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Organizational Choice in a French Civil Law  
Underdeveloped Economy: Partnerships, Corporations  
and the Chartering of Business in Mexico, 1886-1910

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## Resumen

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*Este trabajo estudia las siguientes preguntas: ¿qué determina el tipo de organización que escogen los empresarios? ¿En qué medida el sistema de tradición de derecho civil francés impone restricciones a la actividad empresarial? Revisamos los determinantes de las formas organizacionales en una perspectiva histórica observando el caso de México entre 1886 y 1910. Probamos si tener un menú más grande y diverso de posibles formas organizacionales, particularmente los tipos que no existen en el derecho anglosajón, significó una ventaja para la creación de nuevos negocios. Usando una base de datos de todas las compañías registradas en el Registro Público de la Propiedad de la Ciudad de México entre 1886 y 1910 (5,132 observaciones) estimamos diferentes especificaciones de un modelo Logit Multinomial para estudiar la importancia de las características de las empresas para la elección de una forma organizacional sobre las otras. Encontramos que si bien existían características específicas de las empresas que las llevaron a optar por los tipos de organización exclusivos de la tradición legal de derecho civil francés: comandita simple y comandita por acciones, estas empresas fueron poco relevantes tanto en términos numéricos como del capital que invirtieron. Argumentamos que durante el periodo estudiado la sociedad anónima ofrecía más ventajas que las sociedades en comandita y pocas desventajas, por lo que esta fue una forma organizacional por la que mucho más empresas optaron. Esto significa que el menú más diverso que ofrecía el derecho de tradición civil francesa no implicó una ventaja relevante para las empresas mexicanas del periodo estudiado.*

## Abstract

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*This paper studies the following two questions: what determines the organizational form chosen by entrepreneurs? To what extent did the French Civil Law system impose constraints to entrepreneurial activity? We look at the determinants of organizational form in historical perspective by looking at the case of Mexico, a Civil Law developing country, between 1886 and 1910. We test whether having a larger and more diverse menu of organizational choices, particularly those types not available in Common Law systems, made a difference for the creation of new businesses. Using a newly assembled dataset of all companies registered in the Registro Público de la Propiedad (a legal requirement) between 1886 and 1910 (5132 entries), we run different specifications of a Multinomial Logit model to study the importance of different firm characteristics for the election of an organizational form over the others. In particular we are interested in the characteristics of businesses that made them choose organizational forms only available in Civil Law countries. We find that there are significant characteristics that made companies choose the limited partnership and partnership with shares forms. Nevertheless, when we study the importance of the number and capital of those businesses we find*

*that they made a negligible contribution to total capital formation in Mexico. We argue that by the turn of the twentieth century the corporate charter had evolved in such a way that it offered all of the advantages of the limited partnerships (with and without shares), with few of its disadvantages. This implies that the more diverse menu of organizational choices offered by French Civil Law was did not offer a relevant advantage to entrepereneurs in late XIXth and early XXth century Mexico.*

## Introduction

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What determines the organizational form chosen by entrepreneurs? To what extent did the French Civil Law system impose constraints to entrepreneurial activity? There is an ongoing debate of the long term impact of legal systems on economic activity. Recently, the work of Rafael La Porta, Florencio López de Silanes, Andrei Shleifer and Robert W. Vishny -LLSV- (1997, 1998) has argued that there are significant differences between business regulations in Common Law and Civil Law countries that have had an impact on business performance and market entry. They provide strong evidence -based on large cross-country contemporary databases- to support the view that common law based systems provide better business environments than civil law systems.<sup>1</sup> According to them this is a result of the freer and more flexible environments that common law systems offer for entrepreneurial activity *vis a vis* civil law legal systems.<sup>2</sup>

However, Lamoreaux and Rosenthal (2003, 2004) have recently contested this argument comparing the organizational alternatives that the French and the U.S. legal systems offered to businesses during the nineteenth century and early twentieth centuries. According to them the French *Code de Commerce* offered a more flexible contracting environment than the American legal system. They found that U.S. law offered enterprises a more limited menu of organizational choices, and that business people in the U.S. had much less ability to adapt the basic forms to meet their needs than their French counterparts. Moreover they did not find evidence that American law evolved more readily in response to economic change than French law.

This debate opens the question of how to explain LLSV (1997,1998), results of poorer economic performance in civil-law based countries given Lamoreaux and Rosenthal findings. Since it is in underdeveloped Civil Law countries that LLSV (1997,1998) results are clearer, it is particularly interesting to explore the relationship between legal system and economic performance in this type of countries, of which Mexico is a perfect example.

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<sup>1</sup> Papers with other coauthors sustain similar arguments. See for example Beck, Demirgüç-Kunt and Levine (2002), Levine, Loayza and Beck (2000), Djankov, La Porta, López de Silanes and Shleifer (2002), Djankov, La Porta, López de Silanes and Shleifer (2001), Johnson, La Porta, López de Silanes and Shleifer (2000) and La Porta and López de Silanes (2001).

<sup>2</sup> This argument is developed more formally in Shleifer and Glaeser (2002) and defended with recent data in the empirical tests of Beck, Demirgüç-Kunt and Levine (2002).

In this paper we study if companies took advantage of the diverse menu of organizational forms that the Mexican Commercial Code offered them. We test if having a larger menu of organizational choices, particularly those types not available in common law systems, made a difference for the creation of new businesses. If this is true we would expect to find several firms preferring societal types specific to Civil Law over those specific to Common Law, and that different specific firm characteristics led to different organizational choices. We also test whether having a larger organizational menu made a difference in terms of capital formation in Mexico during the period we study.

We study the chartering of business in Mexico between 1886 and 1910. We explore the decision businesses made to organize as partnerships (*sociedad en nombre colectivo*), limited partnerships (*sociedad en comandita simple*), partnerships with shares (*sociedad en comandita por acciones*), corporations (*sociedad anónima*), or cooperatives (*sociedad cooperativa*). Using a newly assembled dataset of all companies registered in the *Registro Público de la Propiedad* (a legal requirement) between 1886 and 1910 (5132 entries), we run different specifications of a Multinomial Logit model to study the determinants of this decision.

The Mexican case is interesting to test these hypotheses because it was industrializing rapidly during this period, with high rates of GNP growth and large flows of foreign investment during Porfirio Díaz regime (1876-1910). Thus this is a period when new businesses of all sorts were being established and they could choose from a diverse menu of organizational options. Moreover, given that the Mexican Commercial Code on which the organizational structure of companies was defined was passed in 1884, only two years before our dataset starts, the information available allows us to explore the effects of a new legislation on the business environment.

