftung* (GmbH), and the French *Société à Responsabilité Limitée* (SARL).

important trading status. The Ordinance described three types of commercial companies: the ordinary partnership, the limited partnership, and the corporation. In the ordinary partnership, all partners had unlimited liability and participated in running the firm. The limited partnership, which was an association of “foreign character” (E. De Tapia, 1839, p.13), combined two types of owners: limited partners, who had limited liability for the firm’s debts and general partners, who contributed capital, business knowledge and labor, and had unlimited liability for the firm’s obligations. Limited partners could not play any role in firm management, a rule common for limited partnerships in most jurisdictions. The term “corporation” at the time of the Bilbao Ordinance refers to business organizations without a corporate name and that were in essence private. These companies’ objectives were one-off and their duration limited to the completion of a particular task set forth in the founding agreement (C. Petit 1980, p. 56).

Between the *Ordenanzas de Bilbao* (1737) and the *Código de Comercio* (Code of Commerce) (1829) Spain saw numerous proposals for the modernization and unification of its commercial law. The code finally approved in 1829 first appeared during the (second) reign of Fernando VII.⁵ Compiled by the Francophile Sáinz de Andino, this proposal displays strong French influence, although it also followed the tradition of Spanish commercial law as contained in the Ordinance of Bilbao and the Castilian Acts.⁶ The new code mostly differed from the Ordinance of Bilbao and earlier French law only in details. Liability in partnerships was to be joint and several. The code also states that the partnership was not dissolved by the death of a member, so long as the partners did not establish otherwise in their regulations or agreements. This clause makes it possible that the partnership in Spain was less susceptible to the untimely-dissolution problem than were partnerships elsewhere. The code did not explicitly define the limited partnership by shares, although this possibility was mentioned in §275, which describes the manner in which the partnership capital can

⁵ He lived 1784-1833, was King in 1808 and again 1813-1833 (R. Sánchez Mantero, 2001).

⁶ Prior to the modern codes that begin in 1829, there was an attempt to compile all Spanish law, referred to as the *Novísima Compilación* (1805-1829 [1975]). A substantial part of those acts come from the Kingdom of Castile, before the unification of Spain as a modern country.

be divided: “It can be divided into shares [...] and the shares subdivided into coupons; which remain subject to the rules established for this sort of company.”⁷

The (1829) Andino code stresses the principle of publicity: partnerships and limited partnerships are legal when they are constituted by means of private agreements announced to third parties. The Spanish code differed from the earlier French model in entrusting the registration of these agreements with a new organisation, the Commercial Courts. §290 required that new firms be inscribed in a general provincial Register, identifying the notary who wrote the articles of association, the names of general partners, the firm’s duration, as well as a list of the partners with the power to sign in the name of the company.

In one respect the 1829 Commercial code was novel: it introduced general incorporation to Europe. The code stated that any group of investors who met the criteria enumerated in the code could form a corporation. Elsewhere at the time, every corporation required a specific and idiosyncratic grant from the state. The United Kingdom did not adopt general incorporation until 1844. In France this development waited until 1863 (and a further relaxation in 1867). Most of the German states retained a concession system until 1870. Only in the United States, where state legislatures were liberal in granting corporate charters in the early nineteenth century, and several states had also adopted general-incorporation statutes by 1860, was there anything like the provisions of the 1829 Spanish code that early.

Circumstances in Spain at the time were not favourable to the growth of the corporation. The Industrial Freedom Law (20 January 1834) provided a second boost to the formation of companies, and the loss of some Spanish colonies in 1827 led to the repatriation of capital and might have been one stimulus to incorporation. But Spain remained locked in dynastic and civil war until 1840, and the law was repealed in 1847. In addition, some complementary economic infrastructure (such as banks) remained quite weak. The evidence suggests, however, that some entrepreneurs took advantage of the freedom to incorporate. Bernal (2004) estimates, based on Madoz (1850)’s *Diccionario Geográfico*

⁷ The limited share partnership is a form in which the limited partnerships are represented by tradable shares. The literature on France and Germany claims this form was common before the advent of general incorporation because as a partnership, it did not require a charter, but that in its large incarnations it was a reasonable substitute for a corporation. The empirical evidence on this form suggests it was not as widespread as claimed. See Guinnane et al 2007.

Estadístico Histórico as well as the *Anuarios Estadístico de Spain*, that the Andino code led to the creation of about forty corporations (M. Bernal, 2004, p. 77)

At the end of the 1840s the government suspended the 1829 code and related commercial law. On January 28th 1848 the government promulgated a new law requiring that both corporations and partnerships by share receive royal approval. The decision reflects a general economic crisis that started in 1845, which in Spain was accompanied by financial-market crises (P. Gómez de la Serna, 1878, pp. 21-49). The new Spanish stock exchange experienced a sharp decline in 1845, creating mistrust in stock companies. Additional changes culminated in the law of 1848, which abolished freedom of incorporation but offered exceptions, perhaps indicating political motives for control over certain sectors. During the following decade, several laws were passed allowing the creation of corporations in some sectors, including banking, mining and railways (G. Tortella, 1968, pp. 69-84) (L. Padros de la Escosura, 1988) (C. Erro, 1995) (JR García López, 1994). The following decade saw the incorporation of many banking firms.. An international economic crisis (1866) put an end to the prosperity and led to another collapse in the Spanish stock market. The real economy also suffered, with a halt to railway construction and a contraction of Catalonia's textile industry. The economic crisis provoked a military uprising that ended with the queen in exile and a new provisional government. The new provisional government tried to promote economic and social modernisation. The Royal Decree of 28 October 1869 provisionally re-established the 1829 code of commerce, pending passage of a new law. The new law (1869) once again granted freedom of incorporation (Diario de las Cortes Constituyentes. Apéndice, 11.10.1869)

Revising the Code of Commerce: the exception to the principle of numerus clausus

The new commercial code approved in 1885 had a long gestation, starting with a commission formed in 1869. The 1885 code made only one significant change to the 1829 code's treatment of business firms: it abandoned the principle of *numerus clausus* in the menu of enterprise forms.⁸

⁸ Hansmann and Kraakman (2002, p. 373-420) discuss the principle of *numerus clausus* as it applies to property rights.

Article 117 simply declares valid any company contract, in any form, so long as its provisions are not expressly forbidden by law.⁹ This meant that, unlike France or Germany, a Spanish firm did not have to choose from a small set of well-defined business forms. Why was this modification introduced? The drafting commission's minutes do not contain any clear motives. The commission clearly was not borrowing from French or other law in this respect, as most other European business codes had the *numerus clausus* feature.¹⁰

The 1885 code differed from law elsewhere primarily in its treatment of corporations. Some scholars have stressed the lack of influence of the recent French company law on the 1885 Spanish code. The French Corporations Act of 24 July 1867 reflected the greater importance of partnerships in that country. The 1885 Spanish code also differs from developments elsewhere in that it kept corporations in the business code; it did not “decode,” as took place in France, Germany, and elsewhere. Spain was also successful in defining a totally modern corporation. The minimalistic character of the articles governing corporations gave rise in Spain (more than in other countries) to companies that were formally corporations, but did not correspond to the public service function attributed to the corporation, until the law of 1951 established more specific guidelines.¹¹

Reform without law: the SRL and the Commercial Register of 1919

In 1919, the commercial registry issued new regulations that in effect added a new legal form in Spain. The new rules allowed notaries to create and register SRLs. Below we document an almost immediate reaction to the new possibility, as the number of SRLs created each year soon supplanted both types of partnership. The idea for this type of firm in Spain appeared, as we have already seen, as early as 1869. The parliamentary debate in the 1880s over adoption of the 1885 Code also includes

⁹ “§117.- El contrato de compañía mercantil celebrado con los requisitos esenciales del derecho, será válido y obligatorio entre los que lo celebren, cualesquiera que sea la forma, condiciones y combinaciones lícitas y honestas con que lo constituyan, siempre que no estén expresamente prohibidas en el código”

¹⁰ One feature of the 1885 code warrants mention in light of later developments. Some commentators discussed the limited partnership as particularly important for economic activity: “When what is needed is to exploit a factory, create a manufacturing business or promote an invention, it is necessary to combine united management, spontaneous action, correct and opportune measures and complete freedom” (J.M. Ros Biosca, 1886, p. 123). At the end of the code project (1883), Fabra (a member of parliament) drew on the same idea in introducing his proposed “partnership with limited liability.” This idea did not go further, but the proposal suggests that discussion of what became the SRL started decades earlier.

