Adapting Law to Fit the Facts: the GmbH, the SARL, and the Organization of Small Firms in Germany and France, 1892-1930

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Abstract

Unlike the corporate governance literature that focuses on publically-traded corporations, we examine how a founder trying to attract capital might try to structure his firm without losing control of the enterprise. In the 1860s and 1870s, Germany and France had quite similar corporate law, but starting in the 1880s, divergence set in. Germany severely restricted the use of the corporation in 1884, and in 1892, Germany introduced the *Gesellschaft mit beschränkter Haftung* (GmbH), a private, limited-liability company. France never altered is corporation the way Germany did in 1884, and did not introduce a GmbH-like legal form until the *Société à responsabilité limitée* (SARL) in 1925. The GmbH was popular but never eliminated alternative forms. The SARL's introduction in France, on the other hand, quickly replaced the French alternatives. Alsace-Lorraine's experience allows us to focus on firms that faced a menu of forms that at different times included the GmbH and the SARL. When Alsace-Lorraine belonged to Germany, its firms behaved liked other German firms, and when it was French, its firms behaved liked other French firms (excluding Paris). In each case the relative popularity of an enterprise form was driven by tradeoff between tying control rights to equity ownership (as in a corporation) or to individuals (as in a partnership).

In 1919 France recovered the three *départments* it had lost to Germany in the war of 1870. While part of Germany, entrepreneurs in Alsace-Lorraine had experienced in 1892 the introduction of a new organizational form for business, the *Gesellschaft mit beschränkter Haftung* or GmbH. The GmbH was arguably the first example of a special legal form for small, privately-held firms (which we call private limited-liability companies or PLLC). The winners of WWI expected their reunited brethren to bring their activities into the fold of standard French law quickly. Somewhat to France's dismay, the business people of Alsace-Lorraine clung to their German organizational forms and to their German-style bankruptcy law. The bankruptcy exception endures to this day, but French legislators responded to the legal form issue in 1925 by enacting a statute for a private limited-liability company (PLLC), the *Société à responsabilité limitée* or SARL. French entrepreneurs took to the SARL enthusiastically; almost twice as many firms (relatively) adopted the SARL in France as the GmbH in Germany. This striking difference raises a challenge for some of our earlier work on this subject, and also poses an obvious question: why?[1]

Answering this question requires us to take the long view and begin our inquiry in 1871, when the new German Reich adopted the general incorporation statutes first put in place by Prussia. For the next dozen years, France and Germany had similar company law and similar distributions of organizational forms. In both countries, a firm could organize as an ordinary partnership, a limited partnership, or a corporation (*Aktiengesellschaft* or AG in Germany, *Société Anonyme* or SA in France). Then in 1884, Germany innovated with a restrictive incorporation statute designed to limit the corporate form to large and especially to publicly-traded firms. Not surprisingly, the share of new corporations plummeted in Germany relative to France. The 1884 statute proved unpopular, especially among those who wanted to incorporate small firms. In 1892 Germany adopted the GmbH, which made it feasible for privately-held firms to have many characteristics of the corporate form. During this entire period, there were no comparable changes in French company law.

[1] In Guinnane, Harris, Lamoreaux and Rosenthal (2007), we note some of the facts at issue in the present paper, but treat the GmbH and SARL as very similar forms. We continue to use terminology introduced there. PLLC (private limited-liability company) is the general object. It takes the form of the GmbH in Germany, the SARL in France and the Private Limited Company (PLC) in the United Kingdom.

1. The issue

From the mid-nineteenth century in both Germany and France, we see a trend to developing ever-more types of multi-owner firms. Some innovations (such as the German corporation reform of 1884) reduced the attractiveness of multi-owner enterprise forms, while others (like the SARL of 1925) increased it. But these changes' primary empirical impact altered the relative numbers of firms selecting each form. The innovations had only small effects on the number of multi-owner firms overall. The GmbH and the AG taken together proved much more attractive than corporations had been under the 1871 law in Germany. The two German forms were also together more popular than the corporate form in France in the 1890s and early twentieth century. Figure 1 provides a schematic outline of the sub-periods defined by the changes in either German or French law, and uses data on the registration of new firms to show the relative popularity of each form in a sub-period.[2] Figures 2 and 3 provide more detail for each country, using the same sources.

Some obvious possible explanations for these differences do not work. The tax consequences of organizational form and the liability environment in Germany and France differed too little to provide satisfactory explanations for the observed choices. In earlier work, we stressed the choice of legal form as representing different choices about how entrepreneurs view the trade-off between untimely dissolution and minority oppression. That notion served well in our earlier work, but it cannot help much with the differential popularity of the two apparently similar forms, the GmbH and SARL. Here we focus on an area where the two forms differed: how they distributed control and how they allowed control rights to evolve.

Briefly stated, in both Germany and France, entrepreneurs could choose to organize as one of three types of partnership, or as a corporation. Until the GmbH came along in 1892, the overwhelming majority of German firms took the form of an ordinary partnership, with limited partnerships running a

[2] The data underlying Figure 1 are registrations of new firms; we do not net-out the demise of extant firms. The Appendix provides details on our sources.

distant second. Corporations were rare. The GmbH's popularity grew steadily, but at the end of our period the new form accounted for roughly half of firm registrations. Prior to the SARL's introduction in France, ordinary partnerships were also the dominant organizational form. Entrepreneurs used the limited partnership in similar proportions in Germany and France. The two countries differed prior to 1892 mainly in the comparative rarity of German corporations. The most important difference came with the SARL's introduction. After 1925, far fewer French firms took the form of an ordinary partnership, and the limited partnership virtually disappeared. In short, the GmbH never wiped-out the partnership forms in Germany, while in France the SARL nearly did.[3]

The problem of control has long been central to fate of privately held firms. Owners not only need to allocate control, they want to transmit their control to specific individuals. Most features of this problem depend on context: an efficient practice for a small firm with a wealthy principal may be inefficient in a larger firm, or in a small firm with a poor principal. What works for two individuals with long experience in working together may not for two people who just recently came together. One should not naïvely assume that resolving these concerns necessarily improves efficiency. Mitigating conflict over control may allow firms to function more smoothly, but the problem of control is essentially a distributional issue.

We proceed in three steps. We first develop the legal history of multi-owner firms in Germany and France from 1871 to 1939. We argue that reducing this history to the rise of the corporation, as many accounts would have it, misreads the data for continental Europe. In both the US and the UK, the partnership was essentially at-will and thus a very weak organizational form. But general incorporation laws in the US and UK produced a large number of corporations. In Germany and France, on the other hand, partnerships could write sophisticated articles of association, and the law provided a good deal of

[3] Our frame of reference throughout this paper is roughly the period before the Nazi seizure of power in 1933. Tax law and other changes have altered the incentives to use different organizational forms, and the GmbH today is even more popular than in our period.

entity shielding.[4] Firms chose incorporation only if it could offer sufficient solutions to the problem of ensuring stable control. In a second step, we focus on the experience of Alsace-Lorraine to sharpen the empirical problem. This one region's experience can be used as a sort of test of the popularity of the SARL relative to the GmbH, and this test strengthens the implication that the SARL offered features the GmbH could not.

We then develop the variety of control problems faced by privately held multi-owner firms and work through the implications of German and French company law and how these legal rules shaped the strategies multi-owner firms used. Differences across firms in the number and characteristics of owners implies that a more rigid form like the corporation cannot not address the concerns of many potential and actual owners. This discussion implies that the SARL offered owners a form that was closer to a partnership than was legally sanctioned under the GmbH. Thus is not surprising that the SARL was the more popular form. More generally, there are two ways of structuring control. The first (corporate way) ties control to equity stakes. Whoever controls those equity stakes exercises the decision rights associated with that equity. Much of corporate finance focuses on the impact of control rights associated with equity in this way. A second approach to allocating control rights is typical of the partnership. There, one or more individuals enjoy control rights by virtue of contract, and their control rights bear no necessary relationship to current or future equity ownership. Moreover, in a partnership one can contract on future control; the contract can stipulate whether a manager's heirs will enjoy control rights. Both the GmbH and the SARL allowed firms to attach control *either* to equity or to persons (or both), thus offering firms a much broader set of tools for reducing conflicts over control and achieving the allocation and inter-generational transmission of control rights founders wanted.

In the history of multi-owner firms, the trench lines do not run between France and Germany but between two would-be dictators: equity and persons. The differences between the GmbH and the SARL arise from subtle differences in the degree to which law in the two countries allowed firms to divorce

[4] Limited liability shields an owner's assets from the firm's creditors. Entity shielding protects the firm's assets from claims against its owners' personal assets. Hansmann et al (2006) argue that entity shielding preceded the development of enterprise forms with limited liability and that it was in some sense more important.

control from equity and invest it in persons. In the final step we confront our arguments with detailed data on the contractual provisions of GmbHs and SARLs from the period. While this work is provisional, we find ample evidence that a central consideration in using and shaping these legal forms was the desire to manage control issues in the way described here.

