Making Your Own Rules: Contractual Flexibility and Entrepreneurial Success

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Abstract

Can reducing contracting costs between entrepreneurs and investors enhance entrepreneurial success? We assemble a novel dataset of company bylaws covering the near-universe of firms incorporated in France between 2004 and 2012. We show that many new firms, including non-VC-backed firms, tailor their bylaws by modifying default provisions on ownership and control rights, while cash-flow rights are less frequently customized. Such tailoring correlates with proxies for asymmetric information and entrepreneur sophistication. Exploiting a 2008 French reform that lowered the cost of bylaws customization, we show that increased contractual flexibility led to higher equity financing at creation and to persistent increases in investment, employment, and revenue growth.

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"Comparable to the 'Formula One' of corporate law, the SAS should not be put in the hands of inexperienced users." (Guyon, 1999)

1 Introduction

Financial contracting theory holds that optimizing contracts between entrepreneurs and investors enhances firm performance. Consistent with this view, venture capitalists create complex agreements with entrepreneurs that tailor cash-flow and control rights (Kaplan and Strömberg, 2003). However, such contracts may exceed the capabilities or needs of most startups. They may even be detrimental if they allow sophisticated investors to exploit less sophisticated entrepreneurs' behavioral biases (e.g., Landier and Thesmar, 2009).[1] The ambiguous consequences of complex contracts mirror the heterogeneous regulatory approaches across countries: while the United States and France introduced new legal forms aimed at expanding contractual flexibility (namely the *Limited Liability Company* first enacted in Wyoming in 1977 and the *Société par Actions Simplifiée* in 1994, respectively), Portugal's 2005 *Empresa na Hora* and Italy's 2012 *Società a Responsabilità Limitata Semplificata* reforms simplified firm creation but limited contractual customization. These contrasting approaches reflect in part the limitation of our knowledge. Evidence on financial contracting at the startup stage beyond VC-backed firms is scarce, and evidence on its impact on firm performance is even scarcer.

We therefore tackle the following questions: Does sophisticated contracting at the startup stage occur outside the narrow set of VC-backed firms? Who are the firms that engage in sophisticated contracting, and on which dimensions do they contract? And most importantly, does financial contracting at the startup stage impact subsequent firm performance?

To shed light on these questions, we assemble and analyze a novel dataset of company bylaws for the near-universe of firms incorporated in France, and use a reform that reduced the cost of tailoring the bylaws to study the causal impact of sophisticated contracts on entrepreneurial success.

In the first part of the paper, we assemble and analyze a novel dataset of company bylaws (also known as corporate charters or articles of association in other jurisdictions), covering the near-universe of firms incorporated in France between 2004 and 2012, totaling around 900,000 firms.[2] Company bylaws govern the contractual relationship among shareholders (founders and external investors) in three main areas: (1) ownership rights (rules governing the ownership, transfer, and issuance of shares); (2) control rights; and (3) cash-flow rights. We use NLP techniques to extract

[1] There is ample evidence that entrepreneurs exhibit behavioral biases such as overconfidence and optimism; see, e.g., Puri and Robinson (2007), Hvide and Panos (2014), and Astebro, Herz, Nanda and Weber (2014) and Kerr, Pekkala and Xu (2018) for surveys.

[2] The choice of the time period is guided by the timing of the reform we study in the second part of the paper.

key contractual provisions from the bylaws.

Our analysis of company bylaws yields three main findings. First, a substantial fraction of new firms tailor their bylaws by modifying or supplementing the default legal provisions. Importantly, such tailoring is not limited to the narrow set of VC-backed firms: 27% of non-VC-backed firms tailor their bylaws. While prior work has emphasized investor protection in corporate law (La Porta, Lopez-de Silanes, Shleifer and Vishny, 1998), our findings indicate that firms already deviate from default legal provisions at the startup phase by tailoring their bylaws. This implies that investor protection depends not only on corporate law but also on the scope for private contracting to supplement default rules.

Second, we find that firms tailor ownership rights most frequently in their bylaws, customize control rights less often, and only rarely adjust cash-flow rights. The frequent occurrence of ownership provisions underscores the importance to firm owners of controlling ownership composition, protecting against dilution, preventing the entry of misaligned shareholders, and retaining key shareholders. Common contractual provisions in the bylaws include priority rights in share transfers, share transfer restrictions, non-compete agreements, and lock-up periods. While such provisions reduce share liquidity, tag-along and drag-along clauses are used to increase share liquidity and mitigate hold-up problems in transactions.

Firms tailor control rights by delegating authority to the CEO while simultaneously introducing governance mechanisms to monitor and discipline the CEO. They expand delegation by granting the CEO power to appoint executive officers who are legally empowered to represent and bind the company, but also create monitoring structures by establishing a board or other intermediate governance bodies between shareholders and the CEO, which is optional for non-listed firms. Firms also tailor the bylaws to expand the set of situations under which the CEO can be removed without triggering termination compensation.