During this period a large share of the investment was from foreign entrepreneurs opening businesses in Mexico. From 1886 to 1910, 75% of the capital registered in the Mexico City Chartering Office was of foreign companies. This allows us to study the differences in organizational choices between Mexican and foreign companies, and if the specific nationality of foreign companies influenced the societal type chosen. The lack of developed financial markets gives the case of Mexico another interesting feature in terms of the debate on the relationship of legal systems and financial markets LLSV (1997, 1998), Rajan and Zingales (2003), Lamoreaux and Rosenthal (2004). In Mexico City, the stock exchange was very small. Very few companies had their shares actually traded each year. In fact, there was no law regulating the operation of brokers or of the exchange itself. Thus we



expect foreign companies that established in Mexico to have taken the advantage of having a more developed financial market at home, where they could gather funds to invest in developing countries. In fact, this would constitute a major difference with the French case studied by Lamoreaux and Rosenthal (2004). Thus, we expect foreign companies to choose organizational forms that allowed them to trade shares in their home countries.

Table 1 maps out the type of organizational forms according to their liability and the possibility of trading shares. It helps to understand the differences between each organizational form in these two respects. According to this, we would expect that companies that needed a large capitalization would have preferred an organizational form that allowed them to pool funds from many investors and that offered less liability for the partners. Thus, we expect to find that companies with the largest capitalizations chose the corporate charter and as their capitalizations were decreasing we would expect to find entrepreneurs choosing first limited partnerships with shares, then limited partnerships and, finally, partnerships as the least capitalized firms.

**Table 1. Mapping organizational types according to liability and the possibility of trading shares**

		LIABILITY		
		All partners unlimited	Some partners unlimited	All partners limited
SHARES	Bearer / Nominal shares			Corporations ( <i>Sociedad Anónima</i> )
	Nominal shares		Limited partnerships with shares* ( <i>Sociedad en Comandita por Acciones</i> )	
	No shares	Partnerships ( <i>Sociedad Colectiva</i> )	Limited partnership* ( <i>Sociedad en Comandita</i> )	

\*The firm had to have at least one partner with unlimited liability.

In the same way, we would expect that foreign investors, regardless of capital size, were looking for as little liability as possible when establishing a business in a different country. Given that long distance monitoring was very costly, then delegating management to a local agent or partner was very risky if it involved unlimited liability for all parties. Given that the countries that established firms in Mexico had more developed stock markets at home and could sell shares there we expect foreign companies to have chosen the corporate charter or limited partnerships and to have had larger capitalizations than Mexican companies.

Something important in terms of the organizational form chosen is the duration of the business. Entrepreneurs, at the moment of registration, had to decide the duration of the business charter. We expect organizational forms that involve unlimited liability to have sought short term durations. This is explained for two reasons. First, partnerships were forced by law to dissolve if one of the partners passed away. Thus partnerships had, from the beginning, a shorter expected life span than corporations. Second, we would expect that the risk of establishing an unlimited liability partnership would make entrepreneurs cautious about the time span they would chose to share the risk of someone else's actions. In contrast, we expect business that needed to outlive the partners to have chosen the corporate charter. There are businesses that because of the large investment in fixed assets need a long duration for their charters in order to make operations worth it.

The paper proceeds as follows. In section II we present a brief review of the evolution of Mexican corporate law until 1889. Section III presents the data and the methodology used for the analysis, while section IV presents the findings of the paper. We present our conclusions in section V.

### ***i. - The Evolution of Mexican Corporate Law.***

Corporate law in French Civil Law countries had a spectacular development throughout the 19<sup>th</sup> century. As the authors of the project of the Spanish Commercial Code of 1886 explained:

Of all the institutions of commercial law, none has had such a rapid, varied, and powerful development, as that which gives birth to societal contracts (*el contrato de sociedad*). [...] The impulse that has received the societal contract has not ceased for one instant [...] The partnership (*sociedad colectiva*), first form of company [...], was followed by the limited partnership (*sociedad en comandita*); then came the limited partnership with shares (*sociedad en comandita por acciones*) and later the corporation (*sociedad anónima*), that offers so many resources to commerce and industry, and thanks to which in our century some of the most daring and colossal ventures have been undertaken, that will be the astonishment of future generations (Moreno, 1905:178).

However, Mexico arrived late to this process, as a result of the difficult political and economic situation the country faced during the first three quarters of the 19<sup>th</sup> century. Mexico's commercial law (which includes corporate law) was regulated from 1737 to 1854 by the *Ordenanzas de Bilbao*, inherited from Spain together with other colonial regulations. In 1854 Mexico enacted its first *Código de Comercio*, profoundly influenced by the Spanish *Código de Comercio* of 1829, which resembled the French *Code de Commerce* of 1807 in many aspects but was more advanced in terms of corporate law. This made Mexico's *Código de Comercio* of 1854 extremely progressive for the

time since, following the Spanish code of 1829, it introduced the system of free incorporation subject only to the analysis and approval of the companies' articles of incorporation and statutes by the local tribunal of commerce.<sup>3</sup> In Spain, as a result of a severe crash, a backlash took place in 1848 and the code was amended to demand a royal decree as a condition for incorporation, but Mexican legislators chose not to include these changes in the Mexican code (Keinan *et.al* 2002, 842).

The Mexican *Código de Comercio* of 1854 offered a menu of three organizational forms: the partnership (*sociedad en nombre colectivo*), the limited partnership (*sociedad en comandita simple*), and the corporation (*sociedad anónima*). In very few articles it established the basic principles of each type of organization, but did not have the more detailed regulation regarding the existence, the governance and the finance of the ventures that later codes were going to include. Unfortunately, there are no studies on the impact of this law on entrepreneurial activity. We do not know if as in Spain, the liberalization of entry requirements was followed in Mexico by a founders' boom, or if as in Colombia it had a negligible impact on economic development, since few entrepreneurs became aware of the possibilities the new law offered and continued to operate as unlimited partnerships (Keinan *et.al.* 2002, 842-846). A study of the public registry of that period would be necessary to answer this question.

Important changes in the laws governing commercial activities were introduced in France and other civil law countries throughout the 19<sup>th</sup> century. In 1830 the limited partnership by shares legally appeared in France, and in 1863 new legislation permitted firms below a maximum capital of 20 million francs to organize as corporations without a special permission by the government. Then in the 1867 general incorporation law removed the limit on capitalization. These laws defined a set of normative criteria for the establishment of corporations and limited government's discretionary decisions in the formation of this type of ventures (Muñoz 1947, 117).