2. The Law in Germany and France

To understand the comparative appeal of these legal forms requires an overview of what they offered to entrepreneurs. Here we sketch the most important differences, and return to specifics below.[5] We begin from the perspective of an entrepreneur who wants to establish a business in the later nineteenth century. The interesting cases for our purposes arise when the founding entrepreneur does not have enough wealth to finance the business on her own (or does not want to bear the risk of putting so much of her wealth in one enterprise), and must either borrow or seek an equity investment. Both alternatives involve transaction costs. In Germany and France businesses could readily organize as ordinary partnerships. Partnerships could be informal (that is, organized under the civil code) or organized under the commercial code with articles of association registered with the appropriate local authority. Organizing a partnership under the commercial code entailed additional costs, but allowed business people to modify standard partnership terms in ways binding on both the partners and third parties. These partnership came with serious disadvantages, however. All partners were unlimitedly liable for the enterprise's debts, and partnership agreements (even those that specified a term for the enterprise) were effectively at will. Business people entering into such agreements could not credibly commit to stay in the enterprise, so partnerships suffered from the possibility that disputes might arise among the firm's various owners that could force what was otherwise a successful enterprise to dissolve. We have called this problem "untimely dissolution" (Guinnane et al 2007).

[5] Guinnane, Harris, Lamoreaux and Rosenthal (2007) provides some more detail on these forms as well as comparison to the United Kingdom and the United States. Guinnane (2012) focuses on the background and legal theory of the GmbH.

German and French firms could also organize as corporations. The corporate form protected investors from the risk of untimely dissolution. Shareholders could withdraw from the enterprise by selling their stakes, but they could not force the firm to dissolve or even to refund their investments. This protection came at a cost, however, because corporations subjected their members to other risks as a result of their concentrated management. Although in principle corporate officers and directors served at the pleasure of shareholders, during their terms in office they had considerable leeway to act as they saw fit. Moreover, because replacing them required a substantial ownership stake, the degree to which minority investors in corporations could protect their interests depended on the flexibility built into the general incorporation statutes.

German and French firms could also organize as limited partnerships in which one or more partners had limited liability. Both commercial codes treat the limited partnerships as an extensive of the ordinary partnership, so these firms could also adapt standard rules in binding ways. These enterprises had somewhat more protection against untimely dissolution than did ordinary partnerships because the limited partners could not pull their investments out of the firm before the expiration of the agreed-upon term. Limited partners, however, surrendered any voice in running the firm and hence risked exploitation by the managing partners. Because the term of the enterprise was finite, however, limited partners were somewhat less vulnerable than minority shareholders in corporations.

Until 1870 in Germany (and 1867 in France), forming a corporation required the permission of the authorities.[6] The required concession involved considerable scrutiny and often demands that the new corporation provide resources or services for the government that allowed it. Prussia especially had been very tough about agreeing to corporations; Thieme (1961, p.286) reports that in the entire period to 1867,

[6] The *Allgemeine Deutsche Handelsgesetzbuch* specified as the default that corporations required a concession from the German state in which they located. But the ADHGB allowed states to introduce general incorporation if they desired. No large state did so until Prussia in 1870. This provision carried over to the Reich when it was formed in 1871. Firms in both Germany and France could organize as "partnerships by shares" even before general incorporation. This form is like a giant limited partnership in which the limited partnerships are traded liked securities. They were never common in either country; in 1909, Germany had 5222 corporations and 98 *Kommanditgesellschaften auf Aktien* (Moll 1911, p.667). The French version is the *Société en commandite par actions*.

Prussia granted 285 corporate concessions. Thus the corporation was rare. The general incorporation rules made corporations much more common. In Germany, however, the new rules were blamed for a stock-market bubble in the period 1871-73 that was fueled by France's early repayment of the reparations it owed following its loss in the Franco-Prussian war of 1870/1. Taking advantage of limited oversight and a voracious demand for corporate stocks, entrepreneurs founded hundreds of new corporations and listed them on the stock exchanges. By one reckoning, Germany had 235 extant corporations as of 1870, while another 928 were founded in the period 1871-73 (Wagon 1903, p. 3). Some if not many of the new firms had very shaky foundations, and all corporations suffered heavily in the stock-market crash of 1873. In reaction, the 1884 Corporations Act introduced several changes intended to prevent further problems. The Act required corporations to follow more onerous rules when setting up the firm; to have much larger share values; and to adhere to new governance procedures intended to protect the firm's investors. The governance rules centered on strengthened oversight by the supervision committee (*Aufsichtsrat*). After 1884 especially, German entrepreneurs faced a stark choice between the dissolution problems of the partnership form on the one hand, and the minority oppression problems of the corporation on the other.

The GmbH's introduction changed this trade-off for German firms in 1892 because the GmbH represented an intermediate form between the partnership and the corporation. The new form grew directly out of the 1884 corporation reform; influential observers had come to believe the 1884 Act represented an over-reaction that would harm German economic growth. The 1884 Act's oversight mechanisms imposed costs that only the largest firms could bear. The new GmbH shared some features of the partnership and some features of the corporation. As a legal person, the GmbH was less subject to dissolution problems than the partnership. And like the partnership, a GmbH could assign rights to specific, named individuals. The new form had few fixed requirements. A GmbH had to have at least two owners and a capital of at least 20,000 Marks (only 5,000 Marks of which needed to be paid in).[7] All

[7] In 1892, 20,000 Marks equaled £1,000, or about $4860. This was a very large sum; per-capita GDP in Germany in 1892 was 470 Marks, so the GmbH's minimum capitalization was equal to 42 times the per-capita income (Hoffman Table 1, p.248). A corporation (AG) had to have at least five investors, each of whom had a minimum investment of at least 1000 Marks. Thus the total capital invested in an AG could, in theory, be less than the minimum invested in

owners had limited liability for the firm's obligations. Perhaps the most important requirement for a GmbH other than the minimum capital concerned the manager: §38 stated that the manager had to be dismissible. Thus a GmbH could not in theory have the permanent entrenched manager that characterized limited partnerships, although the articles could require, for the manager's dismissal, a super-majority of shares, owners, or both. (Just what §38 meant requires some additional discussion below; one influential commentary says the GmbH could fire the manager on a whim (*Wilkür*), while other accounts imply that courts tolerated some limitations on the manager's dismissal.)[8] Most other aspects of the GmbH's structure and internal governance were left up to the articles of association, and the statute itself lists only default rules.

Four other features of the GmbH are especially important to our discussion. First, transferring ownership shares from one person to another required a notarial contract. GmbH shares cannot be listed on exchanges. [9] But the law also required that shares be alienable and heritable. The articles of association could limit transferability in several ways, however. One tactic was to require agreement of the other owners if a share was to be sold. Second, the GmbH default rules specified that all decisions be made by a linear voting rule. But firms were free to declare different voting schemes. Third, some German corporations had tried to restrict ownership of their shares to specific classes of people. One approach was to make ownership conditional on the investor providing some service to the firm, or agreeing that the firm would be the investor's exclusive buyer or seller. Another was to limit ownership to people in certain occupations or regions. German courts in the 1870s and 1880s had struck down such provisions in corporations as contrary to the idea of corporate securities, which must be freely tradable on anonymous markets.[10] The GmbH law allowed the firm to tie the ownership of some or all shares to the provision of

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a GmbH. The key difference, however, is the minimum investment per owner: in principle a GmbH could be formed by forty individuals who each invested 500 Marks. Although the GmbH law requires two owners to register the firm, courts that a firm in which one owner had purchased all the equity from the other(s) could continue to operate, although these "one-man GmbHs" were controversial.

[8] "Whim" is Hachenburg's term. Hachenburg (1913) was the authoritative commentary on the GmbH law

[9] The equity positions in a GmbH are quotas (*Anteilen*) rather than the shares (*Aktien*) associated with corporations.

[10] The issue rose most famously in the case of sugar-beet processors. Beet producers combined to form corporations that would buy and process their sugar beets. The owners worried that an outside investor could take over the firm

some specific service to the firm. Many GmbHs were founded to exploit a patent, for example. These firms typically consisted of the inventor and an investor. The contracts often required that the inventor assign any future patent to the firm. A fourth feature reflects the 1884 Corporation Act's strong publicity requirements. Many German entrepreneurs viewed this as forcing firms to reveal information of value to their competitors. The GmbH had to provide no public information on its performance. This provision may account for the GmbH's relative popularity in "high-tech" sectors like chemicals, where many relatively large GmbHs were found.

In 1892 the German legislators working on liberalizing the options open to entrepreneurs could have undone the 1884 Corporations Ac, or re-introduced the 1871 rules for privately-held firms. But instead, they innovated. The French did the same in 1925, after an earlier, failed attempt to enact a translated version of the GmbH law. While in general preserving the contractual flexibility inherent in French corporate law, the 1925 SARL statute imposed two requirements on all firms. First, each share had one vote, and all decisions at shareholder meetings had to be made on the basis of voted shares. Second, sales of shares to outsiders was subject to the approval of three-fourth of the owners and of owners of three fourth of the capital. Any deviation from these rules was nugatory (*non écrit*). Contraventions did not require the firm's dissolution but were unenforceable in court.

A third feature of the SARL innovation in effect created two different types of firms under one statute. In the first type, the first shareholder meeting appointed the manager, and that person remained manager so long as they had the support of owners controlling a majority of the firm's equity. In the second type, the SARL's articles of association named a manager, and that person remained manager so long as the firm met several important terms set out in the articles of association (such as any minimum distributions to shareholders). The first type of SARL resembles a corporation in that its owners could hire and fire the management. The second type of SARL more nearly resembled a partnership, because even owners of a majority of the equity could not remove a manager.

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and hold up the producers by reducing prices on their perishable product. The 1897 *Handelsgesetzbuch* removed this difference between the corporation and the GmbH, explicitly allowing corporations to tie share ownership to the performance of a service.