Tailoring the allocation of cash-flow rights as studied in the theoretical literature since Holmström (1979) is, in practice, significantly less common than the customization of ownership and control rights. Non-linear payoffs such as preferred dividends, preferred liquidation rights, and stock options are four times less frequent than the creation of a board and twelve times less frequent than the inclusion of non-compete provisions. Therefore, for the broad universe of new firms, aligning incentives through cash-flow tailoring is not the primary contracting margin at incorporation.

Third, we find that the likelihood of tailoring the bylaws increases with proxies for asymmetric information, as well as with shareholder heterogeneity. This is consistent with the use of tailored contracting to mitigate agency frictions (as emphasized in financial contracting theory) and to mediate conflicts of interest or opinion among shareholders (Burkart, Miglietta and Ostergaard,

2023). The likelihood of tailoring also increases with entrepreneur sophistication, consistent with the notion that optimizing contracts requires legal and financial literacy. This result further suggests that complex contracting does not reflect exploitation of unsophisticated entrepreneurs by savvy investors.

In the second part of the paper, we turn to the more challenging issue of causality. What is the effect of the ability to optimize contractual arrangements in the bylaws on entrepreneurial success? Identifying this effect is challenging because the decision to tailor bylaws is endogenous: firms that choose to do so may differ systematically from those that do not. The ideal experiment would compare firms with and without access to flexible contracting, holding all else equal.

We exploit a reform adopted in 2008 that approximates this ideal experiment. The reform reduced the costs for new firms to adopt a legal form that allows entrepreneurs to tailor their bylaws, while leaving unchanged the costs associated with a more restrictive legal form characterized by standardized bylaws. Combined with rich administrative panel data from tax filings, including detailed balance sheets and income statements for the universe of French firms, this setting allows us to study how lowering the cost of tailoring contracts affects firm performance.

French private firms can choose between two main corporate legal forms that differ in the contractual flexibility they permit. Under the *restricted bylaws* legal form (*SARL*), deviations from standardized bylaws are tightly constrained. Firms cannot issue multiple classes of shares, ruling out deviations from one share-one vote, non-linear payoffs, and other tailored preferential rights. Restrictions on share transfers, such as approval thresholds and lockup periods, can be adjusted only within narrow legal limits. Governance structures are also constrained: firms may appoint one or more managing directors and must hold a general meeting of shareholders, but cannot establish boards or other intermediate governance bodies. In contrast, the *flexible bylaws* legal form (*SAS*) imposes no such restrictions on contractual arrangements and governance structures.[3]

Until 2008, the flexible bylaws legal form was subject to additional regulatory requirements compared to the restricted form. These included a minimum equity requirement and external auditing obligations. The 2008 reform eliminated these additional requirements and aligned the regulatory costs of both legal forms.

The reform led to a substantial increase in the adoption of flexible bylaws. The share of new firms choosing the flexible bylaws legal form rose from 3% prior to the reform to 19% four years later. The sharp increase in take-up has two implications. First, the adoption of flexible bylaws was previously constrained by the higher regulatory costs. Second, the option to implement more sophisticated contractual arrangements between shareholders is valuable for a sizeable fraction of

[3]The restricted bylaws legal form corresponds to the *SARL*, while the flexible bylaws legal form corresponds to the *SAS*. Other legal forms exist but are excluded from the analysis because they are intended either for sole proprietorships (*EI*) or for large public firms (*SA*).

new firms. Consistent with the pre-reform costs constraining valuable tailoring of bylaws, we find that the fraction of new firms adding tailored provisions in their bylaws increases following the reform.

To identify the effect of the reform, we use the fact that contracting flexibility between shareholders is more valuable for firms with greater equity financing dependence. We operationalize this idea by constructing a measure of equity dependence at the industry level, defined as the average equity-to-asset ratio prior to the event window (2000–2003).

While our identification strategy exploits variation across industries, we complement it in several ways to ensure that unobserved industry-specific shocks are unlikely to confound our estimates. First, our preferred specification includes two-digit industry and county fixed effects, each interacted with year fixed effects, so identification relies on comparisons among firms operating in similar industries and geographic locations. Second, we verify that firms in more and less exposed industries followed parallel trends in performance prior to the reform, with divergence occurring only afterward. Third, our industry-level measure of exposure to the reform is uncorrelated with a wide range of pre-reform industry characteristics. Fourth, we exploit a plausible placebo group: while newly created firms substantially adjust their choice of legal form in response to the reform, incumbent firms, having already incorporated, tend to stick to their existing legal form. This asymmetry enables a placebo test: if our exposure measure were capturing unobserved industry shocks rather than the value of contractual flexibility, we would expect incumbent firms in more exposed industries to exhibit differential post-reform performance. We find no such pattern: incumbent firms perform similarly across more and less exposed industries after the reform. This supports the interpretation that our measure of exposure captures heterogeneous treatment intensity, rather than correlated industry shocks.

We begin by confirming that, following the reform, firms in more equity-dependent industries are more likely to incorporate under the flexible bylaws legal form and to tailor their bylaws.

Importantly, the increased take-up of flexible bylaws is not accompanied by a change in the number of firms created. After the reform, firm entry remains stable across more and less exposed industries. This is consistent with the reform's design: it reduced the costs of flexible bylaws without altering the costs of restricted bylaws, which remained low. As a result, the minimum cost of starting a business was unaffected, and composition effects are limited. This allows us to interpret the reform's impact on average firm performance as the effect of enabling more complex contracting between entrepreneurs and shareholders.