Fortunately Mexico's code of 1854 included many of these precepts since it was not until 1884, that a new *Código de Comercio* was enacted.<sup>4</sup> The articles regulating each type of society, but particularly corporations

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<sup>3</sup> Artículo 253 of the Mexican Commercial Code of 1854. It says "En las compañías anónimas, para que puedan llevarse a efecto se requiere además indispensablemente que le tribunal de comercio del territorio en que hayan de establecerse, examine y apruebe sus escrituras y reglamentos".

<sup>4</sup> It established three different types of business organizations: partnership, limited partnership and corporation. However the limited partnership could be either *simple* or *compuesta*, this last type being exactly what later was going to be defined as limited partnership by shares.

expanded. Then in 1889 Mexico's code was again reformed, but the chapters on societal regulations changed only marginally. Following the Belgian code (Law of 1873) it defined five different types of organizational structures: (1) partnership (*sociedad en nombre colectivo*), (2) limited partnership (*sociedad en comandita simple*) (3) corporation (*sociedad anónima*) (4) limited partnership by shares (*sociedad en comandita por acciones*) and (5) cooperative (*sociedad cooperativa*).<sup>5</sup>

As in other French civil law based countries, the Mexican *Código de Comercio*, specifically defined the basic terms on which the different organizational types had to operate, particularly regarding to their formation, liquidation, and governance structure. It was particularly detailed in the chapter dealing with corporations. However, the analysis of the law shows that in many aspects it was more flexible (enabling) than its counterparts in other civil law countries.<sup>6</sup> Mexican legal treaties of the time considered that the Mexican *Código de Comercio* was based on the three principles that legislators of the Spanish Commercial Code of 1885 had defined: (1) Ample freedom to the partners so they can constitute their firm as they consider more convenient; (2) The complete absence of government intervention in the interior life of the firm; and (3) Publicity of all social acts that could be of interest to a third party (Moreno 1905, 161).

## II.- Sources and Methods

For the purposes of this paper we built a database from the *Noticia del Movimiento de Sociedades Mineras y Mercantiles...*, edited by Dr. Antonio Peñafiel.<sup>7</sup> As in other French Civil Law countries the Mexican Commercial Code established that companies must register in a chartering office, *Registro Público*, the main detail of their constituting contracts (and any relevant changes in them), in order for them to be legally binding. This book was a summary of the firms that filed for charter at the Mexico City chartering

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<sup>5</sup> This is clear by analyzing a version of the 1899 Code that compares every article of the law with the legislation of other countries.

<sup>6</sup> Enabling law makes most of the statutory provisions optional and allows parties to reallocate control rights (Keinan et.al. 2003), 9. For example, as in other civil law countries, the Mexican *Código de Comercio* of 1889 set a requirement of a supermajority shareholders vote to increase or decrease capital, something considered mandatory (unflexible) by Keinan et.al., but it opened the possibility for an alternative arrangement, since it stated that this applied only *when the company statutes did not establish something different*.

<sup>7</sup> México. Secretaría de Fomento. *Noticia del Movimiento de Sociedades Mineras y Mercantiles Habido en la Oficina del Registro Público de la Propiedad y del Comercio durante los años de 1886 a 1910. Formada por la Dirección General de Estadística a cargo del Doctor Antonio Peñafiel*, México, 1911.

office, *Registro Público de la Propiedad y del Comercio*, between January 15, 1886 and December 31<sup>st</sup>, 1910.

Our database contains information for the 5132 registrations of firms contained in this document. However we exclude those companies that do not provide information on capital or societal type, ending with a database of 5021 entries. This database is not a census of all companies operating in Mexico, since many companies registered in other cities in Mexico. Moreover, we have found evidence showing that several foreign companies operating in Mexico did not register in Mexico even though (or perhaps because) this meant they would not be protected by the precepts of the Mexican *Código de Comercio*. Given that our database reports all the charters filed at the Mexico City office, it is most likely biased towards larger firms and foreign businesses. Nevertheless, we consider that this is still a very useful source of to study the determinants of organizational choice because it allows us to link some company characteristics with the organizational form selected.

The database provides the companies' names, their trade, their date of registry, their authorized capital, their location, their type of organization, their origin, and their duration. We defined eight sectors in which we divided the firms, according to the information provided as the purpose of the business. We defined ventures as foreign or domestic according to the following rule: they were considered foreign if the social capital registered was given in a foreign currency and/or if as the location of the company they included a foreign city or country.

We use this information to study the determinants of organizational choice. The implicit model is that entrepreneurs choose their organizational form on the basis of the characteristics of the business they are going to undertake. Thus, if having this menu of options really mattered, we are going to be able to find what types of businesses preferred one over the other.

Following Lamoreaux and Rosenthal (2003), we test whether options other than partnership and corporate charter were actually important to business choices. But unlike them, we run tests that allow us to study the chartering decision, controlling for all firm characteristics, simultaneously. For this version of the paper we analyze the decision of organizational form according to business characteristics using a Multinomial Logit model. This model allows us to study the probability of chartering a corporation (*sociedad anónima*) or a limited partnership (*sociedad en comandita simple*) relative to the probability of chartering a partnership (*sociedad colectiva*).<sup>8</sup> The dependent variable of

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<sup>8</sup> We could not study the probability of chartering limited liabilities with shares since there were not enough observations to obtain significant econometric results.

the model is the organizational type (In Tables 5 and 6: 0=partnership, in Table 7: 0=corporation). The results are probability ratios that represent the contribution of each characteristic to the probability of the firm choosing to be a corporation or a limited partnership over partnership. We also present the marginal effects of each variable on the probability ratios of different options.

This statistical setup allows us to test the importance of the larger organizational menu of Civil Law countries in a very specific way. If there are firm characteristics that significantly made entrepreneurs choose any of the Civil Law specific organizational structures, such as limited partnership over the partnership or corporation, we can argue that the larger organizational menu made a difference for some subset of businesses.

In order to use a Multinomial Logit we need to test for the assumption that selection of one organizational form over the benchmark is independent of the existence of the other option. For this purpose we did a Hausman test of Independence of Irrelevant Alternatives which indicated that we could not reject the specification tested (See Appendix).

### **III.- Findings**

In Table 2, we can see that of all the businesses registered in Mexico City between 1886 and 1910, 57.1% were partnerships, but they only represented 4.4% of total capital (see Table 3). On the other hand, corporations represented only 28.1% of total registries, but -as expected- with capitalization adding up to 93.6% of the total capital registered. Limited partnerships represented 13.5% of the number of entries, but only 1.6% of total capital. Clearly the last two options represented a negligible number of companies and of the capital invested. Only 21 companies chose the form of limited partnership with shares, representing 0.4% of the companies established and 0.3% of their capital. On its part, the cooperative form was chosen by only 48 ventures, representing 1% of the number of companies but only 0.1% of the capital. From this analysis it is already clear that these two last organizational choices were not relevant options in the menu.