Comparing these two types of SARL to the GmbH highlights the subtle differences between the German and French enterprise forms. The GmbH's *default* voting rules were the SARL's *required* voting rules. GmbHs had much more latitude to allocate power within their firm as they saw fit. The first type of SARL, with dismissible manager, clearly reflects the intention of the GmbH's drafters. The second type, with its entrenched manager, was hard to achieve with a GmbH.

3. A test: Alsace-Lorraine

Above we established that prior to the introduction of the GmbH and the SARL, entrepreneurs in Germany and France had apparently similar menus of legal forms available to them. The pre-PLLC use of those forms differed in some important ways, however: the 1884 reforms had made corporations less common in Germany than in France. The more striking difference is in the way entrepreneurs in the two countries reacted to the new PLLC forms. In Germany, the GmbH's uptake was at first slow, and even in 1932 amounted to no more than half of all firms. In France, the SARL quickly displaced the partnership forms almost entirely, and also made inroads into corporation's popularity. This comparison implies a central counter-factual question: suppose *German* firms had been able to adopt the *SARL* after 1892. Would have they have been as enthusiastic about the SARL as French entrepreneurs were later?

Alsace-Lorraine's experience offers an opportunity to approximate this counter-factual experience. France ceded much of the region to Germany in 1871 as a consequence of the Franco-Prussian War. Germany returned the territory in 1919, under the terms of the Versailles Treaty. The legal rules affecting firms in German Alsace-Lorraine slowly evolved, but for our purposes were simple. Germany respected prior private French acts, including the formation of firms prior to 1871. After 1871, firms in Alsace-Lorraine had to organize under German law, meaning that the menu of German forms above was available after 1871. Thus the GmbH operated in German Alsace-Lorraine from 1892 just as it did elsewhere in Germany. After 1919, French authorities no longer allowed new firm registrations under German law, so only the French menu of forms was operative. The SARL's introduction in 1925 then expanded the French menu for firms in Alsace-Lorraine as in the rest of France.

This history supports two comparisons. First, we can ask how firms in Alsace-Lorraine organized under German law, and how those decisions changed when the territory reverted to the French menu (including the SARL). This is a comparison over time. In using this comparison we implicitly assume that technological or other changes did not affect firms in Alsace-Lorraine in ways that would alter their preferences over legal form between the 1890s and the 1920s. Second, part of Alsace-Lorraine remained French after 1871. We can ask how the use of forms there compared, at a point in time, to uses in German Alsace-Lorraine? This comparison assumes that entrepreneurs in the territory that remained French had preferences over legal form similar to those in the German parts of Alsace and Lorraine. Neither of these comparisons yields precisely the counter-factual we want. But this is the best evidence comparative history can provide, and it is powerful evidence.

Table 1 summarizes the choice of legal form by entrepreneurs in Germany (not including Alsace-Lorraine) and Alsace-Lorraine in the period 1887-1932. The sampling error for Alsace-Lorraine is relatively large because of the small numbers of firms, but some patterns are robust enough nonetheless.[11] Entrepreneurs in Alsace-Lorraine used the GmbH and other legal forms with roughly the same frequency as elsewhere in Germany. Entrepreneurs in Alsace-Lorraine did not have peculiar concerns that led them to strange uses of the options available under German law. Thus we can compare Alsace-Lorraine under German law to the same region under French law to learn something meaningful about differences between the GmbH and the SARL.

When France recovered its three lost departments in 1919, businesspeople there had to conform to French rather than German law. Unfortunately, French legal statistics do not report data for Alsace Lorraine until 1926. Thus we have no data reporting the types of enterprise forms used there after the GmbH ceased to be available but before the SARL's introduction. As Figure 4 shows, after 1926, entrepreneurs used the SARL in Alsace-Lorraine in proportions nearly identical to that of France net of

[11] To get an idea of the sampling error for the Alsace-Lorraine figures, consider 1912. Thirty-eight percent of all firms that registered in that year took the form of a GmbH. The standard error of that proportion (.38) is .08. This is computed under the assumption of independence; since the sample comprises all firms registered in May and all firms registered in September, this is an approximation.

Paris. The SARL's take-up rate in Alsace-Lorraine is also nearly identical to the take-up rate in the four neighboring French *départments*. Experience with the GmbH does not seem to have made the temporary Germans more comfortable with a SARL-like form, and thus more likely to adopt the SARL after 1925. If anything, partnership forms were slightly more popular in Alsace-Lorraine after 1925 than in the rest of France.

This comparison demonstrates that entrepreneurs saw the GmbH and the SARL as different forms with different strengths and weaknesses. The SARL was more popular in Alsace-Lorraine than the GmbH had ever been, and in fact, during the 1920s, the SARL was more popular in France than the GmbH in Germany. The most striking difference concerns the choice between the PLLC form and the partnership; while the GmbH reduced both partnership forms' popularity, it did not displace them during the period under study, while the SARL's introduction meant the immediate near-demise of French partnerships.

4. The GmbH, the SARL, and the problem of control

As we have argued in earlier work, the design of firm contracts seeks to balance two opposed imperatives: first limiting the cost of conflict within the firm (untimely dissolution or the failure to take advantage of strategic opportunities), second limiting the extent of minority oppression. One can reduce the cost of conflict by concentrating power in the firm and by reducing contests for control. Such moves of course increase the risk of minority oppression. Again as we have argued, firms had and have access to a variety of legal and financial devices to balance these ends. One tool is the choice of legal form itself, and another is the crafting of specific rules to adapt the particulars of that form to the firm's needs. Here we focus on the stability of control and examine two different problems that we label "within generation" and "across generation" control problems. The within-generation problem holds the set of owners constant and involves contests for control that stem from strategic conflicts. The control coalition might evolve over time either because of the operation of the market for equity or because of the evolution of alliances among holders of control rights. A firm that insufficiently concentrates power will either be unable to act or will be buffeted by instability in its strategic plans. The across-generation problem arises when members of the current control coalition sell out, retire, or die. To the extent the firms ties control rights either to equity or to a particular position in the firm, changes in the membership of the firm can lead to a new control coalition that excludes members of the former control coalition that have remained part of the firm. Hence continuing members of the firm might want to have control over the selection of new members and new officers, either because they are concerned that they may lose out in future strategic conflicts, or because they are concerned about the ability of new members of the control coalition to run the firm profitably. Both problems come into sharp relief when members of the control coalition (e.g. the founders) have made significant firm specific investments.

Other issues come into play with this problem, the most obvious being financial. A firm that expands by taking on debt does not dilute control while one that sells a majority stake to the public is taking a radically different route. Even among privately-held firms, one can imagine firms that allow over-the-counter trade in their stock and others that lock it up in a trust, or simply chose an organizational form that does not allow stock to be traded, or that subject equity trades to the approval of management or a board of directors. The extent to which one can interfere with the private decisions of individual owners varies by organizational form and across countries. The laws of Germany and France were flexible enough that entrepreneurs could achieve a wide variety of entrenchment both across and with generations, but solution came with consequences for other issues in firm governments. Because the laws were different between countries these consequences were also varied.

A view from Berlin

Under the *Allgemeine Deutsche Handelsgesetzbuch* (ADHGB), which constituted an all-German business law from 1862 until 1900, partnerships could use their contracts to assign authority as they saw fit. The range was particularly wide since it included the standard situation where every partner could act individually for the firm, all the way to excluding some general partners from management entirely. Limited partnerships had similar flexibility, with the exception on a hard constraint forbidding limited partners from participating in management. Using general or limited partnerships to distribute control rights had the merits of considerable flexibility at the design stage. They also built-in commitment to that authority structure, because any change requires unanimous consent.

German corporation law was much less flexible, especially after 1884, although there were still dimensions on which founders could shape governance. After 1884, the division of authority between the managers (*Vorstand*) and the *Aufsichtsrat* derived from law and not contract.[12] As noted, German courts did not tolerate provisions that limited the free transferability of corporate shares. On the other hand, German firms could and did issue multiple classes of shares, and these classes could have different voting rights. In practice, however, few firms issued preferred shares (*Vorzugsaktionen*), and the literature gives the impression that the different classes of shares were about claims to profits, not votes.[13] Firms could also construct convex voting rules, so long as all shares had at least one vote.

The view from Paris

French partnership law was similar to that described above for Germany; the German law, in fact, was heavily influenced by the French. The corporation law of 1867 also provided considerable flexibility. A corporation's owners could choose how much to insulate the manager from the board of directors and from shareholders, and by the same token, how much to insulate the board of directors from shareholders. Indeed the articles of incorporation governed the length of appointment for both managers and the board, and the managers' appointments could be for life. Beyond the articles that dealt directly with management, the SA law allowed multiple classes of shares and ownership thresholds to vote in the general meeting, to serve as a director, or to be a manager. Unlike the German law, French law left the

[12] The business-history literature stresses the variety of ways in which the *Aufsichtsrat* actually operated. In some cases, it had considerable power and oversight authority, as was intended; it others it was a passive tool of one or more substantial owners. And a long tradition stresses the ways German banks exercised power over clients by placing their staff on the firm's *Aufsichtrat*. We do not deny this diversity, our point is that the basic legal structures constrained the possibility for such variables in the German corporation compared to partnerships or the GmbH.
[13] German corporations in 1906 had a total capitalization of 13.5 billion Marks. Of this, only about 240 million Marks were preferred shares (about 3 percent). See Moll (1906).

division of labor between management, the board and meetings of shareholders up to the firm's founders.[14] The firm could also require super majorities for certain decisions. Because there was no minimum capital requirement, all these options were available to any corporation that had seven or more shareholders, as well as to limited partnerships with tradable shares. Most corporations started with only a fraction of their capital paid in. This fact offered the board another tool: if a share had not been fully paid-in, then its sale required the board's approval. Founders could further restrict sales of shares if they committed not to solicit equity from the public.