We show that the increased take-up of flexible bylaws translates into real effects, as firms in more exposed industries accumulate more capital three years after creation relative to those in less exposed industries, with positive effects persisting at longer horizons. Consistent with labor

requiring upfront financing rather than functioning purely as a variable cost, entrepreneurs in more exposed industries also hire a larger quality-adjusted workforce, as reflected in higher firm-level wage bills.[4] Finally, we find that the positive effects on capital and labor inputs translate into higher firm revenues.

Why does expanding contractual flexibility foster firm growth? We find that firms more exposed to the reform raise more equity at creation. This supports our hypothesis: more complete financial arrangements help entrepreneurs convince shareholders to invest more in their firms. We also study the effect of the reform on the likelihood that firms reach the upper quantiles of the capital investment distribution. We find that firms created in more exposed industries are more likely to appear in the right tail, with no effect on the left-tail, consistent with the idea that flexible contracting facilitates growth-oriented entrepreneurship.

Related literature. This paper connects to five main research streams. First, we contribute to work examining the economic and financial implications of firms' legal forms, including tax differences,[5] incorporation versus sole proprietorship, (e.g., Levine and Rubinstein, 2016; Astebro and Tag, 2017; Bellon, Cookson, Gilje and Heimer, 2021), and limited liability (Akey and Appel, 2021). We extend this literature by focusing on a different source of heterogeneity between legal forms—the possibility to tailor contracting between entrepreneurs and shareholders—and by using policy-induced variation in legal form adoption to identify causal effects on entrepreneurial success.

Second, we contribute to research on contractual provisions in equity agreements. While Kaplan and Strömberg (2003) show VCs' use of complex contracts and Ewens, Gorbenko and Korteweg (2022) models their impact on startup outcomes, empirical evidence remains limited. Lerner and Schoar (2005) show how private equity contracts vary with national legal enforcement strength, while Burkart, Miglietta and Ostergaard (2023) examine control rights allocation in a historical setting in which boards are not mandated by law. We advance this literature by assembling a novel data set of company bylaws for a broader universe of firms, including private, non-VC-backed firms, providing the first descriptive and correlational evidence on financial contracting at the startup stage for an unrestricted sample of new firms, and establishing causal links between contractual flexibility and entrepreneurial success.

Our methodological contribution involves developing tools to transform firm bylaws into analyzable data, complementing recent work on contractual innovation in credit and service agreements

[4] E.g., among many others: Hombert and Matray (2017); Bai, Carvalho and Phillips (2018); Caggese, Cunat and Metzger (2019); Benmelech, Frydman and Papanikolaou (2019); Fonseca and Doornik (2022); Baghai, Silva, Thell and Vig (2021).

[5] This literature has mostly focused on the difference between C-corp and S-corp in the US (Goolsbee, 2004; Elschner, 2013; Yagan, 2015; Chen, Qi and Schlagenhauf, 2018; Giroud and Rauh, 2018; Tazhitdinova, 2020; Bilicka and Raei, 2023; Allen, Allen, Raghavan and Solomon, 2023) although recent papers have studied other countries such as Greece (Bilicka, Guceri and Koumanakos, 2022) and France (Matray, 2023).

(e.g., Ganglmair and Wardlaw, 2017; D'Acunto, Xie and Yao, 2022; Murfin and Sun, 2024).[6]

Third, our work relates to the literature showing that entry regulation inhibits entrepreneurship and that policies that simplify procedures to create a business are effective in promoting entrepreneurship.[7] For instance, Portugal's 2005 *Empresa na Hora* reform analyzed by Branstetter, Lima, Taylor and Venâncio (2014) involved developing "standardized pre-approved articles of association" (p.813).

Our contribution to this literature is to show that retaining the option to write complex contracts between entrepreneurs and shareholders enhances entrepreneurial success, especially at the top of the distribution. Therefore, we highlight the benefits of reducing the costs of setting up complex firms, whereas the earlier literature emphasized the benefits of reducing the costs of setting up simple firms. Another implication of our work is that policies aiming at introducing standardized bylaws and contracts should not inadvertently restrict the contract space by suppressing the option for firms to write complex contracts when needed.

Fourth, we contribute to the literature that studies the link between private firms' ownership structure and financing conditions. Private firms rely predominantly on debt rather than equity, reflecting the higher cost of private equity due to information asymmetry and founders' desire to maintain control (Brav, 2009; Robb and Robinson, 2014). Despite facing greater financing frictions, private firms hold less cash than public firms, a pattern attributed to lower agency costs when ownership and control align (Gao, Harford and Li, 2013). Theoretical and empirical work shows that ownership structure in closely held firms (i.e., how control rights and cash flow rights are allocated among shareholders) is tied to firm behavior and performance (Bennedsen and Wolfenzon, 2000; Michaely and Roberts, 2012; Bena and Xu, 2017). These findings establish that governance arrangements matter for private firm financing capacity, but the literature lacks causal evidence on whether reducing contracting costs can relax financing constraints.[8] We provide such evidence by exploiting a reform that lowered the cost of adopting flexible bylaws, showing that contractual flexibility enables equity financing and improves entrepreneurial outcomes. Relatedly, we contribute to the literature that study more broadly the importance of financing on entrepreneurial success (Kerr and Nanda, 2010; Adelino, Schoar and Severino, 2015; Hombert and Matray, 2017; Hombert, Schoar, Sraer and Thesmar, 2020; Adelino, Ma and Robinson, 2017; Kerr, Kerr and Nanda, 2022;

[6] Related to the literature on covenants in credit agreements, Matvos (2013) estimates the surplus created by the ability to include and tailor covenants in debt contracts.