Most Mexican companies chose the partnership form (57.1%), whereas most foreign companies chose the corporate charter (88.9%). This is in part a result of the nationality of the firm, and in part a result of the sector in which they invested, since most Mexican firms were in the commerce trade (54.2%), where firms in general tended to choose the partnership form (44.2%). However, this does not mean that the corporate charter was irrelevant for Mexican ventures, since as Graph 1, shows Mexican firms increasingly chose this organizational form. This suggests that a learning process was taking

place. In contrast foreign ventures preferred the corporate form from the beginning (Graph 2).<sup>9</sup>

Foreign companies almost exclusively chose the corporate charter, as we expected. It should have facilitated the principal-agent problem generated by having to delegate management in a foreign country to someone. In these cases limited liability was an important asset. Interestingly, we do not find many foreign companies using the limited liability partnership form or the limited partnership with shares. This again must have been related to the fact that legally at least one partner needed to have limited liability.<sup>10</sup>

The mean capital of the companies in the different organizational types followed the order that we would expect from our discussion of Table 1 (see Table 4). Those companies that could issue shares with limited liability had the largest capitalization (on average \$1,445,000 pesos of 1900, approximately US \$750,000), followed by limited partnerships with shares (\$342,000 pesos), and then by limited partnerships (\$52,000 pesos). Finally, at the bottom of the distribution were partnerships and cooperatives with capitalizations of \$34,000 and \$30,000 pesos each. Mexican firms were considerably smaller than foreign firms in every sector, with an average capitalization of only \$19,000 thousand pesos of 1900 compared with \$102,000 for foreign companies. Yet, exactly the same order among different organizational forms holds. This result also evidences the clear disadvantage that Mexican firms experienced in terms of capital sources compared with foreign companies.

Table 5, 6, and 7 show the results of our Multinomial Logit estimates. Table 5 and 6 present the ratio of the probability of choosing the corporate form over the probability of choosing the partnership form. Table 7 presents the ratio of the probability of choosing the limited partnership over the probability of choosing the corporate form. In Table 5 we can see across specifications that the variable year is always positive and significant, indicating that after every year it was around 7% more likely that business would choose the corporation over the partnership form. In contrast, Table 6 shows that for limited partnerships, year was negative although not significant

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<sup>9</sup> A Probit model ran only for the Mexican companies in the database shows that the probability that these firms chose to be partnerships and limited partnerships decreased with time, whereas the probability that they chose the corporate form increased with time. The variable YEAR was 0.04 and significant (at 5%) in the case of corporations, -0.1 and significant (at 5%) in the case of partnerships and -0.01 and significant (at 10%) in the case of limited partnerships.

<sup>10</sup> We ran a specification including the interaction between capital and foreign. We find that the corporation form chosen by foreign firms is independent of their size, so there are some specific characteristics about foreign firms that induced them into choosing the corporate charter.

in every case, meaning that there is no clear time trend between limited partnerships and partnerships. Table 7 shows that choosing to become a limited partnership was also yearly less likely compared to the corporate form. The analysis of partnerships and limited partnerships by themselves shows that as time went by they were less preferred organizational forms.<sup>11</sup>

There is a significant difference in the characteristics of the businesses that chose one type of organizational form *vis à vis* the others. The connection between firm size and organizational form is clear, more capital (in pesos of 1900) increases the likelihood of choosing both the corporation and the limited partnership over the partnership, but the impact is almost twice as large in the case of the corporation (Table 5 and 6). Table 7 shows that the lower the capital the more likely a firm would choose to be a limited partnership over a corporation. These results hold even when we control for the nationality of the business.

Being a foreign or a Mexican firm had clear consequences in terms of organizational choice. If the firm was foreign the ratio of probabilities of choosing the corporation over the partnership would increase by 775% (Table 5) and the probability of chartering a limited partnership over a partnership would increase by 119% (Table 6). On the other hand, as Table 7 shows, being foreign decreased the probability of being a limited partnership over a corporation by 75%. Being foreign or not is the more relevant of all the variables included.

Duration of the business was also important when choosing organizational form. As the duration of the business increases, the ratio of the probability of choosing the corporate charter over the probability of choosing a partnership increases. So, for every additional year the business intended to live, this probability ratio increased by 3%. Instead, this variable is negative and significant only in some specifications in the case of limited partnerships. Table 7 shows that duration decreases the probability of being a limited partnership over a corporation. Our findings show that ventures that chose a larger time span for their operations also opted for the corporate charter, whereas short lived businesses were more likely partnerships or limited partnerships.

Duration was a variable freely chosen by the business subscribers, which they were obliged to provide at the moment of registration (Art. 95 of the

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<sup>11</sup> We estimated several Probit models where the dependent variable would take the value of one if it was a partnership and zero otherwise, and then we ran the same models with other organizational forms. The results follow what the Multinomial Logit shows.



Code of Commerce). One of the advantages of corporations over partnerships (and limited partnerships) was precisely their possibility of outliving the partners. Partnerships by law needed to have the last names of the partners attached to the business name (and in the case of limited partnerships this was true only for the unlimited liable partners). Thus, the society would only survive as long as the partners were alive. A partner passing away implied the dissolution of the business and the settlement of accounts. The data clearly reflects that businessmen interiorized these legal constraints and chose their organizational forms accordingly.<sup>12</sup>

When we control for the sector of the business we find that the ratio of the probability of choosing the corporation over the probability of choosing the partnership is positive and significant in every case except in commerce and services where it is negative and significant. This probability increases the most for ventures in mining, real state, and railroad and utilities (Table 5). In contrast, being in the mining and railroad and utility sectors decreased the probability of choosing limited partnership over partnership (Table 6). These were sectors where the corporate charter was the preferred organizational form, even when controlling by country of origin of the business. For the case of limited partnership there was no sector in specific that increased the probability of choosing that organizational form over the partnership. When we study the partnerships separately (with a Probit model) we find that for commercial businesses the probability of choosing this organizational form increased significantly. Table 7 shows that being a firm in the commercial and services sectors increased the probability of choosing the limited partnership over the corporate form, whereas the opposite was true for the rest of the sectors.