¹¹ Girón Tena (1986, 206) notes that §158 of the 1885 Business Code appears as §309 of the 1829 Business Code

demands for the new form. By the first decade of the twentieth century, a group of intellectuals drew on both German and more often British models, actively discussing the pros and cons of both the new form and the specific rules it should require. Participants in these discussions took different and changing positions, but all stressed, in arguing for the new form, the value of flexibility in organizing multi-owner firms. The SRL's advocates thought the 1885 code was sufficiently flexible that adding a new form would work well, but wanted explicit definition of the new form to create certainty over how it would be used. Opponents of the SRL thought the 1885 code offered the corporation enough flexibility that it could be used as written for small companies and family enterprises; no new form was needed. There was also some concern over possible confusion of the SRL with the limited-liability partnership. Two well-articulated proposals offered in the second decade of the twentieth century provided structure to these debates. In 1914, the *Academia Jurídica Catalana* (Catalan Legal Academy) proposed a law reproducing many of the features of the corporation, but with fewer administrative and organisational obligations. In 1918, ex-minister Roig y Vergada offered an even more detailed proposal, one that languished because of political circumstances.

The preamble to the Commercial Register's new 1919 regulations refers to then-active debates about the SRL, implying that it was giving into considerable pressure in allowing the new form. (It does not describe that pressure's source). The new rules state that a primary objective in the new regulations was to clarify the role of the 1885 code's §127. This article stipulates that investors in an ordinary partnership all have unlimited liability for the firm's debts. The 1919 regulations stated that §117 (on freedom of contracts) allowed the creation of firms not subject to §127. (Note once again the role of *numerus clausus* here; the registry was arguing that those firms had the right to "make up" their own new form distinct from what was enumerated in the code.) The registry stated that the SRL was a distinct type of company and not subject to §127. As a precaution, however, it recommended that SRLs avoid any name that would lead to confusion with other forms (Gaceta de Madrid, 26.9.1919, p. 1020).¹² §108 of the new regulations held that an SRL could be registered

¹² "por entender algunos que con ellas se infringía el precepto del artículo 127 del Código de Comercio, que establece la responsabilidad ilimitada de los socios colectivos, bien miradas las cosas se ve que no puede existir tal infracción si a la Sociedad de responsabilidad limitada no se la denomina sociedad colectiva, dado que sólo a esta clase de sociedades es aplicable es referido precepto. No hay, pues, motivo legal alguno para negar la

under its corporate name “as long as it was not called “partnership”, “limited partnership”, or “corporation.” Instead, the SRL had to include the terms “limited company” “limited liability company” or some analogous phrase in its name, to signal the limitation of liability for its partners” (Gaceta de Madrid, 28.9.1919, p. 1060).¹³

And there the law stood until 1951, when the SRL was first the subject of explicit legislation. There were earlier efforts at reform, however. In 1926, Spain established a commission to draft a new commercial code to supplant that of 1885. Although its efforts did not result in new law, its discussions reveal considerable diversity of opinion about the proper role and nature of the SRL. Many of the reforms offered for the SRL appear either in the German GmbH (established in 1892) or its close cousin, the French SARL (1925). For example, members of the Spanish drafting commission proposed minimum capital for the SRL, limitations on transfers of SRL ownership (to make the shares less liquid), and some governance rules the firm could not contract out of (for example, the right of super-majorities to over-rule management in some cases). These proposals may reflect on the way contemporaries thought of the SRL and the way in which it was used, but, as the 1926 code never came to fruition, the rules governing the creation of firms documented here remained those of the 1885 code.¹⁴

3. Choice of enterprise form: three empirical sources

Which enterprise forms did Spanish firms choose, and how did they use all this flexibility? To answer these questions we have assembled three distinct datasets that allow us to study the decisions firms made in this dimension. As is often the case with historical data, our sources do not provide precisely what we want, but together they yield a remarkable picture. We use the first source to gain an overview of the number and sizes of the different types of firms in Spain, as well as their

admisión en el Registro Mercantil de estas sociedades, constituidas al amparo del §117 del código de comercio, que declara válido y obligatorio todo contrato de compañía mercantil celebrado con los requisitos esenciales del derecho, cualesquiera que sean la forma, condiciones y combinaciones lícitas y honestas con que lo constituyan, siempre que no estén expresamente prohibidas en el código” (Gaceta de Madrid, 26.9.1919, p.p. 1020)

¹³ Shortly after its introduction, the SRL was included with other firms in a reform of business taxation. C. Betrán Pérez (1999, p. p. 119-135).

¹⁴ The minutes of the drafting commission are reproduced in J. F. Lasso Gaité (1999, pp. 550-570). A critical interpretation of this project is in N. Pérez Serrano (1926, p. 335-361)

geographic location. We use the other two to dig into the specific features that led a firm to be organized in one way versus another.

Appendix A describes these sources in detail; here we provide a brief overview. All three databases are based on the registration of new firms with the Commercial Court. The first source consists of annual, province-level totals of the number of firms organized as each legal form, along with the total capital in these firms, for the period 1886-1936. This aggregate source, which we call the *Anuarios*, provides a rare complete picture of how firms organized. The *Anuarios* are based on published sources. The second source we collected ourselves from the archives of five of Spain's fifty-one commercial registries. For a random sample of firms we abstract information from the articles of association that describe a firm's legal form, the number and names of its owners, its business activity, and other matters. We focused on these five provinces because the documents are physically available only in these places; a "Spanish" random sampling strategy would have been prohibitively expensive. For each of these five provinces, we randomly selected two firms from each year, again for the period 1886-1936. The resulting dataset, while rather small, supports detailed questions about the determinants of legal form for our entire period.¹⁵ We refer to this source as the *Articles*. Our third source is based on the articles of association for every firm organized in Spain in the years 1925-1927. This source, which we call the *Association* data, has firm-level information on legal form, total invested capital, and the firm's sector. While the dataset has more firms than *Articles*, the (published) *Association* source contains only a subset of the variables available in the *Articles* data. This limitation reflects the underlying publication.

We must stress some limitations on what is possible, given the underlying source. Attributes such as capital stock or number of owners could and probably did, in some cases, change over the firm's life. The total capital stock listed is the capital authorized in the articles of association. For partnerships and the SRL, this sum reflects a real figure for which the owners were potentially responsible to creditors. We do not know how much was paid in, in the case of corporations, nor do we know about later increases or decreases in capital. Our estimates of capital and the number of owners for corporations are questionable for this reason. In addition, our sources do not tell us

¹⁵ We are currently expanding this part of our database to include more provinces.

anything about a firm's subsequent survival. Some firms probably failed fairly soon after their registration; even the *Annuarios* portrays flows and not stocks of firms.

4. An overview of choice of legal form in Spain

We begin with an overview of the way Spanish firms used their choices of legal form. The *Annuarios* provide two variables for each province-year combination: the number of firms of each type, and the total capital invested in such firms. Figure 1 reports for all of Spain the distribution of firm registrations, by legal form, over our period. The patterns were fairly stable until the introduction of the SRL in 1920. The vast majority of firms in 1886 were ordinary partnerships, with a small but stable fraction organized as limited partnerships. Corporations accounted for a relatively small portion of new firms, although that portion grew throughout our period. The SRL's introduction in 1919 nearly eliminated the limited partnership. The combination of the new SRL and the growing role of the corporation also made the ordinary partnership considerably less popular than in the past. By 1936, less than one-fifth of all new Spanish firms were ordinary partnerships, and the corporation and SRL accounted for nearly equal shares, at about 40 per cent of all new firms each.

Figure 2 reports the allocation of capital invested across the different enterprise forms. Corporations usually account for at least sixty per cent of all capital invested in new firms in a given year. When introduced, the SRL remained small, accounting for much less of total capital than in numbers. Comparing Figures 1 and 2 highlights an important fact to keep in mind with all these comparisons; corporations were ordinarily huge compared to partnerships. In 1900, for example, the average new corporation had a capital of 1.1 million pesetas, while the average new ordinary partnership had a capital of 34.9 thousand pesetas. On the other hand, we should not assume all corporations were huge and all partnerships were tiny. Also in 1900, in one-quarter of Spanish provinces the average new corporation had a capital of 133 thousand pesetas or less, while in one-quarter of provinces the average new ordinary partnerships had a capital of 172 thousand pesetas or more.

In all that follows we must bear in mind another important feature of Spanish firms: the overwhelming weight of Barcelona and Madrid in Spanish commercial life, especially for

corporations. Figure 3 presents the total number of corporations registered in Spain, as well as the same figures for Barcelona and Madrid. Between them, Barcelona and Madrid often account for more than half of all new Spanish corporations. This dominance of Madrid and Barcelona is peculiar to the corporation and does not extend to other legal forms. Figure 4 shows capital invested in corporations. Here we see that while Barcelona and Madrid were home to a disproportionate share of all corporations, those firms were not always the largest corporations in Spain. In 1900, for example, the average corporation registered in Barcelona had 885 thousand pesetas authorized capital, and in Madrid in that year, 784 thousand pesetas. The three corporations registered in Seville in that year had an average capital of more than 4 million pesetas.¹⁶

The reasons for Madrid and Barcelona's role for corporations are not hard to find. As the national capital, Madrid was the logical headquarters for firms that had or aimed to have a national reach. Barcelona held a similar position for the Catalan region, a relatively heavily-industrialized part of Spain. Barcelona and Madrid also account for a large share of all new partnerships and SRLs, but nothing like their domination for corporations. This is as we expect; smaller firms worked in a more local environment, and had little reason to be far from customers or owners. In any case, the importance of Barcelona and Madrid require caution in all that follows.