The French corporation thus enjoyed considerably more flexibility than allowed by the 1884 German corporation law. One reason for the difference was that the German legislation had in mind publically-traded firms (even though listing was not a requirement), while the French law contemplated general incorporation with some provisions targeted at firms that did not intend to list or become large. From the perspective of a legal structure that ties control rights to equity, one could argue that German corporation and the GmbH taken together offered fewer options than the French SA alone. Publicly-traded German firms had to avail themselves of the AG form which was more restrictive than the SA. Privately-held firms could use either form but relatively few used the AG form.

Yet it would be misleading to claim that, prior to 1925, nearly all of the things that could be achieved by a GmbH contract were already available to French entrepreneurs with the SA form. To be sure, the ability to use multiple classes of shares, different voting thresholds, and varied tenure lengths gave SAs considerable flexibility. But there is an important difference: conspicuously missing from SA articles of association, but present in partnership, GmbH, and SARL contracts, are devolutions of authority to *specific people* named in the contract. Legal scholars emphasize distinction between firms as collectives of persons (*société de persones*) and firms as collectives of capital (*société de capitaux*). In the first type of firm, restrictions concern particular persons (e.g., Johan Dupont) while in the second types they concerns classes of persons (e.g., all owners of 5 or fewer shares, which might include Johan

[14] The two exceptions being approval of the original contract by a special one share one vote meeting and the need to have bond issues approved a regular meeting of shareholders.

Dupont). While a partnership was clearly a collective of persons and an AG a collective of capital, the GmbH was a hybrid form which enable some of the articles to be written about particular individuals and other about classes of individuals. Such flexibility was more limited in French Law before 1925.[15]

Suppose a single shareholder owns 30 percent of the capital in a corporation. Specifying a 70 percent voting rule for acquisitions gives that shareholder veto over acquisitions. That voting rule is not identical to a veto, however. Anyone else who amasses 30 percent of the votes can veto as well. In addition, if the first shareholder's stake falls below the 30 percent threshold then he loses his veto. If, on the other hand, the firm grants that *person* veto over acquisitions then firm's capital stock do not affect his veto. One could write such clauses in partnership agreements in both Germany and France, and they were also valid in the GmbH and SARL. But they could not be part of corporation statutes. The ability to write such personal clauses might well explain why the GmbH form was much more popular than the SA and why partnerships were more popular in France than in Germany before 1925.

To our mind it was the inability of personal clauses that drove the demand for an alternative to the SA form in France, and it is that demand that produced the SARL. The standard argument for France's introduction of the SARL (which we have accepted) is that owners of GmbH firms in Alsace-Lorraine were unwilling to convert to any French organizational form after the end of WWI. Chauvinism then dictated that France pass a law that would create an organizational form that would be more attractive to the business people in the recovered territories than the GmbH. While that much is certainly true, we have yet to find any particularly credible argument about why the GmbH was so persistently attractive.

As a thought experiment, consider an extant GmbH in Strasbourg in 1920. Would it want to transform itself into a French SA? The problem entails three different issues: legal uncertainty, transformation costs, and governance concerns. As long the GmbH retained this form, its equity conflicts had to be adjudicated according to German law. Transforming the firm into a French corporation with the same articles of association would place equity conflicts under the rule of French commercial law.

[15] The distinction between an association of people (*Personengesellschaft*) and an association of capital (*Kapitalgesellschaft*) is also important in German commercial law.

Business people and lawyers in Alsace-Lorraine had operated under the German law for 48 years and they may have preferred the legal devil they knew to one that they did not, even if on average the two laws were expected to adjudicate disputes with equal efficiency.

The second element involves conversion costs. A GmbH operating under the default rules could convert to the French SA and use precisely the same governance rules. So a patriotic Alsatian might have considered doing so, but the conversion would cost between 1 and 2 percent of the firm's capital. In the difficult economic climate of 1919 or 1920, one might simply surmise that in absence of any legally compelling reason, business people would have forgone this opportunity to wave the flag in the favor of more investment. For many GmbH firms, however, converting to an SA involved making some governance trade-offs. One could not, legally, embed all of a GmbH's articles into an SA.

The distribution of power and firm stability

Threats to an agreed-upon control structure can come from two sources, voluntary changes in the distribution of power through the operation of the market for equity, and generational changes through inheritance. In firms defined as collectives of individuals, the impact of the market for equity can always be limited by contract. While an agreement is in force, the equity market is closed to outsiders and most often among insiders. In any case, changes in equity stakes rarely if ever translate into changes in the distribution of authority. But beyond the obstacles that can be placed on the operations of the market for equity (and thus for control), firms defined by persons most often allocate controls directly to specific individuals. Thus control and ownership can be fully separated within the articles of association in ways that are more difficult to achieve in corporations. Consider the case where one individual owns 1 percent of a partnership and is named the sole the general partner. There is little the other partners can do to limit the general partner' authority while the contract is in force. Conversely there is no way the general partner can transfer his control rights to someone else.

Now consider a corporation that vests 50.1 percent of its voting rights in a single, golden, share. The position of the other shareholders is identical to that of the junior partners in the partnership example above because the owner of the golden share has complete power. But the golden share's owner can chose to exercise management himself, name someone else, or even sell his share, all without consulting the other shareholders. The key difference between the partnership and the corporation with the golden share is that former has a double lock-in (managers are insulated from equity but this insulation is to specific individuals) while the later only insulates management from equity. In corporations, voting schemes that transfer power to managers do so both over strategic decisions and over management. To be sure, one could adopt an article specifying that the golden share will revert to a common share should it pass from the hands of the initial owner, but that is creating a corporation with some of the characteristics of a collective of individuals.

Straddling the line: PLLCs as collections of persons and/or capital

Both the GmbH and the SARL straddled the distinction between an association of persons and an association of capital. But they did so in different ways. The GmbH was not a perfect fit for firms that wanted partnership-like governance structures because it subordinated management to owners. The firm could confer a variety of powers to specific individuals, an option that gives the GmbH a characteristic of a collective of individuals, but could not contractually empower an individual to manage the firm forever. Similarly, one could give an individual shares with a majority of the votes, but as we noted above this is not the same thing. In this respect the GmbH more nearly resembled the corporation.

In creating their version of the PLLC, French legislators aimed to create a hybrid form that provided many elements of a corporate entity but that also allowed for the partnership's approach to divorcing control from ownership. To the extent that such devices involved limiting the market for equity, or insulating management from owners for some interval of time, the SA contract was flexible enough that there should have been little demand in France for a GmbH-like entity. Legislators seem to have been intent on solving a different intergenerational instability problem, one that comes from the operation of French marriage and inheritances rules. Under French law, assets acquired before marriage or inherited are the personal property of each individual in the marriage while assets acquired during marriage are community property and this belong half to each spouse. Moreover, French inheritance laws involves partible inheritance with the proviso that each of n children must receive a share equal to at least 1/n+1 of the total estate. Taken together these laws created several forms of instability in small corporations that seek to give a firm the permanence a partnership lacks, especially because a very considerable fraction of the family's wealth is invested in the business.

Consider a hypothetical example. Assume that a couple incorporates their firm and give five additional owners some trivial amounts of shares. The husband owns half the shares. The husband dies and these shares pass to his two children who, forming an alliance with the 'trivial' shareholders, wrest control from the surviving wife. Later the wife dies and her half of the firm passes to the two children. In this example, the couple clearly did not intend the firm to be taken away from the surviving spouse, but the existence of the "trivial" shareholders made that possible. We do not need to judge whether any of these intergenerational transmissions are efficient; we that founders want to control the fate of their firm. Rather than trust in the negotiations of the next generation, the founders will prefer to control who has management rights and how these rights evolve. This example involved intergenerational conflicts within a family, but we can also imagine cases where two founders who both manage the firm have to contemplate what will happen should one of them die. In a corporation the shares will pass to the heirs and a contest for control may ensue.

The SARL resolved all these anxieties, offering founders the option of giving initial management uncontested control for any pre-specified length of time including life terms. It also gave founders the option to specify succession rules. These included rules that gave surviving managers veto rights over which heirs might join them, or explicit designate surviving managers as the sole managers. In doing so, the SARL adopted the control structure of a partnership during the life time of the initial managers or of the firm. Relative to the SA, the SARL expanded the set of unalienable rights that could be granted to current members of the firm. Relative to the partnership and related forms, the SARL offered both better owner and entity shielding; unlike in a partnership, the SARL was not dissolved by the bankruptcy of one of its partners. Indeed, it was a limited liability form and had an equity structure designed to endure past the life of the current owners.

5. Evidence

Thus far we have demonstrated the SARL's greater relative popularity, and have also showed this was true for a specific population that at different times could adopt the GmbH or the SARL, the entrepreneurs of Alsace-Lorraine. But this evidence is not sufficient by itself to rule out other explanations for the difference.[16] As we are still developing some of the relevant databases, this discussion is part "results" and part "agenda for the future."