Our country of origin controls offer an interesting result to understand the choice of limited liability partnerships and corporations in Mexico. First of all, the ratio of probabilities of choosing the corporation over the probability of choosing the partnership increased significantly for American companies as well as for Canadian ventures (most of the other foreign countries category). On the other hand, British businesses were more likely to choose the limited partnership over the partnership form. Moreover, as Table 7 shows being a

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<sup>12</sup> Razo (2003) had a similar finding when he studied the duration of corporate charters in Mexico until 1908. However, he misunderstood what the duration of businesses in the public registry records meant. He defended the idea that this was a variable determined by the government instead of the business subscribers. Yet, it is clear in the Mexican Code of Commerce as well as in the legal practice of French Civil Law countries that there was no legal binding or government interference in the determination of duration, except in the case of businesses that required special concessions, such as banks, railroads and utility companies.

German or a British firms strongly increased the probability of choosing limited partnership over the corporate form, whereas being an American or a Canadian firm decreased it, although not as strongly. As we hypothesized, limited liability must have been attractive for foreign investors willing to incur in the risk of investing in Mexico. What is not clear is why these British businesses, concentrated in financial services, preferred the limited partnership over the corporate form.

Lamoreaux and Rosenthal (2003) argue that in France since the corporate charter required special approval by the government before 1867, then having a menu with different partnership structures (e.g. with limited liability or tradable shares) made a difference. The limited partnership (*comandita simple*) was a relevant substitute for the corporation. But for the case of Mexico between 1886 and 1910, when the corporate charter existed without special approval and with limited liability for the shareholders, we find that it tended to be chosen as organizational form over the limited partnership. In fact, chartering options such as the cooperative and the partnership with tradable shares (*comandita por acciones*), were almost irrelevant. The reason that made partnerships with shares irrelevant as an organizational choice in Mexico in the period studied was that most of its advantages were already offered by the corporate charter.<sup>13</sup>

Thus, when we look at the Multinomial Logit results we find support for our first hypothesis: the Civil Law system offered more flexibility for the creation of businesses than the Common Law system. Regression results show that some companies actually took advantage of the set of organizational options available in Mexico. The existence of limited liability partnerships clearly served a function, by providing businessmen with a suitable organizational form. Different entrepreneurs wanted a mix of limited and unlimited liability and the possibility of selling shares.

Nevertheless, if we define an extreme counterfactual, where limited liability partnerships, limited liability partnerships with shares, and cooperatives did not exist and we explore the effect that would have had on total capital formation we would find that these organizational forms in fact had a negligible effect; in particular, the last two options.

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<sup>13</sup> The disadvantages of the partnership with shares, relative to the corporation were the following: (1) there had to be at least one partner that had unlimited liability; (2) the shares of limited partnerships had to be, by law, nominal (with a name attached to it) and could never be denominated “to the bearer”; and (3) if the “socio comanditario” (the unlimited liable partner) died, the partnership had to be dissolved by law. On the other hand, the main disadvantages of corporations, as Lamoreaux (2000) has argued, were the requirement of public disclosure of financial accounts, and that limited liability itself could deter probable lenders from financing the firm.

Our data shows that the organizational forms associated with the Common Law system, i.e. partnerships and corporations, slowly emerged as the dominant organizational forms in Mexico. In fact, all of the organizational forms other than corporations were losing ground during the period we study. Interestingly, the same pattern of corporate charter dominance is observable in other countries such as Spain between 1830 and 1840 (Martín Aceña, 1993).

## *Conclusions*

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This paper provides evidence that undermines the implicit model used by recent studies that compare Common and Civil Law countries on a variety of economic indicators. History shows us that Civil Law systems have been in fact more flexible than Common Law systems during some periods of time.

Also, this paper contributes to the discussion of the emergence of the corporation as the dominant organizational form, even in Civil Law countries. The corporate charter evolved during the nineteenth century into an organizational form that gave several advantages for the formation of new businesses. Limited liability and the possibility of trading shares allowed businesses to pool large amounts of capital by attracting a large number of small investors to participate in the venture. Tradable shares gave investors the chance of having investment opportunities in very liquid assets that gave them some control over business performance (depending on the corporate governance structure of the country of origin). Thus, the evolution of the corporate charter over the nineteenth century gave the corporation advantages over other organizational forms available in Civil Law countries, such as the limited liability partnership and the limited liability partnership with shares, and precluded some of the disadvantages. Thus, while in France, these limited liability partnerships might have been useful because the option of corporate charter with limited liability was not available until 1867, by the turn of the twentieth century their advantages were fading.

Moreover, in developing countries the corporate charter offered a peculiar advantage to foreign entrepreneurs or to domestic companies that could appeal to foreign markets. It allowed businesses to take advantage of developed financial markets in Europe and the United States to fund businesses that operated in environment with poor financial markets. Thus, the corporate charter facilitated the flows of capital to developing countries and allowed small investors in developed countries to diversify their portfolios by taking their money to the latter countries. This was possible to a large extent because these investors had their liability limited to the value of the shares they acquired.

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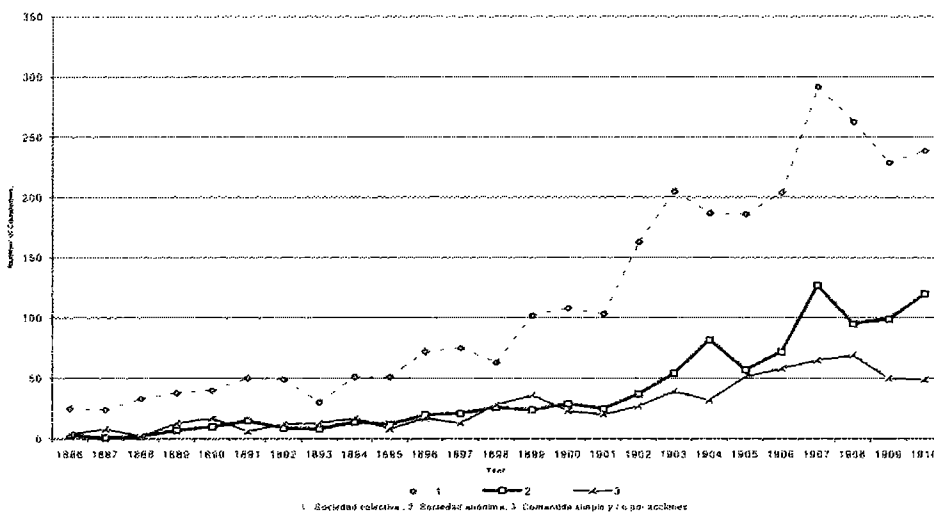
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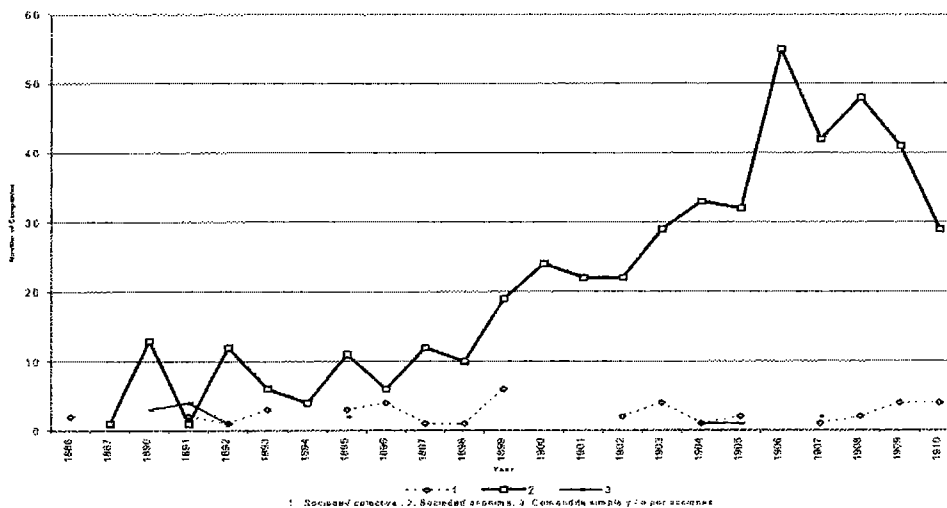
Graphs and Tables