[7] E.g., Djankov, La Porta, Lopez-de Silanes and Shleifer (2002), Branstetter, Lima, Taylor and Venâncio (2014), Amici, Giacomelli, Manaresi and Tonello (2016), Gregg (2020), and Guzman (2020).

[8] A broader literature has studied the performance of listed family firms (Anderson and Reeb, 2003; Villalonga and Amit, 2006; Sraer and Thesmar, 2007; Villalonga and Amit, 2009; Pérez-González, 2006; Burkart, Panunzi and Shleifer, 2003). Cross-country evidence further shows that inheritance laws, internal capital markets, and pyramidal structures shape family firm investment and resilience (Ellul, Pagano and Panunzi, 2010; Masulis, Pham and Zein, 2011; Lins, Volpin and Wagner, 2013). This literature focuses on listed firms where family control persists; we study private firms at founding, where the decision to raise outside equity is first-order.

Jensen, Leth-Petersen and Nanda, 2022, e.g.,).

Finally, we relate to the law and finance literature on ownership structure and control, which shows that legal origin and investor protection shape corporate ownership, with weaker protection associated with concentrated ownership, pyramidal structures, and family control (La Porta, Lopez-de Silanes, Shleifer and Vishny, 1998; La Porta, Lopez-de Silanes and Shleifer, 1999; Claessens, Djankov and Lang, 2000; Claessens, Djankov, Fan and Lang, 2002; Shleifer and Vishny, 1986). While this literature focuses on investor protection embedded in corporate law, our findings show that firms already depart from default legal provisions at the startup stage by tailoring their bylaws, implying that investor protection depends not only on statutory rules but also on the scope for private contracting.

2 Institutional Background

Company bylaws. The central object of this paper is French companies' *statuts,* i.e., the firm's constitutional document filed with the commercial registry at incorporation and upon amendment. Throughout the paper, we use the term "bylaws" as shorthand for the French *statuts.*[9]. These company bylaws govern the contractual arrangements between shareholders regarding ownership, control, and cash-flow rights. While corporate law provides default provisions for each these rights, firm founders may modify these default provisions and include additional ones in the firm's bylaws, i.e., they may *tailor* the bylaws. However, the scope for tailoring the bylaws may be restricted depending on the company's legal form.

Corporate legal forms. In France, private firms typically incorporate under one of two main legal corporate forms, which differ in the range of provisions that can be included in the firm's bylaws. The *SARL* form (*Société à Responsabilité Limitée*) restricts the set of provisions that may be included in the firm's bylaws. By contrast, the *SAS* form (*Société par Actions Simplifiée*) imposes virtually no restrictions. Both legal forms grant limited liability to all shareholders, do not impose a minimum number of shareholders, and are subject to entity-level corporate taxation, similar to U.S. C-corporations.

The *SAS* was introduced in 1994, as a flexible corporate form specifically designed to increase shareholders' contractual freedom. Legal scholars described the new *SAS* form as "an island of contractual freedom in a sea of regulation" (Guyon, 1994). While initially restricted to a relatively narrow set of companies (joint ventures and shared subsidiaries), access to the *SAS* was substantially broadened in 1999, turning it into a general-purpose corporate form available to a wide range

[9]In the US context, the documents comparable to the French *statuts* are the corporate charter (articles/certificate of incorporation for corporations; articles of organization/certificate of formation for LLCs), whereas US bylaws generally refer to internal governance documents that are not publicly filed

of firms. A 2008 reform further reduced the costs of choosing the SAS (see Section 5).

For ease of reference, we refer to the *SARL* as the "restricted form" and the *SAS* as the "flexible form."

3 Data

3.1 Sources

The key novel data set introduced in this paper is the company bylaws for the near-universe of firms incorporated in France between 2004 and 2012. We choose this period because it provides a balanced window of four years before and after the 2008 reform. We complement this with rich administrative and survey data shared by the French public administration with researchers. We describe each data source in turn.

Company bylaws. Every firm incorporated in France is required to file its bylaws with the local commercial court.[10] Firms must submit their bylaws upon incorporation, as well as any subsequent amendments—such as changes in company name, share capital, registered office, or corporate purpose. In addition, firms are required to file other key documents, including annual financial statements and excerpts from the minutes of the general shareholder meetings when decisions involve changes to the company's legal status or profit allocation.