We have (or will have) four types of evidence. The first is the legal rules themselves. By comparing the GmbH to the SARL, especially, we can be clear about how each compared to its relevant alternatives. Our second type of evidence draws on observations about *which* forms the GmbH and SARL displaced. Figure 2 shows that the GmbH had its greatest effect on the ordinary partnership, and very little on the limited partnership. To be clear, the limited partnership always accounted for a small proportion (around 5-7 percent) of all new firms. Our point is not that the limited partnership was terribly popular; rather, the limited partnership provided something the GmbH could not, which was a founder's ability to acquire outside capital without risking loss of control. In every other respect, the GmbH could replicate a limited partnership or provide a benefit (such as limited liability for everyone) without any trade-off. Of course, once the GmbH came along, using the limited partnership had opportunity costs in the form of the unlimited liability born by the general partner. But this partnership

[16] One alternative view consistent with the German data is that small firms feared that by switching to a form with all limited-liability owners, they would lose access to bank credit and make it harder to purchase inputs on credit. After the GmbH's introduction a number of banking texts and periodicals aimed at bankers urged caution in lending to GmbHs. There is also some evidence that firms supplying inputs to GmbHs on terms thought they were more likely to have trouble getting paid. But we know of no systematic evidence on the issue, and in the discussions noted it is never clear whether they are comparing GmbHs to extant partnerships or to some ideal. It is worth noting the owners of a GmbH usually had to pledge personal security to obtain bank credit for the firm, in effect waiving their limited liability for this one purpose. But since this was a common practice, and still gave the owners liability protect superior to that in a partnership, we cannot see how this would drive the popularity of the partnerships in Germany.

form gave limited liability to all the other investors, and thus for some owners the price of control was tolerable.

A third type of evidence comes from the popularity of "mixed forms" in Germany. Starting in the early twentieth century, many German firms began to operate with legal structures that mixed two different legal forms. The most popular by far was (and remains) the GmbH & Co KG, which is a limited partnership in which a firm organized as a GmbH takes the role of the general partner. The general practice of allowing a legal person (such as a GmbH) to substitute for a natural person (as general partner) first emerged in the early twentieth century. Unfortunately, the data available to us for our period does not distinguish this mixed form from other limited partnerships. Some of the literature on this topic stresses the favorable tax implications of mixing forms this way. The firm can assign all the profits to the limited partnerships, where the income is taxed as personal income and thus escapes the enterprise tax that applies to the GmbH. In the extreme, the limited partners can also own the GmbH quotas, and thus this form can be a pure tax-avoidance mechanism. But as we noted, enterprise taxes on the GmbH were quite low in our period and we doubt that tax reasons accounted for many GmbH & Co KG at first. Another literature stresses the use of mixed enterprise forms as a way of controlling a firm with a minority investment. Consider a hypothetical example: Schmidt could create a GmbH with 11,000 Marks investment, making up the other 9,000 with funds from his wife or some other investor. Schmidt would then be in charge of the GmbH for the life of the firm. He could raise additional funds from outside investors as limited partners. Because the GmbH is the general partner and thus controls the limited partnership, this device allows Schmidt to entrench himself as the firm's manager, even the GmbH's capital is significantly less than the capital contributed by the limited partners.[17] This strategy requires the agreement of the other investors, of course, so it amounts to a commitment device locking-in Schmidt as manager of the firm.

[17] Hesselmann (1957) lists several hypothetical cases where the GmbH & Co KG would be preferred to another form. In most of his examples, the issue is what we stress in this paper: that a family or other group of owners want assurances about control of their firm in the face of outside investors.

A fourth but indirect piece of evidence comes from the general patterns we see in GmbH equity structures. Most GmbHs had a capital structure that implies no real conflicts of the sort we imagine. Depending on the year, about two-thirds of all new GmbHs had only two owners. Of those, about one-half had a majority owner and about one-half had two owners with equal equity investments. Under the default voting rules, the former had an entrenched manager (he if so desired) and the second operated by consensus. Firms where conflict could be a problem (for example, three or four equal owners) existed but were uncommon. Although indirect, this simple fact suggests avoidance of the GmbH form where other considerations required that type of capital structure.

We also see evidence of concern in our contracts, but only in the (relatively rare) cases where the equity structure makes the founder a minority owner dependent on a coalition to retain control.[18] A good example is a GmbH formed to take over and operate a manufacturer of ornamental embroidery for furniture in Nowawes (now Potsdam).[19] Emmo Pechatscheck, Sr. owned the original firm. The new GmbH brought together Pechatscheck's wife, Helene, and two apparently unrelated investors, Berthold Thon and Walter Vockel. Thon owned three-fifths of the new enterprise's 25,000 Marks of capital, while Vockel and Helene Peschatscheck each owned one-fifth. Emmo Jr., who was not an owner, was named manager. The GmbH's default rules would make Thon the firm's dictator, since he owned an outright majority of the shares. Instead, this firm used the GmbH's flexibility to reduce Thon's power (Vockel's, too) and to compensate them by guaranteeing them a return on their investment and a share of profits larger than that implied by their equity stakes. The contract includes a provision requiring the unanimous

[18] These "contracts" are the articles of association for about 1000 German firms. At this stage they are not fully coded and thus not suitable for statistical analysis, although that analysis is our goal. See the appendix for more description.

[19] Emmo Pechatscheck Mechanische Posamentenfabrik für Möbel und Konfektion, Gesellschaft mit beschränkter Haftung. Before Notary Raphael Josephsohn, Potsdam, June 3, 1912.

consent of the owners to fire the business manager. Hence Emmo's mother had to agree to his removal as manager.[20]

So far as we can tell, this firm operated smoothly, and we cannot know for certain how courts would have judged the unanimous-consent rule for firing Emmo. Other features of this contract are, while not very common, entirely unremarkable; we see many examples of firms that allocated returns and control in ways that gave some owners greater or less profits or power than their ownership stake would imply under the default rules. We suspect that the rule about firing the manager would pass judicial scrutiny because Emmo could still be fired, even if it required an unlikely coalition's agreement. And we see unanimous-consent rules on many issues in many GmbHs. So we take this example to show the difficulty but not impossibility of entrenching a GmbH's manager.

Comparing this firm to the alternatives helps clarify how the PLLC forms worked. Creating a corporation in this case would have been difficult. A corporation required at least one more owner, but the real obstacle would be the requirements for internal controls and publicity, which imposed substantial fixed costs. Corporations with 25,000 Marks capital were almost unknown.[21] Most importantly, the combination of strange profit allocation and unanimous consent to remove the manager would have been very difficult to achieve with preferred shares. The limited partnership would also have been inferior for these investors. A limited partnership with Thon and Vockel as the limited partners could have replicated this GmbH's profit allocations from their point of view, but it would have left the Peschatchecks with unlimited liability as well as complete authority over the firm.

French articles of association also show the same strong differences between organizational form. French corporations that did not solicit funds from the public had the ability to restrict sales of equity either by subjecting new owners to thethe board of directors's veto or by giving other current equity owners a right of first refusal. But such clauses are exceedingly rare. Our sample has yet to turn up any

[20] The associates also added provisions designed to protect the Pechatscheck family against the threat of untimely dissolution. Should they wish to withdraw, Thon and Vockel were obliged first to offer their shares to the father and son at a price determined by a mechanism included in the contract.
[21] In fact, our "corporation handbook" samples contain *no* firms with less than 100,000 Marks capital. These samples are all from the early twentieth century. See the appendix for details.

case of such limitations being using in practice. The use of multiple classes of shares was frequent. A quarter of firms had founders' shares, but these shares did not increase the power of any control group since these share typically had no voting rights. Only one firm had a set of golden shares with five times the voting rights of the others, but in this case the founder owned more than 90 percent of the capital (Guinnane and Rosenthal 2009). As we have discussed elsewhere, incorporation and the use of multiple classes of shares in this case was a move by the owner to have the ability to bequeath control in his factory to a single heir (who would inherit the golden shares). In all other cases, control rests with equity and that equity has the form of one-share-one-vote most of the time. (There are also cases where an individual must have ten shares to attend ordinary meetings of shareholders; the law required that all extraordinary meetings be open to all shareholders). Voting rules did not protect founders.

Founders had other avenues in the clauses dealing with management. Management was typically entrenched. Board terms were either three or most often six years and replacement of individual board members was staggered to prevent "clean sweeps." On the other hand, the contracts systematically mandated minimum dividends (between three and eight percent) and failure to meet profit targets would force management to get its business plan approved by the meeting of shareholders. Remarkably given all the flexibility of the 1867 law, corporation articles of association tie control rights to equity almost uniformly. Thus it is no surprise that nearly all of the firms in our sample were controlled outright by the founders, and most often by a single founder. The sample currently includes 40 corporations, most from the post WWI period, so these findings are preliminary. t seems, however, that a corporation is an entity that locks in capital permanently and maintains a control structure as long as the current control group maintains a sufficient equity stake.

The contrast with partnership is striking. As Lamoreaux and Rosenthal (2005) detail, power in French partnership could be and was specified partner by partner. The default rule involve several and joint liability with each partner being able to act on his or her own for the firm. In practice, however, many partnerships deviated from these rules giving more rights to some partners than others or by requiring joint signatures to bind the firm. Because these management rights were given to individuals named in the contracts, they were not subject to renegotiation so long as the contract was in force. On the other hand, the unlimited liability kept the length of the contracts short. Renewal, though frequent, was subject to the unanimous consent of the partners.