Graph 1. Mexican Companies registered in Mexico City, 1886-1910



Source: República Mexicana, Secretaría de Fomento (Peñafiel, Antonio), 1911: *Noticia del Movimiento de Sociedades Mineras y Mercantiles (1886-1910)*. Mexico, Secretaría de Fomento.

Graph 2. Foreign Companies. Registered in Mexico City, 1886-1910



Source: República Mexicana, Secretaría de Fomento (Peñafiel, Antonio), 1911: *Noticia del Movimiento de Sociedades Mineras y Mercantiles (1886-1910)*. Mexico, Secretaría de Fomento.



**Table 2. Number of Companies per Sector, Type and Nationality Registered in Mexico City, 1886-1910**

Sector	Colectiva			Anonima			Comandita Simple			Comandita por Acciones			Cooperativa			Total		
	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total
Manufacturing	4	573	577	29	222	251	4	144	148		5	5		4	4	37	946	985
Mining	3	65	68	154	136	290	1	5	6							158	206	364
Agriculture	1	122	123	58	98	156		25	25			1		1		59	247	306
Real Estate	3	67	70	38	95	133	2	11	13					5	5	43	176	221
Finance	3	86	89	81	64	145	4	13	17	3	2	5		12	12	91	177	268
R.R. and utilities		45	45	52	72	124		3	3					1	1	52	121	173
Commerce	21	1782	1803	68	234	302	8	436	444	1	7	8		10	11	99	2469	2568
Services	1	149	150	2	37	39		35	35		2	2		15	15	3	238	241
<b>Total</b>	<b>38.06</b>	<b>2869</b>	<b>2925</b>	<b>462</b>	<b>956</b>	<b>1440</b>	<b>19</b>	<b>672</b>	<b>691</b>	<b>4</b>	<b>17</b>	<b>21</b>	<b>1</b>	<b>49</b>	<b>48</b>	<b>542</b>	<b>4584</b>	<b>5126</b>

Source: República Mexicana, Secretaría de Fomento (Peñafiel, Antonio), 1911, Noticia del Movimiento de Sociedades Mineras y Mercantiles (1886-1910), Mexico, Secretaría de Fomento.

**Table 3. Capital of the Companies per Sector, Type and nationality Registered in Mexico City 1886-1910 (Thousands of pesos)**

Sector	Colectiva			Anonima			Comandita Simple			Comandita por Acciones			Cooperativa			Total		
	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total
Manufacturing	946.65	14,938.65	15,346.00	12,863.41	55,515.75	68,379.16	540.46	3,096.37	4,378.62	2,123.75	2,123.75		92.33	148.62	13,803.31	77,966.94	91,377.15	
Mining	46.69	3,357.22	3,433.21	629,801.80	63,913.05	693,514.85	154.64	89.30	242.94			0.00			629,802.42	67,366.06	697,191.00	
Agriculture	43,69.85	5,237.09	9,596.94	65,560.74	32,878.53	98,439.27		1,029.51	1,029.51		32.66	32.66	422.93	422.93	66,993.59	39,601.71	106,595.30	
Real Estate	7,605.27	2,060.65	10,493.12	65,203.36	25,784.56	91,998.98	1,270.03	263.54	1,533.57			0.00	162.39	162.34	74,080.65	33,061.34	104,142.00	
Finance	7,354.98	2,484.74	9,839.72	539,788.00	62,993.07	622,777.07	10,376.35	1,015.42	11,391.77	296.60	244.55	3,240.15	69.49	69.46	580,514.99	66,799.26	647,332.20	
R.R. and utilities		4,543.13	4,543.13	334,716.60	54,739.00	389,455.60		29.38	29.38			0.00		73.31	73.31	334,716.60	59,384.81	394,101.41
Commerce	1,934.32	41,262.86	43,217.18	60,291.62	39,392.00	99,683.62	471.21	16,557.74	17,028.95	108.59	1,631.62	1,738.15	57.59	207.95	255.55	62,811.47	99,082.17	161,853.64
Services	6.76	1,414.61	1,421.37	446.13	2,246.64	2,692.77		325.15	325.15		49.24	49.24		199.95	199.95	452.69	4,275.58	4,699.47
<b>Total</b>	<b>21,633.01</b>	<b>76,199.15</b>	<b>97,832.17</b>	<b>1,729,423.69</b>	<b>336,468.61</b>	<b>2,057,882.46</b>	<b>12,812.67</b>	<b>21,147.41</b>	<b>35,960.08</b>	<b>3,102.13</b>	<b>4,081.81</b>	<b>7,183.94</b>	<b>57.59</b>	<b>1,228.34</b>	<b>1,343.53</b>	<b>1,766,105.67</b>	<b>444,115.31</b>	<b>2,210,222.17</b>

Source: República Mexicana, Secretaría de Fomento (Peñafiel, Antonio), 1911, Noticia del Ministerio de Sociedades Mineras y Mercantiles (1886-1910), Mexico, Secretaría de Fomento.