Maps 1-4 present more information on the geographic distribution of firms in Spain. The units here are Spain's provinces, and the population as of 1900 is used in population normalizations. Map 1 suggests that part but not most of the role of Barcelona and Madrid in corporations reflects their large populations. Even when we normalize by provincial populations, these two provinces stick out. Between 1886 and 1914, the number of Spanish corporations increased, but their numbers (but not capital) became even more concentrated, on a per-capita basis, in Madrid and Barcelona. Maps 2 and 4 report the distribution of the two kinds of partnerships. In 1886, both were much less concentrated than the corporation, as noted. Comparing Maps 2 and 4 shows that the limited partnership's decline

¹⁶ Madrid and Barcelona dominate the creation of new corporations over this period, but not in every single year. In all Barcelona was home to 4088 new corporations and Madrid to 2511; but one can find years in which more corporations were created in another province. In 1900, for example, Vizcaya gained 55 new corporations, topping Madrid (29 new corporations) and Barcelona (14 new corporations).

was concentrated in Spain's south-western provinces; the geographical distribution of the ordinary partnership, on the other hand, changed little in the period prior to World War I.

5. The choice of legal form

Our central interest is how specific types of firms decided on one of the legal forms available to them. To study this issue we have two different firm-level databases, the *Articles* and the *Association* data. We find it useful to divide the discussion into two regimes, before and after the SRL became available. Prior to the SRL's introduction, there were three different margins, between the two types of partnerships, and then between the corporation and each type of partnership. The SRL introduced the margins to six. Given the information available, we can organize this question under a few headings:

- What is the role of size, measured as capital, in the choice of legal form? Following the literature, we suspect that the largest firms prefer the corporation because limited-liability and liquid shares facilities raising capital from a large number of dispersed investors. For similar reasons, firms needing more capital are more likely to become a limited partnership, as opposed to an ordinary partnership.
- How does the number of owners affect the choice of legal form? For very large numbers of owners the corporation might be the only workable form, but we do not think our measures actually capture this dimension correctly for corporations. Among the two partnership forms, the ability of a limited partner to invest without great risk suggests that partnerships with more owners will be limited partnerships.
- How do family ties among owners affect legal form decisions? The liquidity of corporate shares make it less attractive for families that seek to keep control of an enterprise, and in any case, it is unlikely that the many dozens or even hundreds of share-holders can be restricted to a family group. Family connections are more important in choosing among partnership forms. We suspect that if all owners are related, they are more likely to choose the ordinary partnership. Joint holding of assets at the household level, as well as risk-sharing within families, implies that it makes little sense for one family member to have limited liability in a firm in which another has unlimited liability. On the other hand, limited partnerships offer a vehicle for family members to seek investment from unrelated persons.
- How does the firm's underlying activity affect the choice of legal form? (In our data, we are forced to use the firm's sector as a proxy for its activity.) Businesses sensitive to untimely dissolution, we predict, will prefer the corporation. Such businesses would include any entity that had sunk investments that pay off only over time. We have no prediction for how sector would affect the decision between the two partnership forms.

The SRL changes these margins in several ways. The SRL did not have access to capital markets in the same way as a corporation, so firms with large numbers of owners would still prefer the corporate form. But, given its locked-in capital, a larger SRL might be a closer substitute for a corporation than for firms that anticipated a large capital stock in a firm with a smaller number of owners. As for family ties among owners, the SRL would be a closer substitute for the partnership forms. Finally, we expect the SRL to edge out partnership forms in areas where the firm's activity makes untimely dissolution a special concern.

Note that in this analysis, we focus on choice of legal form, and not on contracting decisions owners make within a given legal form. This second issue remains at the heart of our agenda, but the *Association* source provides little useful information on key contracting decisions. Digging into how Spanish entrepreneurs used the flexibility of a given legal form must wait on our enlargement of the *Articles* database. For now we know that the Spanish corporation was unusually flexible, and this flexibility must have made it a closer substitute for other legal forms in some circumstances.

An overview of the databases

The *Articles* provide firm-level information for a randomly-selected group of enterprises in Barcelona, Madrid, Murcia, A Coruña and Vizcaya. These provinces reflect the diversity of the Spanish economy in our period: a pioneering city in the industrialization of the 19th century in the textile sector (Barcelona) and in the industrial sector (Vizcaya), a city dedicated to government and services (Madrid), a port city (A Coruña) and a centre focused on agricultural export and with a strong mining sector (Murcia). For each firm we extracted the date of the firm's creation, its legal form, the capital contributed by each owner, and indicators of family ties among the several owners, and a classification of the firm's main line of business or sector.

Table 1 presents an overview of the *Articles* sample, showing the number of firms of each type in each province. We also include the proportions of each type of firm implied by the *Anuarios*, as a rough check on the sampling strategy. In most cases, our sample of two firms per year yields a

distribution of legal forms that is tolerably close to that implied by the *Anuarios*.¹⁷ Table 2 reports basic characteristics of the firms in this database, by legal form. Recall that for corporations, the number of owners is simply those who were part of the initial filing; we cannot say what happened to ownership thereafter. The two “family” variables were constructed on the basis of surnames and internal references (for example, “and his son...”) and probably understate the true weight of family connections in firms. We probably fail to detect some relatives “in law” as well as married sisters. Note that limited partnerships were larger (measured by both number of owners and by capital) than ordinary partnerships, with SRLs in between. The role of family in ownership is more complicated. Limited partnerships have more family involvement, but are less likely to consist solely of family members.

Table 3 reports our effort to classify firms into sectors. Our sector groups are an idiosyncratic adaptation to the size and character of this sample. We started with the scheme used by the CNAE (*Clasificación Nacional de Actividades Económicas*: National Classification of Economic Activities)¹⁸ and combined related sectors until the scheme was manageable for our purposes. Corporations dominate two sectors, mining and the heterogeneous category of agriculture, utilities, and construction. This pattern probably reflects capital requirements. Within a given sector, firms organized as corporations have dramatically larger total capital investments. In the manufacturing sector, for examples, corporations were organized with an average of 4.7 million pesetas capital. Manufacturing firms with other legal forms had an average of 73 thousand pesetas in capital.

Table 4 shifts to the *Association* database, reporting the number of firms by form and their size (measured by mean capitalization). The *Association* source is similar to the *Articles*. But it contains over 3200 firms, formed in the years 1925-1927 only. The *Association* source reports less information than we extracted from the articles of association for the *Articles*; most importantly, the *Association* data lack information on the number of owners and their family connections. The main

¹⁷ See the Appendix for discussion of sampling challenges. With these sample sizes, the standard error of the proportion of firms in a given enterprise form can be very large. Consider Madrid, where 54 percent of our firms but only 36 percent of all firms in the *Anuarios* dataset are corporations. The standard error of a proportion .54 in a total sample of 96 firms is about .05.

¹⁸ A discussion of the CNAE can be found at: <http://www.ine.es/jaxi/menu.do?jsessionid=47757905616C69F3FB75D4DA2F07F903.jaxi02?type=pcaxis&path=/t40/clasrev&file=inebase&L=1> [22.3.2012]

value of this source is that it allows us to look in more detail at a period after the SLR was fully normalized. We saw earlier that the limited partnership became rare during the 1920s. Table 4 shows that the remaining limited partnerships were larger than the SRL and much larger than the ordinary partnerships.¹⁹

Table 5 presents an overview of legal form by sector once again in the *Association* data. Once again we construct a sector classification scheme that starts from the published Spanish tables, and collapses firms into like categories to achieve a manageable number of groups. The scheme used here is too detailed for our econometric analysis below, but this level of detail is useful for seeing the popularity of the different forms by sector. The corporation, not surprisingly, dominates in most areas where one would expect large capital requirements, including extraction and utilities. (The category “clubs” includes some social organizations, where apparently the ease of issuing corporate shares to members made it an attractive form.) Ordinary partnerships retained their importance for retail firms and for some light manufacturing, including shoes, textiles, and furniture. This form also continued to dominate agency firms. The SRL’s appeal was very broad, with significant numbers in most of our categories. This may be one reason the limited partnerships had completely disappeared in some areas, and lack a commanding presence in any sector.

Multivariate approaches

Our samples are too small to use table to examine multiple dimensions at once. What we really want to know is whether firms in a given sector in a given province with a specific capital size were more likely to choose one legal form over another. To address this kind of question we use a simple multivariate econometric model, the multinomial logit (MNL).²⁰ MNL estimates reflect the probability of selecting each legal form relative to another specified as the baseline, which we assume

¹⁹ G.W. McDonogh (1989 [1986]) claims that the treatment of inheritance under Catalan civil law made the limited partnership relatively more attractive there. Perhaps, but our data do not support that view; while limited partnerships were more common in Barcelona, the difference between that province and the rest of Spain is not large. In 1925 and 1926, about 10 percent of all firms organized in Barcelona were limited partnerships. In 1927 that figure had fallen to 4.5 percent.