As we have detailed elsewhere the SARL represents a compromise that was quite different from the GmbH. Because the French incorporation law of 1867 was more flexible than its German 1884 counterpart, there was no particular need to make the SARL attractive to larger firms with several owners. For large firms with few owners, the SARL offered a simple form that reduced transaction costs relative to the corporation, but that had less flexibility. And in fact the share of multi-owner firms that organized as SAs did not change before and after 1925. The primary targets of the SARL law were thus the limited and general partnerships that both before and right after WWI accounted for 80 percent of all new multi-owner firm registrations. The SARL law offered limited liability for all equity owners (and was thus an improvement even on the limited partnership) and the ability to specify management rights independent of equity stakes. As we showed earlier, nearly 80 percent of all firms in our sample availed themselves of this ability and named managers that were entrenched for the duration of the contract. Beyond binding the current generation, a full quarter of all firms provided clauses that limited the ability of heirs to intrude on management. This effort echoed a common practice in partnerships that limited untimely dissolution due to death. The heirs of a partner who died could not be bound to become general partners (because such liability could not be forced upon them), but they could be bound to become limited partners.

Again, our samples remain small but they all point to the constraints imposed on the distribution of power by different organizational form and they all suggest we pay more attention to issues of distribution when considering how firms are organized. It seems unlikely that such concerns are solely a problem invented by the French.

Analysis of contractual features: an agenda

We have a large collection of articles of association similar to those for the Peschatcheck firm, and are in the process of coding these contracts to reflect their important features. In the remainder of this section we lay out our thinking on how to use this information once the databases are completed. This discussion focuses on our German contracts although the questions for the French contracts are quite similar. Our task here is to construct ways to use the frequency of certain types of contractual clauses to test whether owners were or were not concerned about the issues we stress in this paper. We consider three types of firms from the perspective of two different types of owners. “MO” are firms that have a single majority owner. EQ firms have two equal owners. SO (“several owner”) firms have more than two owners, none of which owns a majority of the equity. These situations implicitly define two different types of owners: those who by themselves own a majority of the firm, and those that do not.

The contractual clauses themselves fall under several headings. The distinctions are not as clear as in equity structures, but the following headings suffice for now. (1) Deviations from linear voting rules, or assignment of extra control rights (in the extreme, veto rights) to specific persons. As we have noted, these are distinct matters. (2) Limits on the sale of shares to outsiders, individuals who do not currently have an equity stake. (3) Limits on the sale of shares to insiders, those currently owning an equity stake. (4) Restrictions on the manager’s authority. Typically these restrictions name a list of actions the manager cannot take without approval of other owners, and the lists are not always identical. The most common restrictions state that the manager cannot acquire debt or buy land without permission; more extensive lists require agreement before hiring an employee, signing contracts of a certain value, etc.

Deviations from linear voting rules take two forms in our contracts. Some name a specific owner for a specific action (“owner X cannot sell his shares to an outsider without first seeking the approval of owner Y”). Others require super-majorities for certain actions, but do not name specific owners. The super-majority can often be the entire firm, that is, unanimous consent. Reading the particular contract, one can often see how such rules amount to statements about specific owners, given the original ownership structure (as with our example, above, the contract does not say the mother has to agree to firing the son, it just requires unanimous consent, and the mother is an owner). But if the contract does not name specific people, the rules bind for all future owners. For example, if the mother died and her son inherited the equity, then *he* could have to agree to firing himself!. Nonlinear voting rules in the GmbH contracts can be complex. Figure 4 lays out in schematic form our interpretation of the presence of absence of clauses concerning the sale of quotas and limits on the manager's authority.

Our empirical strategy is two-fold. The first relies on frequencies (and conditional frequencies) of types of clauses. For example, our argument implies that SO firms have more concerns about transfer of equity than MO firms, and we can test that claim with simple comparisons. We can also develop these arguments further and use other firm characteristics to proxy for the severity of particular issues using conditional frequencies, eg., probit models. For example, suppose we had a good proxy for the degree to which a majority owner cares who the minority owners are. Then we could use this proxy to ask whether firms try to use restrictions on quota transfers to lock in the majority owner, the minority owners, or both. Our impression (not yet confirmed with statistical analysis) is that firms whose assets involved intellectual property rights were more likely to restrict the sale of shares to outsiders. The reasons are clear: a firm can retain its intellectual property rights (the patents) but lose exclusive use of more basic knowledge if a minority owner sells to a person or firm who wants to use that knowledge for some other purpose.

Our second empirical strategy relies on close analysis of more contracts such as the Peshatscheck's. Only by reading and pondering the implications of specific rules can we really figure out what the firm's creators wanted to accomplish with specific rules. The danger with this kind of strategy is clear: one can always find a few strange examples and misconstrue them as reflecting more general forces. But this danger seems limited by the first-stage analysis of frequencies. We *know* the Peshatscheck GmbH had unusual provisions; the question is to understand what these provisions were trying to accomplish.

6. Conclusions

At this point our conclusions must be tempered by the provisional nature of our evidence. But the question's importance and implications are clear. Most discussions of firm governance focus on the public corporation**.** We do not deny the importance of such firms (!) but stress that they constitute a minority of firms, especially in Germany and France in our period, and that while large firms account for disproportionate shares of output, smaller firms dominate some sectors and are almost always the seed for large firms. We have argued that the central governance problems for small firms are different from those affecting public corporations. This is partly a matter of goals; controlling a firm and passing it on to specific heirs may be personally important to a small firm's founders in a way that the future of a large public corporation may not be to its president or a major stockholder. But we have stressed other aspects of the problem. The nature of public corporations makes it both undesirable and impractical to place serious controls on the identity of owners, for example, while for small firms such controls may be the only way to manage conflict and achieve the founder's long-term goals. To take another important example, the corporate governance literature tends to assume that an individual or entity that owns a large share of a firm's shares are a problem and must be controlled to protect smaller shareholders. We have stressed that in smaller firms, owners of smaller stakes may prefer a majority owner with a particular identity to a firm with less concentrated direction.

Our very question also poses a challenge to some dominant ways of thinking about both corporate governance and broader issues of law, economics, and historical economic development. The central claim at the heart of the so-called "law and finance" literature is that one can usefully divide countries into legal families, and that membership in a particular legal family is correlated with the ways and degree to which the law protects investors (La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny 1997, 1998, 1999). That literature focuses on the large, public corporation, as noted. But our close study of the PLLC-form in France and Germany suggests a different weakness. This approach assigns Germany and France to slightly different legal families (Germany has "Germanic civil law" while France has "French civil law."). But all the law directly at issue here is nearly identical, partly because both countries drew on earlier legal traditions and partly because French thinking was so influential in Germany. Partnership law, in particular, was for all practical purposes identical in the two countries. A quick reading of the GmbH and SARL statutes also makes them sound similar. France, in fact, enacted the SARL because of demands for the GmbH's reincarnation in France. Yet some apparently subtle differences lead to substantially different uses of the two forms. To understand the actual impact of legal rules on historical development may require more attention to the rules themselves, and less attention to the broad origins of those rules.

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Figure 1: Registration of new firms in Germany and France, 1871-1936