**Table 4. Mean capital of the Companies per Sector, Type and nationality Registered in Mexico City 1886-1910 (Thousands of pesos)**

Sector	Colectiva			Anonima			Comandita Simple			Comandita por Acciones			Cooperativa			Total				
	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total	Foreign	Mexican	Total		
Manufacturing	66.71	26.27	26.09	443.57	254.56	276.41	135.11	26.66	29.59			424.75	424.75	23.08	23.08	371.64	81.91	92.81		
Mining	15.33	52.11	50.49	4,115.04	489.95	2,399.71	154.64	17.66	40.49							4,011.48	327.13	1,920.64		
Agriculture	4,358.85	44.76	81.32	1,130.36	335.50	631.02		41.18	41.18		32.68	32.68		422.93	422.93	1,185.08	162.46	361.59		
Real Estate	2,535.09	43.19	151.54	1,715.93	281.94	691.65	635.01	23.96	117.97					54.13	54.13	1,722.81	171.78	477.72		
Finance	2,451.66	29.23	111.82	6,997.35	984.20	4,324.84	2,594.09	77.34	669.52	998.53	122.27	648.03		6.95	6.95	6,450.17	383.87	2,451.93		
R.R. and utilities		105.65	105.65	6,436.86	770.97	3,166.31		9.79	9.79					73.31	73.31	6,436.86	503.26	2,318.24		
Commerce	101.81	23.35	24.18	885.91	169.06	331.01	58.90	38.26	38.64	106.53	233.09	217.27		57.59	25.99	29.51	847.54	40.44	63.56	
Services	6.76	9.58	9.54	223.06	62.41	70.66		9.29	9.29					24.62	24.62	14.28	14.28	150.96	18.02	19.70
<b>Total</b>	<b>636.85</b>	<b>26.82</b>	<b>33.78</b>	<b>3,609.45</b>	<b>355.45</b>	<b>1,445.41</b>	<b>674.35</b>	<b>34.66</b>	<b>52.27</b>	<b>775.53</b>	<b>240.11</b>	<b>342.09</b>	<b>57.59</b>	<b>29.96</b>	<b>30.62</b>	<b>3,290.85</b>	<b>97.64</b>	<b>435.91</b>		

Source: República Mexicana, Secretaría de Fomento (Peñafiel, Antonio), 1911. Noticias del Movimiento de Sociedades Mineras y Mercantiles (1886-1910), México, Secretaría de Fomento.

Table 5. Multinomial Logit. Partnerships as base category

	spec (1)		spec (2)		spec (3)		spec (4)	
1 Corporation (sociedad anónima)	RR	%	RR	%	RR	%	RR	%
Year	1.08 (0.010)***	7.55%	1.07 (0.010)***	7.50%	1.08 (0.010)***	7.51%	1.08 (0.010)***	7.51%
Capital_1900	1.00 (0.000)***	0.24%	1.00 (0.000)***	0.19%	1.00 (0.000)***	0.24%	1.00 (0.000)***	0.20%
Foreign	8.75 (1.835)***	774.80%	6.92 (1.525)***	592.15%				
Duration	1.03 (0.001)***	3.34%	1.03 (0.001)***	3.05%	1.03 (0.001)***	3.37%	1.03 (0.001)***	3.09%
Exchange Rate	1.38 (0.305)	38.34%	1.16 (0.266)	15.95%	1.29 (0.287)	29.03%	1.07 (0.247)	7.07%
Mining			3.25 (0.815)***	224.65%			3.32 (0.633)***	231.71%
Agriculture			1.76 (0.313)***	76.39%			1.74 (0.312)***	73.73%
Real Estate			2.05 (0.410)***	104.88%			2.04 (0.412)***	103.75%
Finance			1.21 (0.259)	21.46%			1.30 (0.277)	30.02%
R.R. and utilities			2.67 (0.653)***	167.22%			2.62 (0.645)***	161.52%
Commerce			0.37 (0.042)***	-63.08%			0.37 (0.043)***	-62.77%
Services			0.64 (0.143)**	-36.29%			0.64 (0.145)**	-36.19%
United Kingdom					1.26 (0.577)	25.51%	0.82 (0.386)	-17.72%
France					2.78 (2.209)	177.67%	3.51 (2.819)	251.41%
United States					19.58 (6.009)***	1857.64%	14.65 (4.634)***	1365.40%
Germany					0.48 (0.382)	-52.38%	0.61 (0.493)	-38.88%
Other Countries					4.65 (3.207)**	365.38%	5.14 (3.835)**	414.16%
LR chi2	2296.67.a		2642.82.b		2367.21.c		2701.88.d	
Prob>chi2	0.000		0.000		0.000		0.000	
Observations	5021		5020		5021		5020	

Source: República Mexicana, Secretaría de Fomento [Peñafiel, Antonio], 1911. Noticia del Movimiento de Sociedades Mineras y Mercantiles (1886-1910), Mexico, Secretaría de Fomento. Standard errors in brackets

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

a. 10 degrees of freedom, b. 24 degrees of freedom, c. 18 degrees of freedom, d. 32 degrees of freedom

Table 6. Multinomial Logit. Partnerships as a base category.

	spec (1)		spec (2)		spec (3)		spec (4)	
2 Limited Liability Partnership (Sociedad en comandita simple)								
	RR	%	RR	%	RR	%	RR	%
Year	1.00 (0.009)	-0.11%	1.00 (0.009)	-0.21%	1.00 (0.009)	-0.10%	1.00 (0.009)	-0.20%
Capital_1900	1.00 (0.000)***	0.12%	1.00 (0.000)***	0.11%	1.00 (0.000)***	0.12%	1.00 (0.000)***	0.11%
Foreign	2.19 (0.647)***	119.04%	2.39 (0.708)***	138.85%				
Duration	1.00 (0.002)*	-0.39%	1.00 (0.002)	-0.27%	1.00 (0.002)*	-0.43%	1.00 (0.002)	-0.30%
Exchange Rate	0.76 (0.152)	-24.09%	0.77 (0.155)	-22.65%	0.77 (0.153)	-23.35%	0.78 (0.158)	-21.51%
Mining			0.34 (0.147)**	-66.46%			0.33 (0.146)**	-66.78%
Agriculture			0.79 (0.189)	-21.31%			0.79 (0.190)	-20.59%
Real Estate			0.70 (0.224)	-29.63%			0.70 (0.222)	-30.35%
Finance			0.74 (0.207)	-26.39%			0.71 (0.201)	-29.13%
R.R. and utilities			0.25 (0.149)**	-75.43%			0.26 (0.157)**	-74.10%
Commerce			0.97 (0.104)	-2.73%			0.97 (0.103)	-3.44%
Services			0.96 (0.201)	-4.10%			0.95 (0.200)	-4.58%
United Kingdom					3.24 (1.752)**	224.16%	3.65 (1.993)**	265.00%
France					1.90 (1.657)	90.48%	1.87 (1.627)	86.75%
United States					0.62 (0.474)	-37.85%	0.71 (0.539)	-29.33%
Germany					3.10 (2.109)*	209.50%	2.99 (2.046)	199.42%
Other Countries					4.09 (2.902)**	308.75%	4.12 (2.927)	311.90%
LR chi2	2296.67.a		2642.82.b		2367.21.c		2701.88.d	
Prob>chi2	0.000		0.000		0.000		0.000	
Observations	5021		5020		5021		5020	

Source: República Mexicana, Secretaría de Fomento [Peñafiel, Antonio], 1911. Noticia del Movimiento de Sociedades Mineras y Mercantiles (1886-1910), Mexico, Secretaría de Fomento.