²⁰ The approach used here is similar to those employed by Gómez-Galvarriato and Musacchio (2006) as well as Abramitsky, Frank, and Mahajan (2010).

is the ordinary partnership. The MNL model has the “independence of irrelevant alternatives” (IIA) feature that the estimates for each binary choice here (that is, corporation versus ordinary partnership, limited versus ordinary partnership) are the same as we would obtain from estimating two separate binary-logit models. The choice of baseline form also does not affect properly-constructed tests of the effect of coefficients in the model.²¹

In many discrete-choice applications the IIA property is a problem, as it implies an implausible restriction on underlying choice behaviour. Here we doubt that it has an undesired effect; a firm deciding between two kinds of partnership probably does not care where the corporation is another option. But in future work we will explore alternative modelling choices to make sure our results are robust.

We begin with the *Articles*. Table 6 reports a multinomial logit model of the choice of legal form, given the firm’s sector, the number of investors, and its total capital. We restrict the sub-sample to the years before 1920, to focus on the period when the SRL was not available. The baseline outcome is the ordinary partnership. One could worry that the number of owners and the total capital invested are possibly endogenous, and we would agree, but with sample sizes of this sort there is little we could do about the problem. More capital and more owners led entrepreneurs away from the ordinary partnership, either to the corporation or to the limited partnership. The effect of more owners is about the same for the two alternatives (the Wald test for the null hypothesis of equal coefficients is 0.6, $p=.44$), while the capital effect is larger for corporations, which should not surprise (the Wald test is 3.8, $p=.05$). The trend towards corporations noted earlier in connection with the *Anuarios* is also apparent here, even holding other variables constant.

The dummies for province probably pick up a number of influences, including differences in firm activity not captured by the sector dummies. Collectively, the place dummies matter (Wald is 25.77, $p=0$). Being in either Madrid or Murcia makes the corporation much more likely than in the omitted province, Barcelona. This result does not contradict the discussion above; by controlling for firm size and sector, we are pulling out some of the factors that made Barcelona home to so many

²¹ Specifically: one can test for the equality of a given coefficient on the “corporations” and “SRL” branches and obtain the same results, regardless of the choice of baseline.

corporations. The sector dummies tell an interesting tale. We have further collapsed them because of the need to divide the sample at the year 1920, to account for the SRL's introduction. Here the omitted category is especially heterogeneous, but our primary interest is in comparing sector effects across the two equations (for corporations and for limited partnerships). First, we can reject the null hypothesis that the sectors do not matter collectively in general (the Wald statistic is 19.8, $p=0$) or for corporations only (the Wald statistic is 15.02, $p=0$), but not for the limited partnerships (the Wald is 1.7 with $p=.42$). Investors were less likely, *ceteris paribus*, to decide on a corporation for manufacturing and trading firms. The former is surprising, as one would think the problem of untimely dissolution would affect manufacturing firms that had specific investments in plant and worker training. The result may reflect the nature of manufacturing firms in Spain at the time; most are in light-manufacturing areas, where the costs of liquidating equipment would be relatively low. None of our firms (in this sample) are steel or other firms where one would expect heavy, firm-specific investments. Sector does not affect the choice between the two kinds of partnerships, which may not be surprising. The main difference there is liability, and there is little reason to think that sectors as we define them have any bearing on liability.

We also see clear differences in the decisions made by firms with a family component. Owners who include family members are much less likely to decide on the corporate form than on the ordinary partnership. This result is what we expected. The choice between the two partnership forms is more complex. Entrepreneurs with *some* family members are more likely to decide on a limited partnership; if the entire group is family, then they are more likely to decide on an ordinary partnership. These "family" effects are very large. Including some family members raises the probability of choosing the limited partnership form by .17 (compared to an unconditional mean value of the dependent variable of 0.16); if all investors are family members, the probability declines by 0.09. This effect probably reflects the suggestion in the literature that limited partnerships were often used by family firms to bring in an outside investor.

Table 7 reports a similar model for the period 1920 onwards, when the SRL was a fourth organizational possibility. This model differs from that reported in Table 7 because of a new alternative, and it is important to be clear about how this alternative matters. Econometrically,

dropping the SRL “branch” (and all SRLs) from the estimation in Table 7 would not affect the other estimates. But the decision to organize as a limited partnership or corporation reflects, in part, the existence of the SRL. That is, the actual *data* would be different had there been no SRL. Several results stand out. The time trend suggests the slow demise of the limited partnership, as the corporation and SRL become more and more popular. Larger firms measured by capital are more likely to decide on the corporate form, but not other forms, while starting with more owners has no effect on legal form. The sector dummies once again show interesting relationships with legal form. We can reject the null that they are all zero (Wald is 13.33, $p=.04$), but this appears to be driven by the corporations, for which the test statistic for both sector dummies being zero is 10.86 ($p=0$). We also cannot reject the null hypothesis that the sector effects are the same across all three outcomes. The effect of family links among owners show that the limited partnership is favoured among investors who are mostly family but want to bring in some outsiders. This effect remains even after the SRL’s introduction. The SRL distinguishes itself most strongly from the ordinary partnership in the effect of family relations among owners: here, if all investors are related, the SRL is an unlikely choice. We need to explore this finding more, but it suggests that for families the SRL was used as something distinct from a sort of partnership where all had limited liability.

Given the limitations imposed by our sample size, it would be rash to draw strong conclusions from these results. But some patterns do stand out. The gradual trend in favour of the corporation (and after 1920, the SRL) are not just compositional effects, they remain even when we control for firm size, sector, and location. The effect of firm size (owners or capital) appears limited to corporations; the choice of form between one of the partnerships, or between the ordinary partnership and the corporation, is driven by other considerations. And sector matters most in the decision to form a corporation, once again suggesting that the contracting issues that lead to one of the other forms is not much affected by the sector in which the firm operates. Finally, the family patterns noted in connection with the earlier period are evident here; groups of investors consisting of some family have a strong preference for the limited over the ordinary partnership. Groups consisting entirely of family have a strong preference for the ordinary partnership over the SRL. This last finding awaits

further refinement with the enlarged sample, but clearly shows that the SRL played a role, in at least some cases, distinct from the partnership forms.

We now turn to the *Association Mercantile* data, which permits more detailed examination of firm choices after the introduction of the SRL. Table 8 reports a model similar to those shown earlier. Once again the baseline legal form is the ordinary partnership. The year dummies indicate the growth in the SRL's popularity; even controlling for capital, sector, and region, the dummy for 1926 is positive and significant, and that for 1927 is nearly double the size of the 1926 dummy.²² The probability of choosing a limited partnership declined (conditionally) between 1925 and 1927. The effect of capital shows that SRLs were better-suited to smaller enterprises than was the corporation. The marginal effect of capital for a corporation is .06, while for an SRL it is -.02. Both marginal effects are estimated precisely. The regions are collectively significant in each branch of the model, and we see that limited partnerships are extremely rare in some provinces.

We have further collapsed the sector classification scheme over that used in Table 7, combining several smaller primary and service sectors. (The earlier scheme implied too many sparse for empty cells for the econometric model.) We can reject the null that the regions are collectively insignificant in all branches of the model. The same goes for sectors taken together. Above we noted that Barcelona played a pioneering role in creating the SRL. This status does not, however, translate into the SRL being more common there than in other regions. About 20 per cent of all new firms in the Association data in Barcelona are SRLs. This figure is far below several other regions; in Galicia, 40 per cent of new firms were SRLs. Our multinomial logit model implies that the marginal effect of a firm being in Catalonia is .02; for Madrid, it is .42. This huge difference may reflect the other variables in the model, that is, it might be that the sector composition of firms in Barcelona was especially appropriate for the SRL. In any case, it provides no support for the view that Barcelona had a special affinity for the SRL because of local civil law or the influence of local notaries.

²² The marginal effect of moving from 1925 to 1927 increases the chance of an SRL by about 6 percent. We can reject the null that the 1926 and 1927 dummies are the same in the SRL branch (the Wald is 3.45, p=.06).

Our estimates do not support the view that untimely dissolution problems guided firm decisions about the form of enterprise. The corporation dominates in some sectors where untimely dissolutions would be especially acute, but the difference is not consistent. The two legal forms with “locked in” capital, the corporation and the SRL, are not consistently more common in some sectors where one would think untimely dissolution would be acute. Unfortunately, we lack for this source the information on family ties that would allow a cross-check on the way firms dealt with untimely dissolution. In future research we will experiment with different definitions of sectors, to see whether the problem here is just the assignment of firms to categories that do not capture the firm’s reliance on sunk investment.