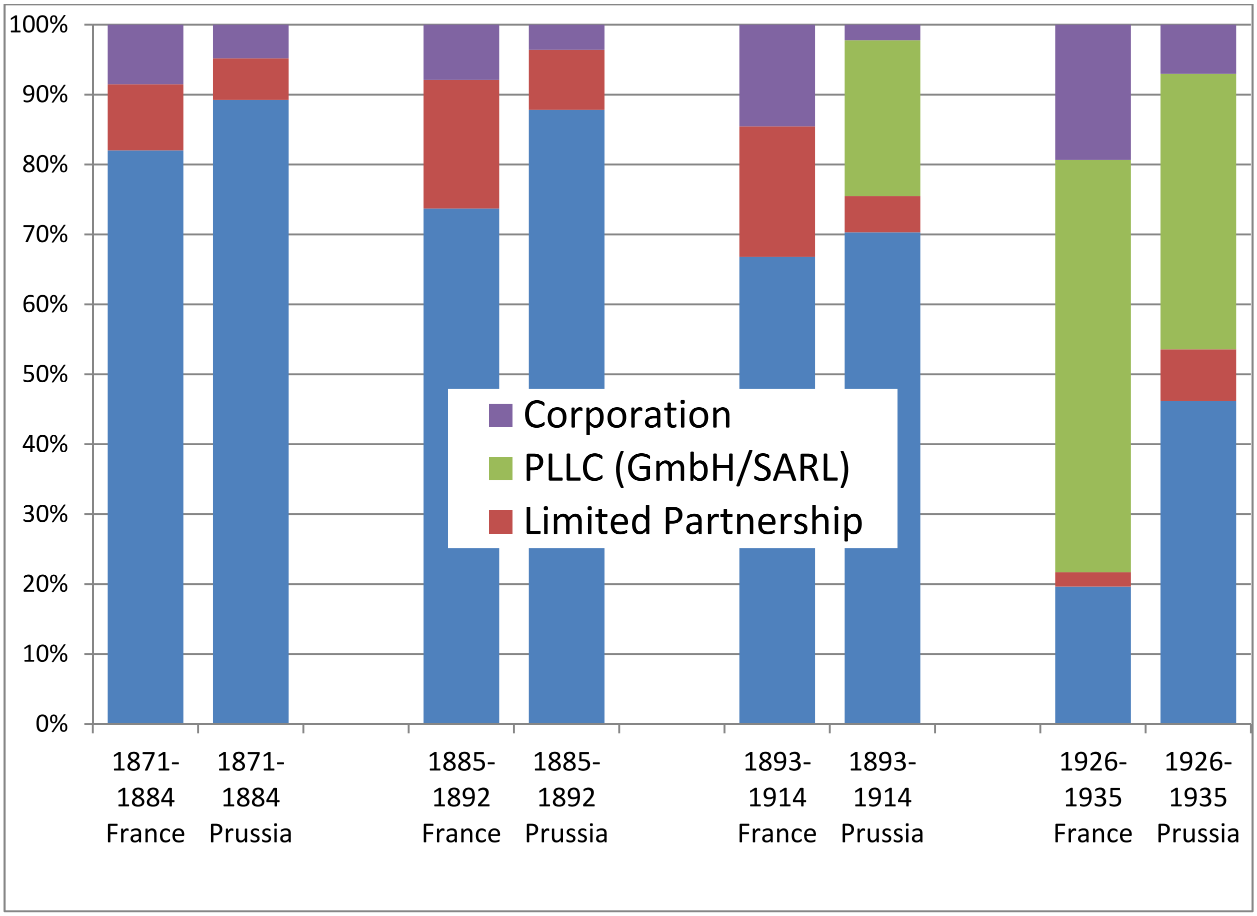


Figure 2: Distribution of new firms by legal form, Germany

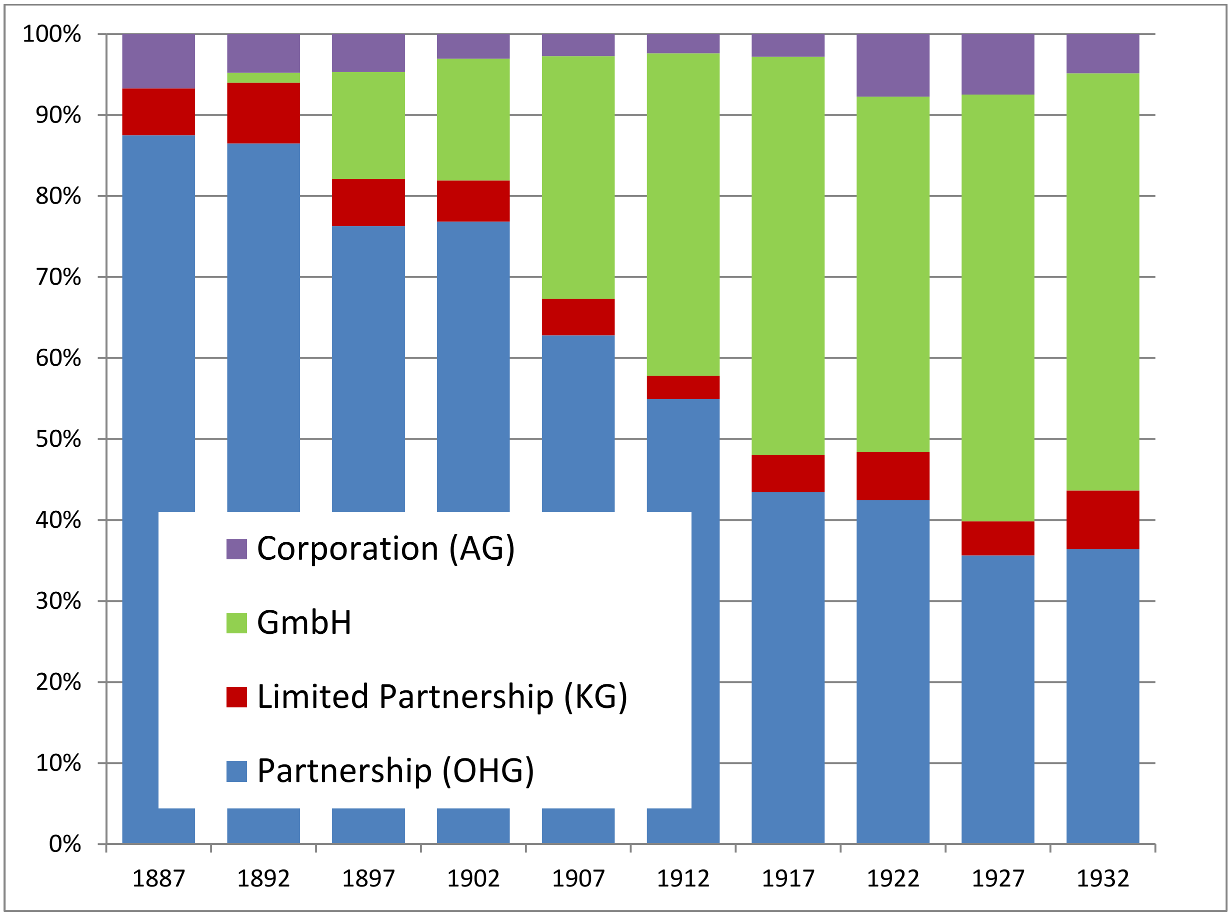


Figure 3: Distribution of new firms by legal form France

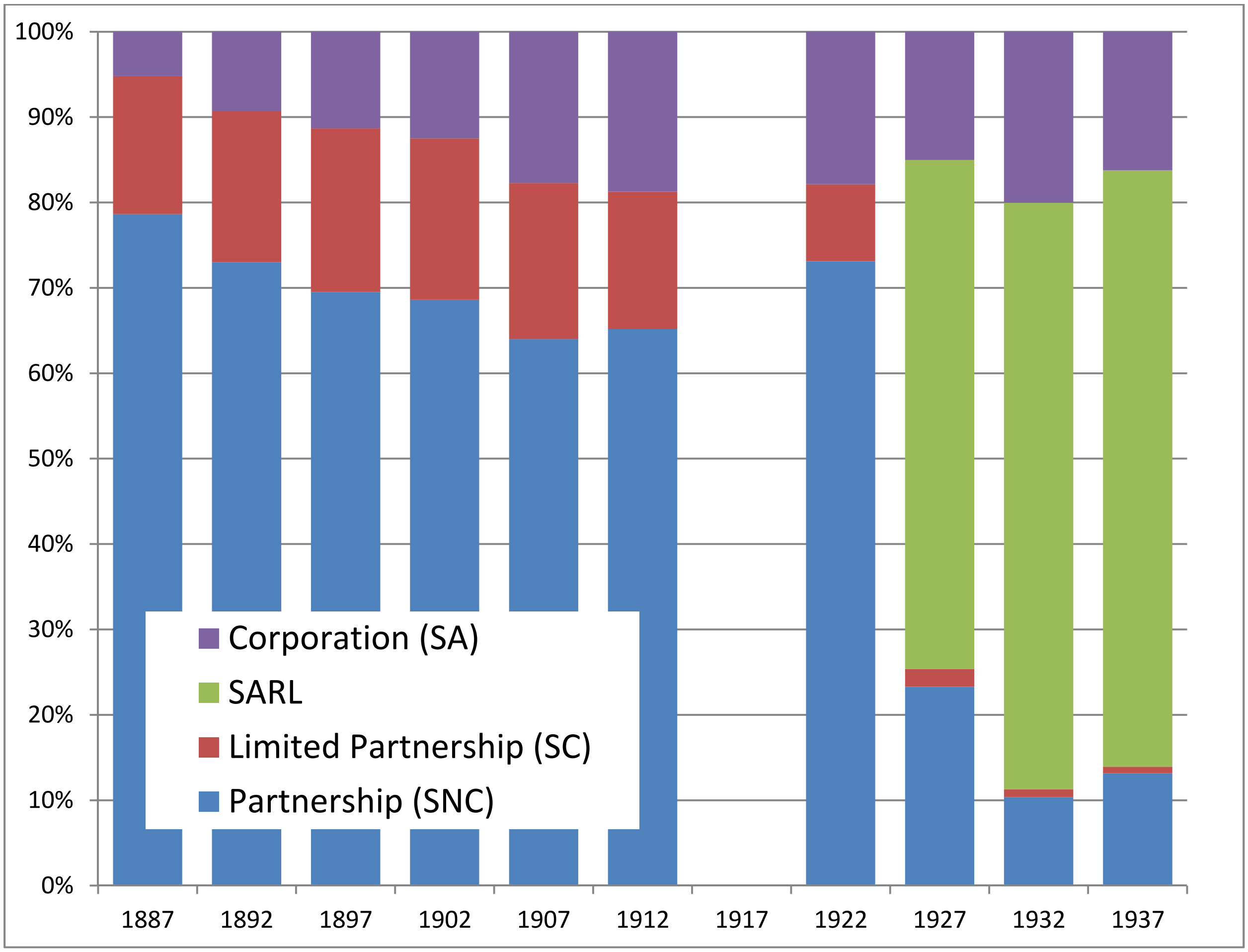
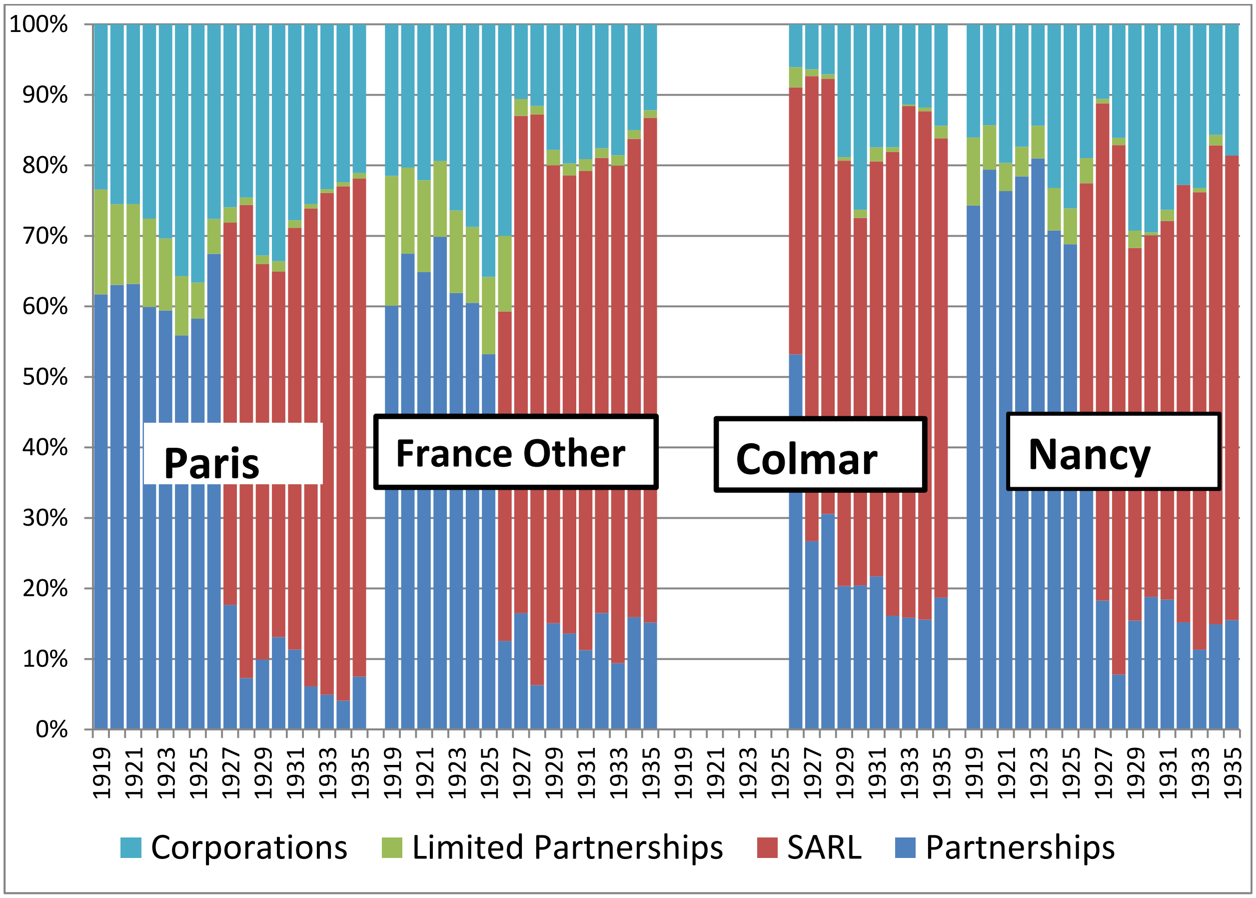