These legal documents, filed with the registries of commercial courts, are publicly available and accessible through an API provided by the French government (https://www.inpi.fr/en/). The API allows us to request all filings over a chosen time period for a given firm identified by its SIREN number—a unique legal identifier used in tax filings, social security records, and survey data. The files are scanned documents in PDF format, which we convert to plain text files.

VC backing. To identify VC-backed firms, we extract shareholder names from the bylaws. We match corporate shareholders to their SIREN numbers using an API from the French statistical office that performs fuzzy matching on company names. This allows us to retrieve the five-digit industry classification of corporate shareholders. We classify a corporate shareholder as a VC investor if one of the following conditions is met: (1) it belongs to sectors related to VC financing;[11] or (2) its name includes keywords associated with VC, such as "FIP," "FCPR," or "FCPI" (French legal structures related to venture capital financing), or "incubateur" (incubator).

[10] Exemptions to the filing requirement were introduced in 2015, after the end of our sample period.

[11] The sectors are: *Activities of holding companies* (64.20Z), *Investment funds and similar financial entities* (64.30Z), *Other lending activities* (64.92Z), *Securities and commodities brokerage* (66.12Z), and *Fund management* (66.30Z). These correspond to the most common five-digit sectors of VC investors present in Crunchbase France.

We complement the list of VC-backed firms using Crunchbase. Using an extended list of shareholders' sectors that we classify as venture capital investors implies that we may incorrectly classify some non-VC-backed firms as VC-backed, but the opposite is unlikely. Therefore, when we analyze the subsample of firms classified as non-VC-backed, we are confident these firms are actually non-VC-backed.

Business registry. The business registry includes all French firms, along with their SIREN numbers, dates of incorporation, legal forms, and industry classifications.

Corporate tax filings. We retrieve firm-level accounting information from corporate tax records (dataset FICUS-FARE). These data contain income statement and balance sheet information collected by the French Treasury for the universe of firms operating in the French economy. Because the information is used to assess tax liabilities and is subject to audit by the tax authority, with substantial penalties for misreporting, the data are of high quality and reliability.

Industry classifications in the tax files follow the Nomenclature d'Activités Française (NAF), which maps one-to-one to the European NACE classification. We use version Rev. 2, 2008 of NAF, as it remains consistent over our sample period.[12]

Entrepreneur survey. We obtain qualitative information on entrepreneurs and the firms they create from the SINE survey, a large-scale survey conducted by the French Statistical Office every four years. We use the 2006 and 2010 waves, which together cover approximately 17% of new firms created in those years. We retrieve information on entrepreneurs' backgrounds (education and prior entrepreneurial experience) and their stated objectives at the time of firm creation.

3.2 Sample

We start from the business registry containing the exhaustive list of firms incorporated between 2004 and 2012. We keep firms created under one of the two most common legal forms for French companies: *SARL* and *SAS* (see Section 2). We exclude sole proprietorships (*EI*), which do not have bylaws; partnerships (*SNC*); joint-stock companies (*SA*), which are the main legal form for listed companies; and legal forms primarily used for noncommercial activities.

We exclude firms that do not appear in the tax files in the year following incorporation, which happens if they cease activities during their first year. We also exclude firms that start with 50 or more employees (0.2% of new firms), as these are likely to be subsidiaries of large corporations and may operate more like mature firms than new firms. We exclude firms in agriculture and extraction

[12] NAF Rev. 2, 2008 was introduced in 2008. The French Statistical Office retrospectively applied it to earlier years, back to 2003.

(NAF codes 1–999), financial and real estate activities (6400–6899), headquarter services (7010–7019), utilities (3500–3999), and sectors related to social services and public administration (8200–9999), as well as firms reporting missing or negative total assets or revenues. The final sample contains 892,397 firms founded between 2004 and 2012. Table 1 presents summary statistics on the pre-treatment period (2004-2007). Three years after creation, the average firm in the sample has €167,000 of total assets, including €54,000 of (tangible and intangible) capital, and generates €231,000 of revenues.

Table 1: Summary Statistics Three Years After Creation

	Mean	Std. Dev.	p25	Median	p75
Capital	54.43	81.53	0.44	17.07	71.97
Wage bill	68.39	91.01	0.00	34.10	94.00
Revenues	231.34	293.80	26.55	128.00	306.84
Equity	7.41	8.64	1.00	7.50	8.00
Assets	166.91	211.11	19.99	91.00	226.00
Survival	0.82	0.39	1.00	1.00	1.00
Wage bill/revenues	0.30	0.22	0.14	0.28	0.43
Revenues/Assets	1.97	1.81	0.93	1.53	2.39
Capex	0.02	0.21	0.00	0.00	0.03
Net trade credit	-0.01	0.23	-0.09	0.00	0.07
Observations	332,457				

Notes: This table presents summary statistics for the main sample in the pre-treatment period (2004–2007). All variables are measured three years after firm creation. Assets, revenues, capital, wage bill, and equity are expressed in thousands of euros. Capital is defined as the sum of tangible assets (property, plant, and equipment) and intangible assets. Equity corresponds to paid-in equity, defined as the sum of share capital and share issuance premiums. Survival equals one if the firm generates positive revenues three years after creation and zero otherwise. Capex is capital at $t+3$ minus capital at $t+2$ scaled by assets at $t+3$. Net trade credit is defined as supplier credit minus customer credit, scaled by firm revenues. Appendix A gives more detail on the construction of the variables.