Before concluding this discussion we should briefly discuss some other evidence that does suggest concern with untimely dissolution. Firms had the option of stating in their articles of association how long the firm would last. This variable is thus available, in principle, in both the Articles and the *Annuarios* data. We do not (yet) know how courts interpreted these provisions, so cannot say how binding they might have been. In any case, only about 40 per cent of the firms in the *Annuarios* state a contractual duration. Among those that do, corporations have by far the longest contracts (a median of 20 years, N=296). Ordinary partnerships and SRLs’ each have a median duration of 6 years, with limited partnerships slightly longer at 8 years. Econometric analysis (not reported) of the median contract duration turns up an intriguing result: holding constant firm capital, year of registration, region and sector, we find that firms in the “chemicals and pharma” sector listed a duration nearly three years longer than the baseline (food and drink). There are several possible interpretations for this finding; one suggests a promising avenue of research, which is that firms in this sector had more sunk investments in intellectual property and firm-specific human and physical capital, and thus were more worried about a premature end of the project.

4. Conclusion

Our account of the development of Spanish company law in the nineteenth and early twentieth century stressed its long tradition of flexibility, as well as the introduction of a completely new form, the SRL, in 1919. Using three related empirical sources, we have documented the choice of

legal forms entrepreneurs made within this system. This paper is a first step in our investigation of Spanish law and the choice of enterprise form in Spain. Our next step, which awaits the enlarged *Articles* database, will use the detailed provisions of the firm's agreements to understand how entrepreneurs used the options available to them within a given form. This enlarged version of the *Articles* database used here will allow us to better-study the impact of the SRL on the choice of legal form, as done here. And by digging in the articles of associations' specific provisions we will gain a better understanding of how firms tailored each form to their needs.

This paper has focused on the choice of one form over another. Our findings require refinement, and but thus far we have clear evidence on several points. First, the corporation was less uncommon in Spain than in some other civil-law jurisdictions such as France or Germany. This ubiquity may reflect the flexibility of the Spanish law on corporations, and the opportunities it afforded entrepreneurs to adapt the form to their own needs. Second, family groups in Spain preferred the ordinary partnership for firms owned entirely by related people, and tended to use the limited partnership to bring in unrelated investors. Third, the introduction of the SRL nearly wiped-out the limited partnership, a pattern we see in France but not in Germany. Fourth, the very fact that the SRL's introduction had such a significant impact shows that it was in fact a new entity; the flexibility of the corporation was not enough for entrepreneurs to create what they wanted without the SRL. Finally, our econometric results stress the importance of firm size in the decision to use the corporation over both partnership firms and the SRL. We have, as yet, no clear-cut evidence that avoidance of partnership forms was motivated by concerns about untimely dissolution.

Appendix A: Sources

This appendix provides more detail on the three data sets employed in the paper. Starting in 1886, Spain maintained an exhaustive register of companies inscribed in the Deed Books of the commercial register in each province. The register files reflect the information provided by the firms as they inscribe the creation of new firms. Each new entity was assigned a number, which it retained for the life of the firm. The law required that changes in the articles of association also be registered. These inscriptions underlie our three sources.

Anuarios

We constructed the *Anuarios de la Dirección General del Registro y del Notariado* (Yearbook of the General Directorate of the Register and Notary) from three distinct publications: *Estadística del Registro Mercantile* (1886-1898), published by the Dirección General de los Registros Civil y del Notariado (Madrid, 1901); *Estadística del Registro Mercantil* (1899 – 1909), published by the Dirección General de los Registros y del Notariado (Section 4) (Madrid, 1911).; and *Anuario de los Registros y del Notariado*, published by the Dirección General de los Registros y del Notariado (Madrid, continues to the present day).

These three references each list, at the province level, the number of firms registered by legal form and total capital. The sources also divide firms by basic function: for example, which are banks, which have some type of concession, which are mines, etc. This source has been used by several scholars who have discussed its strengths and weaknesses (X. Tafunell, 2005). Earlier discussions focus on two problems. First, the capital figures are always authorized (not paid-in) capital, so they probably reflect an over-estimate for corporations especially. Second, in some cases when a firm registered a branch offer, the registry listed that branch's capital as the capital for the entire firm, leading to double-counting at the national level and over-estimates for the province where the branch was located.

Articles of association

To register a firm had to provide a copy of its articles of association, and those documents are in principle open and available. Collecting and using this kind of sources is very expensive, so we began with an initial sample of 500 firms, drawn from the registries of Madrid, Barcelona, Murcia, A Coruña and Vizcaya. As a pseudo-randomization scheme we selected the first firm registered in February and the first firm registered in July of each year. As noted in the text, because of incomplete access to the archives, in some cases the resulting sample was fewer than 100 firms. The worst case is Murcia, with only about 80 firms. For each of these firms we know the company name, its legal form, the year and date it was created, the total capital (subject to the qualification noted earlier), its sector classified according to CNAE-2009 (the national classification of economic activities), its planned duration in years, and family relationships among the firm's listed owners.²³ We also know, for the first three listed owners, name, profession, sex, capital contribution, and distribution of profits.

Association Mercantile

The third collection is based on an unusual source that unfortunately was only constructed for three years. Starting in 1927, the Special Statistics Section of the General Directorate of Commerce, Industry and Services published *La Asociación Mercantil en España*, a nominative list of all the companies inscribed in the Commercial Register. Apparently this publication was to be maintained indefinitely, but it only appeared for the years 1926, 1927, and 1928. This publication contains three types of information regarding trading companies that (1) registered/constituted (2) dissolved and (3) modified. The information supplied for each of the series is the following: province, corporate name, legal form, duration, nature of business, capital, and paid-in capital.

Maps

Maps 1-4 report the geographic distribution of firms in several ways. The firm data is simply the *Anuarios* discussed above. For the per-capita normalizations (the right-hand panel of Maps 1 and

²³ In our empirical work we divide these family relationships into 1 if all owners appear to be related; .5 if some are related; and 0 if none are related. Since these scoring relies on family names as well as references in the text (“... his brother Juan...”) they probably under-estimated family connections.

3, as well as both panels in Maps 2 and 4) the provincial population estimates are for 1900. We exclude the Spanish islands.