Figure 4: Distribution of new firms by legal form, France by region after WWI



Note: the registration data were reported by *départment* until 1925 and then by appellate court districts. Paris, which was collected separately, is restricted to its old department (the city and two suburban zones, St Denis and Sceaux). The district of Colmar did not file reports until 1926, but it coincides withthe three departments of Alsace Loraine annexed to Germany in 1870 and recovered by France in 1918. Thus Colmar here is directly comparable to “Alsace-Lorraine” in Table 1. The district of Nancy includes the four neighboring *départments* (Ardennes, Vosges, Meurthe et Moselle, and Meuse). The rest of France is simply the difference between the national totals and the three other areas

Figure 4: Implications of equity structures for contractual clauses

Type of clause	Types of firms		
	MO: a single, majority own	EQ: two owners with equal equity	SO: three or more owners, none of whom owns a majority
(1) Limits on sale of shares to *outsiders*	Majority owner controls firm regardless of other owners' identity. Will only care who minority owners are if they provide a crucial service to firm. Minority owners may prefer this specific majority owner to some other majority owner or coalition.	Clear reason to control alienation of shares, since either owner has an effective veto. Wrong "other owner" could make firm unworkable.	Sale of equity to outsider could change coalition governing firm. At the extreme, could create a majority owner who controls firm alone.
(2) Limits on sale of shares to *insiders*	Majority owner should not care if other owners sell to each other and consolidate. Other owners should not care if majority owner buys out some small guy	Creates one owner, which may resolve conflict in firm, but not clear why such a clause would appear in this type of firm's contract.	Concern that one of the minority owners could become majority owner by amassing equity. Could also change governing coalitions by give some a larger minority stake.
(3) Constraints on manager authority	Prevents managerial tunneling; especially important if majority owner's stake is not much more than 50 percent Presumably clauses can require unanimous consent for certain actions; then makes less important who is in charge	Prevents managerial tunneling. If voting rules imply unanimous consent for decisions, these constraints may just clarify areas where consent required.	Same concern as with other firms MO and EQ

Table 1: Distribution of enterprise forms for new firms in Germany (excluding Alsace-Lorraine) and in German Alsace-Lorraine, 1887-1932

	Germany minus Alsace-Lorraine					Alsace-Lorraine				
Year	AG	GmbH	KG	OHG	N	AG	GmbH	KG	OHG	N
1887	6.68	0	5.79	87.39	674	0	0	0	83.33	6
1892	4.77	1.22	7.47	86.29	817	0	0	0	100	7
1897	4.68	13.2	5.81	76.22	1,068	16.67	8.33	16.67	58.33	12
1902	3.04	15.01	5.07	76.82	1,579	6.06	21.21	0	73	33
1907	2.72	29.95	4.5	62.77	1,910	3.13	18.75	6.25	72	32
1912	2.37	39.79	2.91	54.89	2,237	8.82	38.24	2.94	50	34
1917	2.8	49.13	4.63	43.44	1,036	9.09	45.45	0	45.45	11
1922	7.71	43.78	5.96	42.38	6,611					
1927	7.46	52.62	4.21	35.59	5,106					
1932	4.81	51.21	7.19	36.2	2,558					
Total	5.64	39.2	5.23	49.77	23,596	6.67	24	3.7	65	135

Notes: AG are corporations, KG are limited partnerships, and OHG are ordinary partnerships. The source is the *Anzeiger* sample described in the Appendix. The sample comprises every registration in May or September of the years listed. There are a total of 23, 596 firms in "Germany" and 135 firms in Alsace-Lorraine. *Kommanditgesellschaften auf Aktien*, which account for less than one percent of firms overall, are not reported.

Appendix: the sources used in this paper

We have several distinct empirical sources for Germany and for France. Because German commercial law resembles French commercial law so closely, the sources are similar. Record-survival and other problems, however, leave us with rather different samples.

Germany

The source used most heavily here are notices of firm registrations published in the *Reichsanzeiger*, an official newspaper. These notices were compulsory for firm-formations undertaken under the auspices of the commercial law. The notices summarize key information on the firm's legal form and place of registration (that is, the local *Handelsregister*). The sample used here consists of every report in the *Anzeiger* in May or September of 1887, 1892, 1897, 1902… 1932. The figures we report are gross flows; because corporations have longer lives, the stock of corporations is always slightly larger than implied by the flows. (Guinnane (1912) uses both the *Anzeiger* sample and the published census of firms to compare flow and stock data.) Some information in the notices is complete; we always know the legal form of the new firm, for example. Other information in the *Anzeiger* reports is less consistent. For example, we do not always know the firm's industrial sector, and we have yet to develop strategies for handling such gaps. This sample has about 60,000 notices, of which 23,000 represent the birth or death of a firm.

For a much smaller group of firms we have the actual articles of association (*Gründungsvertrag*) the firm filed with the commercial registry. This sample, which we call the "contracts," is a random sample of firms within cities, but from cities we selected because of record survival and diversity of local economy. Strictly speaking it is only a random sample of firms from Stuttgart (for example) and cannot be aggregated to an all-German random sample. These contracts were prepared by a notary and in the case of a corporation or GmbH tell us precisely how the firm was to be run, at least at the start. For partnerships the surviving documents tend to be summaries rather than the actual contract, and are as such less detailed. We cannot, from the contracts themselves, state how long the firm survived or whether it changed its governance rules after operating for some time under the original contract.

The final source, which we call the "corporation handbooks," consists of a number of random samples drawn from balance sheets reported in the *Handbuch der deutschen Aktiengesellschaften.* This dataset was constructed to study small corporations and is still in preparation.

France

All multi-owner firms were supposed to publish notices of formation, dissolution, and modification (including information relevant to who exercised control) in a newspaper of record. The law seems to have been applied systematically only in Paris. They were also required to file first summaries, then the complete article of association with the clerk of the commercial tribunal. This requirement seems to have been adhered to. The clerks then compiled statistics of registration which were published in the *Annuaire Statistique de la Justice* from 1840 forward. These report new registration by organizational form by *départment* until 1933 and by appellate court district thereafter. The samples of articles of association come from the archives of Paris (series D31U3). The archive has a complete set of articles of association for firms that registered in Paris from 1807 forward.