3.3 NLP of Bylaws

Using the government API, we request the bylaws and their amendments during the first three years after creation for our main sample of firms. We retrieve at least one document for 93% of firms.

We detect contractual provisions in the bylaws based on the presence of specific sequences of words, complemented by extensive human validation. We find this approach yields fewer coding errors than using large language models (LLMs), possibly because understanding the content of a provision often requires subtle, context-dependent knowledge of French corporate law. We use LLMs only for simpler tasks, such as extracting the list of shareholders and their geographic localization from the bylaws.

Our approach may underestimate, but is unlikely to overestimate, the occurrence of contractual provisions for three reasons. First, we search for provisions identified by corporate law practitioners as particularly important or commonly used, potentially missing less common or idiosyncratic

provisions.

Second, we detect specific contractual provisions based on specific word sequences. We develop the list of these word sequences by reading a large number of bylaws and identifying the common ways in which each contractual provision is worded. We systematically inspect random subsamples of the output to check that there are no false positives or false negatives. For provisions with a low frequency of occurrence, random subsample validation ensures a low rate of false positives, but not necessarily a low rate of false negatives.

Third, shareholders may enter into shareholders' agreements containing additional provisions. Unlike bylaws, these agreements need not be disclosed, but they can only supplement the bylaws, not override them.

We describe the methodologies used to process the bylaws in greater detail in Appendix B. The implementation of this approach requires two sample restrictions. First, because contractual provisions are detected using the article structure of the bylaws, the analysis is limited to documents that can be successfully parsed into articles. Second, analyses relying on shareholding information further restrict the sample to documents in which the shareholder base is complete and the reconstructed ownership structure is internally consistent.

4 New Facts From New Firms' Bylaws

4.1 Tailored Provisions

Bylaws govern the contractual arrangements among shareholders—including between the entrepreneur and outside investors—across three main areas: (1) ownership rights (i.e., rules governing the ownership, transfer, and issuance of shares); (2) control rights; and (3) cash-flow rights.

National corporate law provides default provisions in each of these areas for each legal form. We define a firm as having tailored provisions if it deviates from the default provisions of the restricted legal form (*SARL*) by including additional provisions in its bylaws or modifying the default ones, which may require to opt for the flexible legal form (*SAS*). For instance, by default, firms with the restricted legal form do not have a board. Creating boards requires the flexible legal form and their functioning must be provided for in the bylaws.

Table 2 lists the tailored provisions along with their frequency in our sample, which covers the near-universe of firms incorporated between 2004 and 2012. When multiple versions of the bylaws are available for a given firm due to amendments made during the first three years after incorporation, we collapse the data at the firm level and code a provision as present if it appears in any version of the bylaws.

Table 2 shows that bylaws tailoring is common among newly created firms. Overall, 27.4% of

firms deviate from default legal provisions, and the share remains nearly identical among non-VC-backed firms (27.1%).[13] Contractual customization is therefore not confined to VC-backed startups but characterizes a broad set of new firms.

The table also reveals a clear ordering across types of provisions. Tailoring is concentrated in ownership rights (26.8% of firms), occurs less frequently for control rights (5.7%), and is relatively uncommon for cash-flow rights (0.3%). This pattern suggests that, at creation, firms primarily use contractual flexibility to protect shareholders' investments and their ability to exert influence over the firm. In what follows, we describe in greater detail the different ways through which firms tailor their bylaws.

4.1.1 Ownership Rights

26.8% of new firms deviate from the default provisions by adding or modifying provisions governing ownership, transfer, and issuance of shares, which we refer to as ownership rights. While the law and finance literature emphasizes investor protection embedded in corporate law, this widespread customization shows that investor protection is also shaped by firms' use of private contracting to supplement default rules. Overall, firms customize ownership rights to control ownership composition by protecting against dilution, screening out misaligned shareholders, and retaining key investors, while balancing restrictions on transfers with the need to preserve share liquidity.

Among the most common customized ownership rights are anti-dilution provisions. While the issuance of new shares always requires shareholder approval, unanimity is typically not required. To further protect existing shareholders against dilution, additional provisions are often included. The most frequent is a preemptive rights clause, which gives existing shareholders the priority to purchase newly issued shares in order to maintain their ownership stake. We find that 20.7% of firms include such a provision.[14]

Share transfer restrictions are also widespread. Nearly all firms require existing shareholders to approve the sale of shares to new parties, although this requirement is sometimes waived for transfers to family members. Only 0.5% of firms allow unrestricted transfers. As with new share issuances, approval for share transfers generally does not require unanimity. To provide additional protection against the arrival of misaligned investors, 5.0% of firms grant existing shareholders priority rights to acquire the shares of selling shareholders.

Firms also include other provisions to mitigate the risk of diverging interests between sharehold-

[13] Removing VC-backed firms has a negligible impact on the fraction of firms tailoring their bylaws because only 1.7% of firms are VC-backed (using our extensive definition of VC-backed; see Section 3.1).