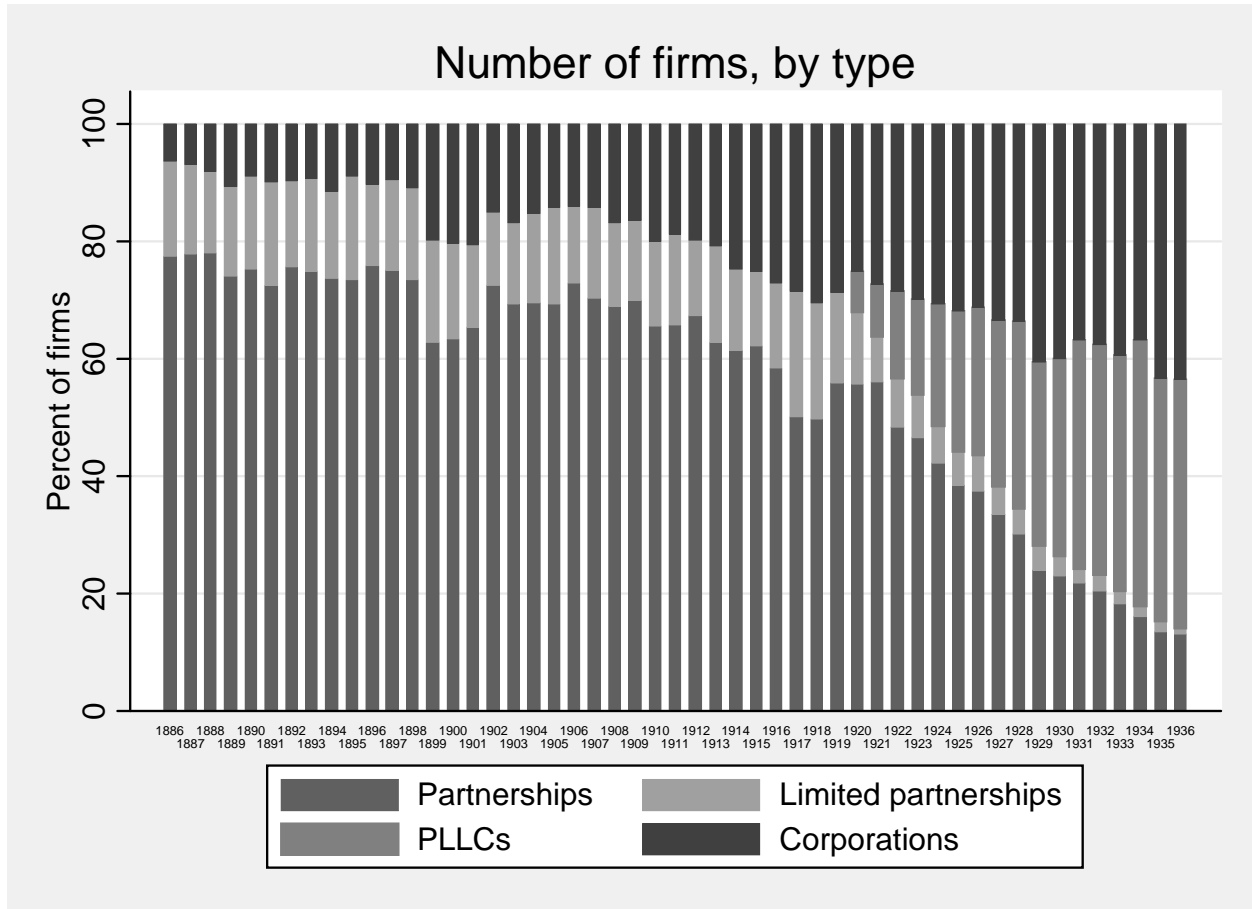
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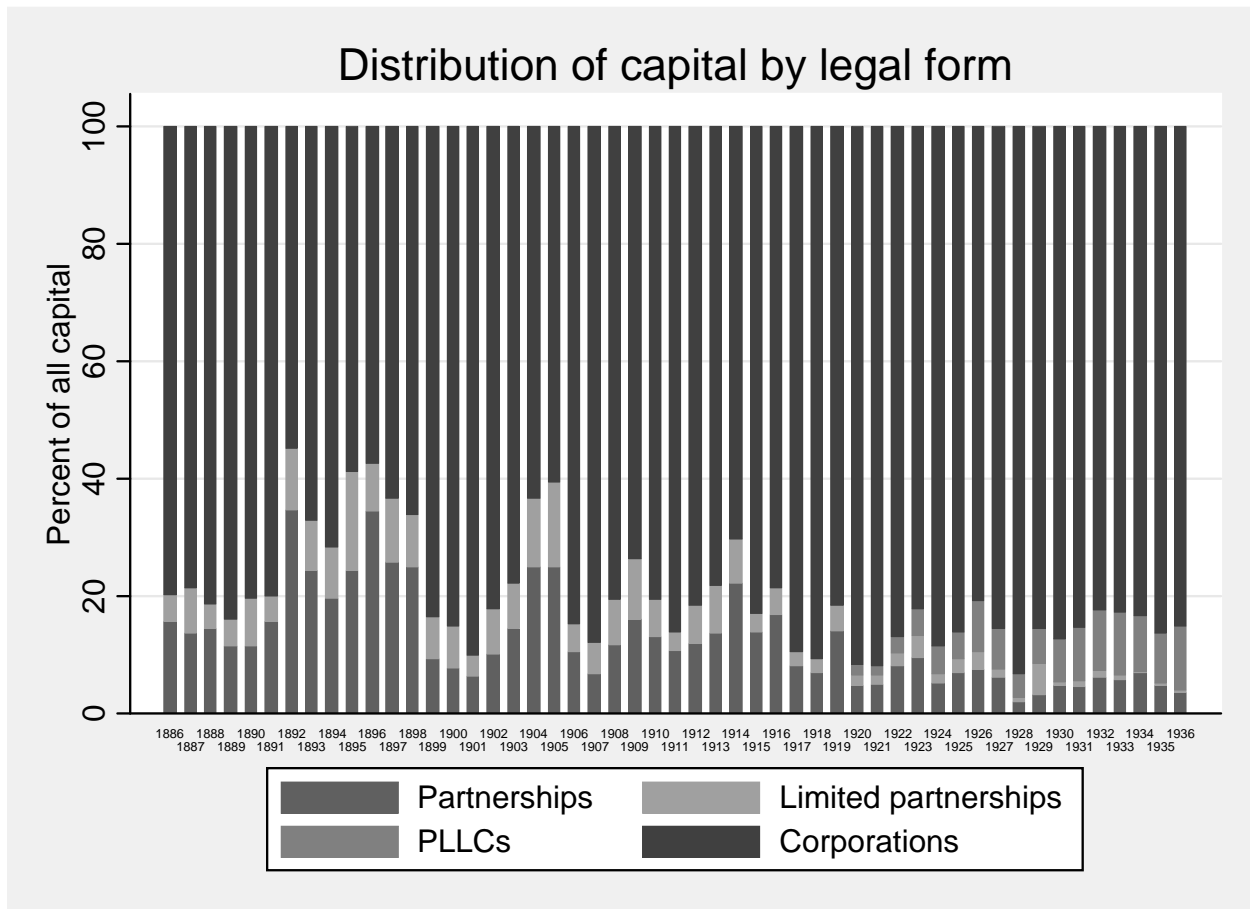
Figure 1