Standard errors in brackets

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

a. 10 degrees of freedom, b. 24 degrees of freedom, c. 18 degrees of freedom, d.32 degrees of freedom

**Table 7. Multinomial Logit. Limited Partnership as a base category.**

	spec (1)		spec (2)		spec (3)		spec (4)	
	RR	%	RR	%	RR	%	RR	%
<b>1 Limited Liability Partnership (Sociedad en comandita simple)</b>								
Year	0.93 (0.010)***	-7.00%	0.93 (0.010)***	-7.00%	0.93 (0.010)***	-7.00%	0.93 (0.011)**	-7.00%
Capital_1900	1.00 (0.000)***	-0.15%	1.00 (0.000)***	-0.15%	1.00 (0.000)***	-0.21%	1.00 (0.000)***	-0.18%
Foreign	0.25 (0.066)***	-75.00%	0.35 (0.097)***	-65.00%				
Duration	0.96 (0.002)***	-4.00%	0.97 (0.002)**	-3.00%	0.96 (0.002)***	-4.00%	0.97 (0.002)***	-3.00%
Exchange Rate	0.55 (0.149)**	-45.60%	0.67 (0.187)	-33.00%	0.59 (0.162)*	-41.00%	0.73 (0.206)	-27.00%
Mining			0.10 (0.045)**	-90.00%			0.10 (0.044)**	-90.00%
Agriculture			0.45 (0.116)**	-55.00%			0.46 (0.120)**	-54.00%
Real Estate			0.34 (0.112)***	-66.00%			0.34 (0.113)***	-66.00%
Finance			0.61 (0.189)	-39.00%			0.55 (0.226)**	-45.00%
R.R. and utilities			0.09 (0.056)***	-91.00%			0.10 (0.061)***	-90.00%
Commerce			2.63 (0.371)**	163.00%			2.59 (0.389)***	159.00%
Services			1.51 (0.419)	51.00%			1.50 (0.420)	50.00%
United Kingdom					2.58 (1.291)*	158.00%	4.44 (2.316)***	344.00%
France					0.69 (1.131)	-31.00%	0.53 (0.499)	-47.00%
United States					0.03 (0.022)***	-96.59%	0.05 (0.035)***	-95.00%
Germany					6.50 (5.392)*	550.00%	4.90 (4.088)**	390.00%
Other Countries					0.68 (0.604)	-12.00%	0.80 (-0.61)	-20.00%
LR chi2	1033.91 a		1210.16 b		1091.34 c		1261.56 d	
Prob>chi2	0.000		0.000		0.000		0.000	
Observations	2124		2123		2124		2123	

Source: República Mexicana, Secretaría de Fomento [Peñañuel, Antonio], 1911. Noticia del Movimiento de Sociedades Menoras y Mercantiles (1888-1910). Mexico, Secretaría de Fomento, Standard errors in brackets

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

a. 5 degrees of freedom, b. 12 degrees of freedom, c. 9 degrees of freedom, d. 16 degrees of freedom

Corporation (sociedad anónima) is the base category.

## Appendix

A stringent assumption of Multinomial Logit models is that outcome categories for the have the property of independence of irrelevant alternatives (IIA). This property states that the ratio of the probabilities of choosing any two alternatives is independent of the attributes of any other alternative in the choice set. Stated simply, this assumption requires that the inclusion or exclusion of categories does not affect the relative probability ratios associated with the regressors in the remaining categories.

Under the IIA assumption, we would expect no systematic change in the coefficients if we excluded one of the outcomes from the model. The IIA Hausman test is based on eliminating one alternative from the choice set to see if underlying choice behavior from the restricted choice set obeys the independence from irrelevant alternatives property. We estimate the parameters from both the unrestricted and restricted choice sets. If the parameters are approximately the same, then we do not reject the Multinomial Logit specification, but if the parameters change significantly, then we have to discard the validity of the model.

First we estimate parameters, excluding category 2 (limited partnerships) outcome (*partial*), and perform a Hausman test against the fully (*all*) efficient full model. The results are in Table A.1. They show that we can not reject the Multinomial Logit specifications that we use. Then, we also perform the IIA Hausman test against the remaining alternatives in the model, category 1 (Corporations). In this case, the chi<sup>2</sup> statistic is actually negative. Such a result is not unusual outcome for the IIA Hausman test. So, we might see that the difference between the two models is very small (*all and part2 models*). We can interpret this as strong evidence that we should not reject the Multinomial Logit specification. The base category is partnerships.

IIA Hausman Test								
A1. Limited Partnership				A2 Corporations				
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	partial	all	Difference	S.E.	partial	all	Difference	S.E.
Year	0.0745	0.0728	0.0017	0.0020	-0.0020	-0.0011	-0.0009	0.0003
Capital_1900	0.0026	0.0024	0.0002	0.0001	0.0001	0.0012	-0.0011	.
Foreign	2.1371	2.1688	-0.0318	0.0406	0.8377	0.7841	0.0536	0.0934
Duration	0.0337	0.0329	0.0009	0.0003	-0.0026	-0.0039	0.0014	.
Exchange rate	0.1630	0.3246	-0.1616	0.0482	-0.2726	-0.2756	0.0030	.
Constant	-144.3631	-141.3622	-3.0009	3.8230	2.8930	1.2065	1.6865	0.5851
b = consistent under H <sub>0</sub> and H <sub>1</sub> ; obtained from mlogit				b = consistent under H <sub>0</sub> and H <sub>1</sub> ; obtained from mlogit				
B = inconsistent under H <sub>1</sub> , efficient under H <sub>0</sub> , obtained from mlogit				B = inconsistent under H <sub>1</sub> , efficient under H <sub>0</sub> , obtained from mlogit				
Test: H <sub>0</sub> : difference in coefficients not systematic				Test: H <sub>0</sub> : difference in coefficients not systematic				
chi2(4) = (b-B)'[(V_b-V_B) <sup>-1</sup> ](b-B)				chi2(4) = (b-B)'[(V_b-V_B) <sup>-1</sup> ](b-B)				
= 22.23				= -13.63				
Prob>chi2 = 0.0002								

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