[14] French law does not grant default preemptive rights in the restricted legal form; these rights must be created in the bylaws. Firms may also opt for the flexible legal form, which grants default preemptive rights, and flexible bylaws firms may further tailor preemptive rights in their bylaws. Since we define tailored provisions as provisions deviating from the restricted form's default provisions, we classify the inclusion of preemptive rights in the bylaws as a tailored provision.

Table 2: Share of Firms With Tailored Bylaws (%)

Sample:	All firms	Non-VC-backed
Tailored bylaws	27.37	27.06
Tailored ownership rights	26.81	26.52
Priority in share issuance	20.75	20.49
Unrestricted share transfers	0.46	0.44
Priority in share transfer	4.97	4.83
Non-compete	3.26	3.23
Shareholder exclusion	5.83	5.70
Class-specific ownership rights	0.13	0.11
Lock-up period	0.78	0.75
Tag-along	0.80	0.75
Drag-along	0.15	0.14
Tailored control rights	5.69	5.48
Governance body	1.20	1.12
CEO can appoint executive officers	3.92	3.78
Ad nutum CEO termination	1.43	1.37
Suspension of voting rights	1.68	1.62
Class-specific control rights	0.12	0.11
Tailored cash-flow rights	0.28	0.24
Preferred dividend rights	0.08	0.07
Stock options	0.13	0.10
Preferred liquidation rights	0.14	0.13
Class-specific cash-out rights	0.01	0.01
VC backed	1.76	0.00
Observations	634,070	622,896

The table reports the share of firms with various bylaws provisions for the full population of firms (column 1) and for non-VC-backed firms (column 2). A firm is said to have "tailored bylaws" if its bylaws deviate from the default provisions of the restricted legal form during its first three years of existence. Similarly, a firm is said to have "tailored ownership rights" (respectively, control rights or cash-flow rights) if its bylaws deviate from the default provisions related to ownership, control, or cash-flow rights.

ers. 3.3% of firms include non-compete provisions, which prevent shareholders from either owning or working for another firm in the same industry. These provisions are usually not restricted to shareholders holding an executive position in the firm, consistent with a motive of aligning interests between investors. 5.8% of firms include exclusion provisions, which provide the circumstances under which a shareholder may be removed from the company and forced to sell their shares.[15]

0.8% of firms include lock-up provisions in the bylaws, which restrict the sale of shares for a specified period, to protect against the premature departure of key shareholders (e.g., founders) and the associated hold-up problem (Hart and Moore, 1994). The average lock-up period is four

[15] Another layer of ownership right tailoring arises when firms issue multiple share classes, which have different rights and restrictions on share ownership and transfer (0.1% of firms).

years.

In contrast to transfer restrictions, tag-along and drag-along provisions are designed to increase share liquidity in the event of a sale. Tag-along clauses protect minority shareholders by allowing them to sell their shares on the same terms as majority shareholders when the latter sell to a third party; 0.8% of firms include such a provision. Drag-along clauses, present in 0.2% of firms, allow majority shareholders to compel minority shareholders to sell their shares under the same terms, mitigating potential hold-up problems during acquisition events.

4.1.2 Control Rights

We find that 5.7% of firms tailor control rights and governance arrangements relative to the default, modifying the extent of internal monitoring and the delegation of key decisions. Overall, these modifications reflect a tension between delegating authority to management and preserving mechanisms that allow shareholders to monitor and discipline managerial decisions.

On the one hand, firms empower CEOs by extending delegation within the organization. In 3.9% of firms, the bylaws grant the CEO authority to appoint executive officers who are legally empowered to represent and bind the company in dealings with third parties. On the other hand, firms introduce mechanisms that allow shareholders to oversee and discipline management. 1.2% of firms create boards or other intermediary governance bodies between shareholders and the CEO, even though such bodies are optional for private firms in France.[16] Firms also restrict managerial entrenchment by modifying dismissal rules: while removal normally requires just cause, 1.4% of firms adopt an *ad nutum* termination provision allowing shareholders or the board to dismiss the CEO at any time, without cause, notice, or severance, and generally without entitlement to wrongful termination compensation.

Firms also tailor their bylaws to anticipate potential conflicts among shareholders. In 1.7% of firms, the bylaws include provisions for suspending the voting rights of certain shareholders under specific conditions. These provisions share the same underlying motivation as shareholder exclusion clauses: limiting the influence of potentially misaligned shareholders. A common trigger is a change in ownership of a shareholder that is itself a corporate entity—for example, if the new controlling owners are competitors, the firm may face strategic risks. To address such concerns, the bylaws may authorize the suspension of that shareholder's voting rights.

Deviations from the one-share–one-vote principle are commonly viewed as creating scope for the expropriation of minority shareholders (Shleifer and Vishny, 1997). We find that such arrangements are rare among newly created firms, with only 0.1% of firms issuing multiple classes of shares granting differentiated voting rights or appointment rights over board members or the CEO.

[16] A board of directors is mandatory only for firms incorporated as *SA*, the legal form required for publicly listed firms. These firms are excluded from our sample.