Source: *Annuarios*

Note: PLLC is the SRL

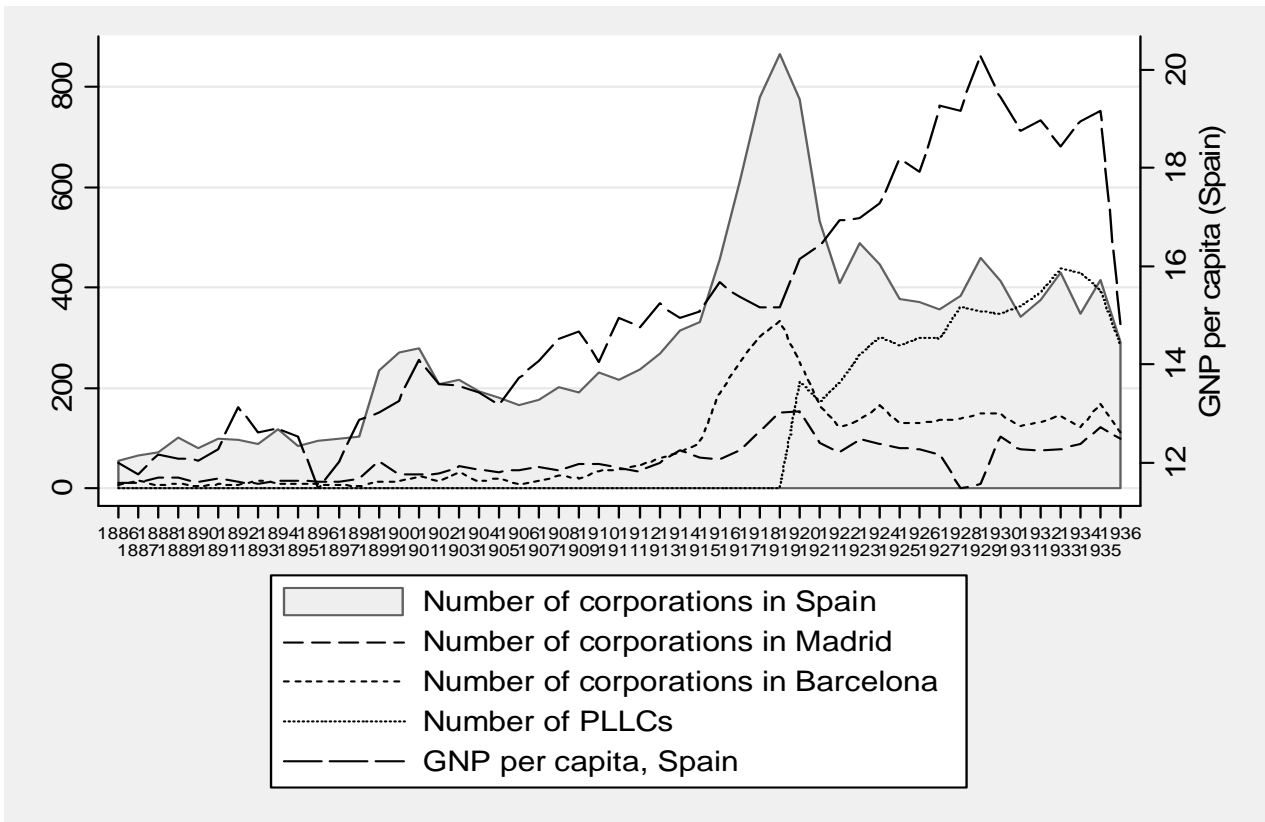
Figure 2



Source: *Annuarios*

Note: PLLC is the SRL

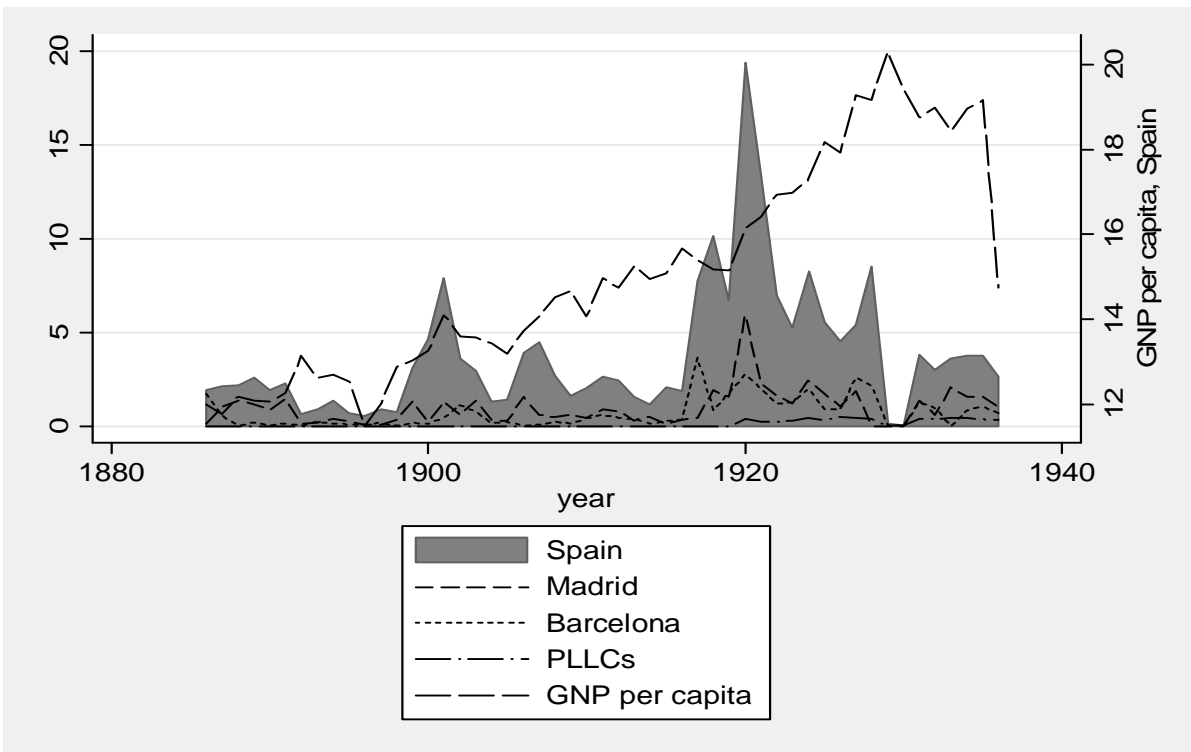
Figure 3



Source: *Anuarios*

Note: PLLC is the SRL

Figure 4: Capital invested in new corporations



Source: *Anuarios*

Note: Capital (left-hand vertical axis) is in hundreds of millions of pesetas.

Table 1: Legal form of firms in the Articles of Association sample and the *Anuarios*

Province	Legal form				Number of firms in the Articles sample
	Corporation	Partnership	Limited Partnership	SRL	
Barcelona	20.2 (21)	57.4 (56)	14.9 (16)	7.5 (7)	94
Vizcaya	28.7 (25)	44.6 (55)	9.9 (5)	16.8 (14)	101
Coruna	12.0 (15)	47.8 (51)	17.4 (19)	22.8 (14)	92
Madrid	54.2 (36)	28.1 (46)	7.3 (11)	10.4 (8)	96
Murcia	34.2 (34)	53.9 (49)	9.2 (8)	2.6 (9)	76
Number of firms	137	211	54	57	459

Note: The table presents row percentages of the percentage of all firms sampled in a given province that had a given legal form. The figures in parenthesis are the corresponding totals from the *Anuarios*.

Source: Main figures computed from the *Articles*, numbers in parentheses from the *Anuarios*

Table 2: Characteristics of firms in the *Articles* sample

Legal form	Number of owners	Capital	Some family	All family
Corporation	5.38	2737	0.13	0.09
Ordinary partnership	2.74	68	0.07	0.27
Limited partnership	3.98	135	0.28	0.17
SRL	2.95	96	0.14	0.04

Note: all figures are means. Capital is the median, in thousands of pesetas. “Some family” and “all family” are indicator variables, where a value of one means at least some of the firm’s owners were related (“some family”) or all owners were related (“all family”). The family categories are mutually exclusive.

Table 3: Sector breakdown of different legal forms, *Articles* sample

	Sectors						All firms
	(1)	(2)	(3)	(4)	(5)	(6)	
Corporation	25 19.8	22 14.4	15 31.9	14 35	25 78.1	35 58.3	136 29.8
Ordinary partnership	72 57.1	84 54.9	22 46.8	17 42.5	5 15.6	11 18.3	211 46.0
Limited partnership	15 11.9	28 18.3	3 6.4	3 7.5	0 0	5 8.3	54 11.8
SRL	14 11.1	19 12.4	7 14.9	6 15	2 6.2	9 15	57 12.4
Total	126	153	47	40	32	60	458

Note: second figure in each cell is the *column* percentage.

Sectors: (1) Manufacturing (2) Trade (3) Hospitality and services (4) Finance and real estate (5) Mining (6) agricultural processing, utilities, and construction

Table 4: Overview of firms in the *Association Mercantile* source

	Number of firms, by legal form				Mean capital, by legal form		
	1925	1926	1927	All years	1925	1926	1927
Corporations	33.2	31.1	33.4	1,061	1155.97	929.05	1591.51
Partnerships	37.5	36.6	34.1	1,178	105.10	94.12	117.70
Limited partnerships	6.5	6.9	4.1	193	183.41	207.73	192.84
SRL	22.7	25.4	28.4	827	112.89	150.46	131.50
Number of firms	1,135	1,112	1,012	3,259	461.04	376.47	615.56

Note: Figures in left-hand panel are row percentages, that is, in 1925, 33.2 percent of all new firms organized as corporations. Capital is in thousands of pesetas

Table 5: Sectors and the choice of legal form, 1925-1927

	<u>Corporation</u>	<u>Partnership</u>	<u>Limited Partnership</u>	<u>SRL</u>	<u>Number of firms</u>
Primary	50.0	10.0	5.0	35.0	40
Extraction	65.5	16.7	4.8	13.1	84
Food and drink	39.3	31.0	5.0	24.7	239
Wood and paper	18.1	55.3	9.6	17.0	94
Textiles and shoes	26.5	43.5	10.5	19.6	306
Metallurgy	23.8	43.6	5.9	26.7	101
Wholesale	36.7	35.2	6.4	21.8	409
Retail	7.5	52.3	9.3	30.8	493
Chemicals and pharmaceutical	45.4	23.9	4.6	26.2	130
Mining	25.3	40.0	3.2	31.6	95
Energy and utilities	69.8	17.2	2.6	10.3	116
Transportation and warehouse	42.5	30.8	4.2	22.5	120
Hotels and restaurants	28.3	30.2	1.9	39.6	53
Publishing and advertising	47.7	19.3	6.4	26.6	109
Finance, Real Estate, and Insurance	56.7	26.9	1.9	14.4	104
Liberal professions	46.4	15.5	1.0	37.1	97
Agents	9.5	54.0	4.8	31.8	126
Manufacture of machinery	39.0	29.4	3.7	27.9	136
Construction	44.1	30.7	2.4	22.8	127
Automobiles	31.1	20.4	6.8	41.8	103
Personal services	25.7	40.0	0.0	34.3	35
Clubs	83.3	16.7	0.0	0.0	6
Furniture	20.5	46.2	2.6	30.8	78
Public administration	15.9	59.1	6.8	18.2	44
Number of firms	1,061	1,178	193	827	3245

Figures are row percentages. See text for discussion of sector definitions.

Source: *Association* database

Table 6: Choosing a legal form – before the SRL

<u>Regressor</u>	Corporations		Limited partnerships	
	<u>Estimate</u>	<u>T-Ratio</u>	<u>Estimate</u>	<u>T-Ratio</u>
Number of owners	0.74	3.91	0.42	2.72
Capital	0.50	2.54	0.27	1.67
Sector dummies (reference is all other sectors):				
Manufacture	-1.18	-2.54	0.09	0.16
Trade	-2.04	-3.69	0.56	1.07
Family connections among owners (reference is no connection):				
Some family	-1.40	-1.89	1.01	1.97
All family	-4.33	-3.43	-0.80	-1.41
Province dummies (reference is Barcelona) :				
Bilbao	0.44	0.57	-0.95	-1.55
Coruna	0.84	0.95	0.15	0.3
Madrid	2.24	2.74	-0.30	-0.49
Murcia	2.27	2.95	-1.44	-2.1
Year	0.09	3.71	0.00	-0.21
Constant term	-173.75	-3.78	5.35	0.14

There are 301 observations. The log-likelihood is -167.26. The Chi-square statistic for the null that all estimates are zero is 89.44. Capital is in millions of pesetas.

Source: Articles database.

Table 7: Choosing a legal form: After the SRL

	Corporation		Limited partnership		SRL	
	<u>Estimate</u>	<u>T-Ratio</u>	<u>Estimate</u>	<u>T-Ratio</u>	<u>Estimate</u>	<u>T-Ratio</u>
Number of owners	0.40	2.04	0.16	0.50	-0.01	-0.04
Total capital	0.41	3.76	-0.07	-0.41	-0.05	-0.38
Sector dummies (reference is all other sectors):						
Manufacturing	-2.78	-3.06	0.33	0.26	-0.63	0.99
Trade	-1.22	-1.95	0.43	0.36	-0.75	-1.22
Family connections among owners (reference is no connection):						
Some family	1.56	1.53	3.00	2.69	0.80	0.91
All family	-0.14	-0.16	1.54	0.99	-2.03	-2.32
Province dummies (reference is Barcelona)						
Bilbao	-0.53	-0.62	2.53	1.68	1.30	1.68
Coruna	-3.38	-2.47	-0.25	-0.18	1.09	1.49
Madrid	-0.14	-0.16	-43.26			
Murcia	-0.91	-1.15	2.86	1.69	-0.72	-0.78
Year	0.11	1.73	-0.19	-1.67	0.14	2.67
Constant	-202.94	-1.73	363.29	1.66	-278.11	-2.67

There are 152 observations. The log-likelihood is -120.82. The chi-square statistic for the null that all estimates are zero is 137.5. Capital is in millions of pesetas. SRLs in Madrid are completely determined and had to be dropped from the model. Source is the articles database.

Table 8: Multinomial estimates of choice of legal form, Association Mercantile source

	Corporation		Limited partnership		SRL	
	<u>Estimate</u>	<u>T-ratio</u>	<u>Estimate</u>	<u>T-ratio</u>	<u>Estimate</u>	<u>T-ratio</u>
<u>Year of registration</u> (1925 is reference)						
1926	0.133	1.140	0.142	0.780	0.199	1.710
1927	0.166	1.360	-0.409	-1.910	0.417	3.500
Aragon	-0.100	-0.300	-0.848	-1.330	0.844	2.430
Asturias	0.392	0.840	-32.240	-86.310	0.868	1.650
Baleares	0.310	0.680	-0.436	-0.550	1.075	2.340
Canarias	0.185	0.200	-31.922	-56.540	0.829	1.030
Cantabria	-0.601	-1.290	0.265	0.500	0.244	0.500
Castillalamancha	0.629	1.310	0.042	0.060	1.208	2.520
Castillaleon	-0.047	-0.130	-1.820	-1.720	0.063	0.140
Cataluna	0.351	1.860	-0.042	-0.170	0.677	3.030
Comunidadvalenciana	-0.190	-0.790	-1.434	-3.010	0.508	1.900
Extremadura	0.513	0.750	0.057	0.050	0.558	0.630
Galicia	-0.810	-2.080	-1.696	-2.190	1.242	4.090
Larioja	-0.520	-0.510	-32.531	-58.550	1.489	2.510
Madrid	0.753	3.450	0.013	0.040	1.055	4.220
Navarra	-0.066	-0.200	-0.753	-1.300	1.261	4.020
Paisvasco	-0.554	-2.520	-0.856	-2.650	1.362	6.060
Regionmurcia	-0.165	-0.230	0.237	0.290	0.610	0.840
<u>Sector</u> (Food and drink is reference)						
Textile & Shoes	-1.015	-4.210	0.205	0.550	-0.632	-2.640
Metallurgy	-0.623	-1.810	-0.083	-0.150	-0.510	-1.670
Wholesale	-0.271	-1.220	0.043	0.110	-0.345	-1.500
Retail	-2.001	-7.370	0.150	0.420	-0.423	-2.010
Chemical & Pharma	0.433	1.500	0.115	0.210	0.285	0.920
Transport & Warehouse	0.457	1.580	0.083	0.140	-0.184	-0.580
Advertising & Publishing	0.710	2.150	0.661	1.220	0.452	1.300
Machinery	0.228	0.810	-0.243	-0.430	0.103	0.340
Construction	-0.073	-0.250	-0.766	-1.100	-0.258	-0.840
Cars	0.595	1.790	0.924	1.670	0.945	2.770
Furniture	-0.647	-1.900	-0.941	-1.180	-0.273	-0.840
Misc services	-0.178	-0.810	-0.768	-1.760	-0.195	-0.890
Misc primary sector	0.261	1.210	0.073	0.190	-0.264	-1.130
Constant	-0.764	-2.960	-1.594	-3.910	-1.322	-4.820

Computed from the *Anuarios* database. There are 3154 observations, and the log-likelihood is -3312. The pseudo r-square is .159

Map 1

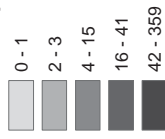
Spain
Corporation Capital per Capita
1886



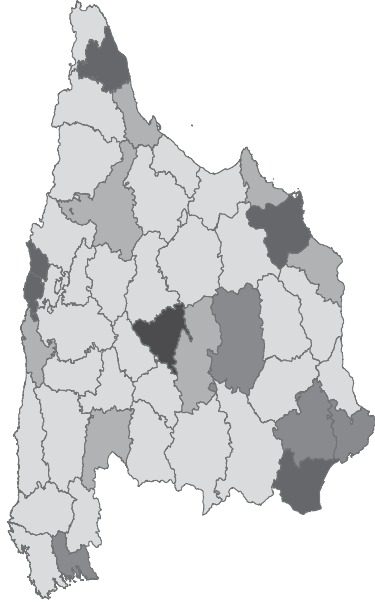
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Spain Mainland

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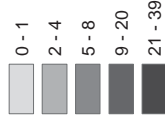
Spain
Number of Corporations per Million
1886



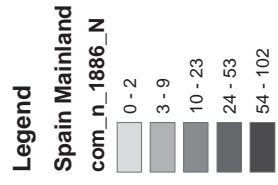
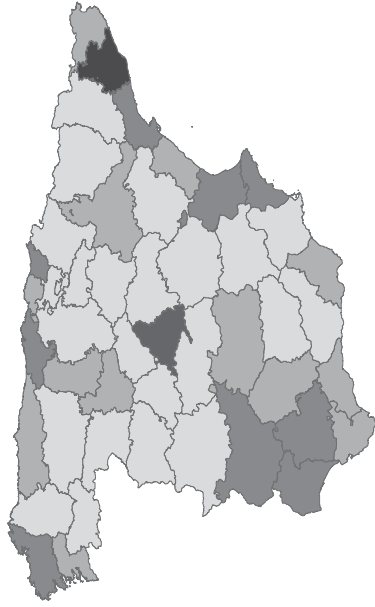
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Spain Mainland

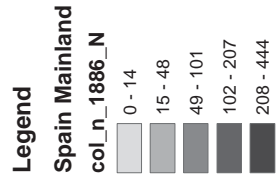
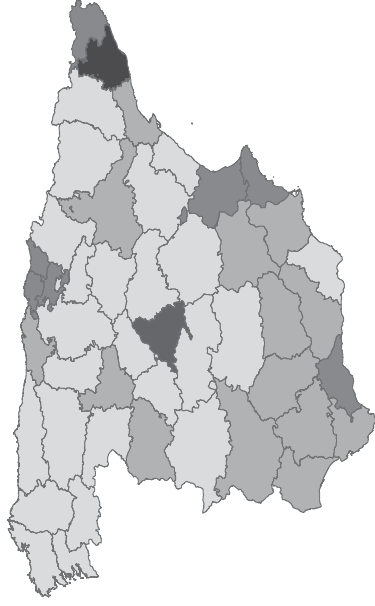
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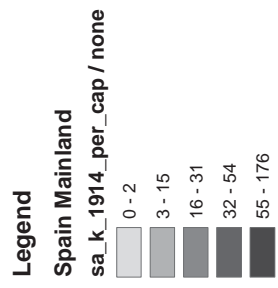
Spain
Number of Limited Partnerships per Million
1886



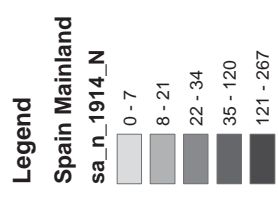
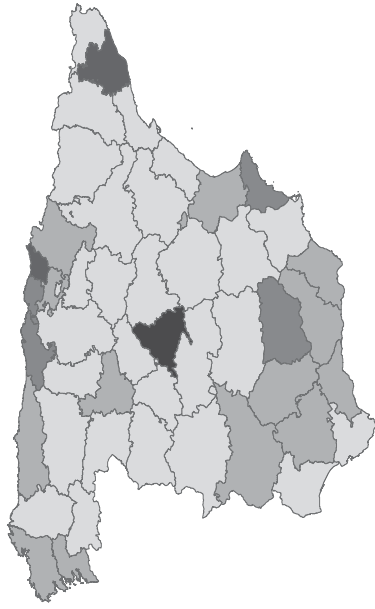
Spain
Number of Partnerships per Million
1886



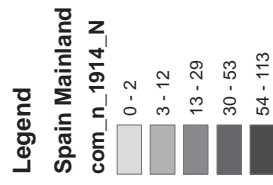
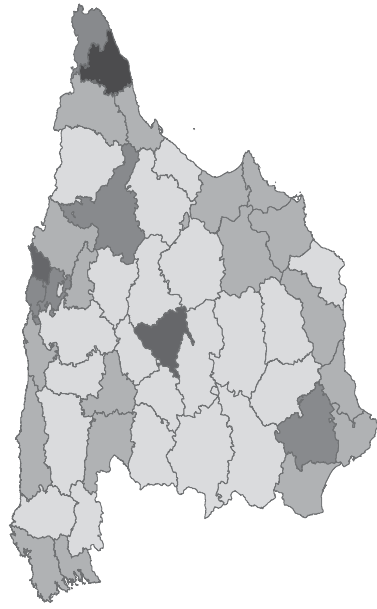
Spain
Corporation Capital per Capita
1914



Spain
Number of Corporations per Million
1914



Spain
Number of Limited Partnerships per Million
1914



Spain
Number of Partnerships per Million
1914