4.1.3 Cash-Flow Rights

In contrast to ownership and control provisions, tailoring of cash-flow rights is relatively uncommon. Financial contracting theory emphasizes that the allocation of cash-flow rights should be tailored to mitigate informational frictions between entrepreneurs and outside investors (Holmström, 1979). The optimal contracting solution often departs from strictly proportional allocation of cash flow across all shareholders and states of the world. Instead, theory predicts contracts that assign a larger share of value to entrepreneurs in good states and to outside investors in bad states.

In practice, however, newly created firms rarely depart from the default proportional allocation of cash flows. Only 0.3% of firms introduce non-linear cash-flow rights, a frequency much lower than that observed for ownership or control rights. This pattern suggests that, for the broad universe of new firms, aligning incentives through cash-flow design is not the primary contracting margin at incorporation.

When firms tailor cash-flow rights, they rely on a specific set of instruments reported in the bylaws that differ in the extent to which they provide downside protection or upside exposure. Several provisions primarily protect investors on the downside. Preferred liquidation rights, used by 0.1% of firms, entitle shareholders to recover their initial investment, or a multiple of it, before common shareholders receive any payout. Similarly, 0.1% of firms issue preferred shares granting priority dividends paid before common dividends. In some cases, firms also adopt cumulative preferred shares, under which unpaid dividends accumulate over time and become payable upon liquidation.

Other instruments mainly provide exposure to upside outcomes. 0.1% of firms grant stock options, allowing holders to benefit disproportionately from favorable firm performance. Priority rights over cash-out proceeds from share sales or acquisitions, which appear in only 0.01% of firms, combine both features, offering priority repayment while still allowing participation in upside gains.

4.2 Correlations Between Tailored Bylaws and Firm Characteristics

Which founder and firm characteristics explain whether firms tailor their bylaws? If tailoring reflects efficient optimization, it should be more prevalent when (1) the need for contracting arising from asymmetric information and heterogeneous shareholders with divergent interests is higher, and (2) entrepreneurs have the legal and financial literacy to optimize contracting.

An alternative hypothesis is that entrepreneurs tailor their bylaws for reasons that do not enhance contracting efficiency. They could either be overconfident in their capacity to contract and include clauses they do not really master, or be taken advantage of by savvy investors. Under this hypothesis, factors such as asymmetric information, shareholder heterogeneity, and entrepreneur sophistication may not necessarily explain bylaws tailoring. If anything, this hypothesis predicts

that entrepreneur sophistication negatively correlates with the presence of tailored bylaws.

We test these predictions by analyzing how tailoring depends on proxies for asymmetric information, shareholder heterogeneity, and entrepreneur sophistication.

4.2.1 Asymmetric Information and Heterogeneous Shareholders

We consider several proxies for asymmetric information and shareholder heterogeneity: (i) Fraction of distant shareholders (located outside the firm's headquarter county), capturing the idea that distant shareholders are less informed and less able to monitor; (ii) External CEO (a CEO who is not a shareholder), implying more severe moral hazard concerns; (iii) Number of shareholders, since a larger shareholder base increases coordination problems. (iv) Geographical dispersion of shareholders, measured as (Number of distinct counties of residence -1)/(Number of shareholders -1), which proxies for shareholder heterogeneity; and (v) Non-family ownership (one minus the largest combined ownership share held by shareholders with the same last name), reflecting the assumption that family members have more aligned interests. We also use measures of firm complexity as additional proxies for asymmetric information: (vi) Innovative sector (an indicator for operating in an innovative sector per the Census Bureau's definition); and (vii) Idiosyncratic sales volatility, measured as the cross-sectional standard deviation of firm sales growth within the industry, averaged over time.

We regress the presence of tailored provisions on these proxies. Because contractual provisions and firm characteristics may change over time (e.g., when a firm updates its bylaws following a change in ownership), we run the analysis at the document level, where the first document for each firm corresponds to the initial bylaws and subsequent documents, if any, are updated bylaws. This ensures that all variables are measured at the same point in time. We weight regressions by the inverse of the number of documents per firm, so that each firm contributes equally to the estimation, and cluster standard errors at the firm level. All regressions include creation-year fixed effects.

We report the results in Table 3. All the proxies are coded such that a higher value is associated with a stronger motive to tailor contracts. We find that the propensity to tailor the bylaws increases with proxies for asymmetric information, shareholder heterogeneity, and firm complexity, in both univariate and multivariate regressions. The economic magnitudes are substantial. For instance, one additional shareholder—which corresponds approximately to one standard deviation in the number of shareholders—is associated with a 4.3 percentage point increase in the likelihood of tailoring the bylaws (column 8), representing a 18.3% increase relative to the mean. Likewise, moving from a 80% to a 20% family ownership block is associated with a 5.6 p.p. increase in the

Table 3: Tailored Bylaws Asymmetric Information, and Shareholder Heterogeneity

Dependent variable:	Tailored bylaws							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
% Distant shareholders	.052***							.012***
	(.0022)							(.0025)
External CEO		.039***						.00049
		(.0036)						(.004)
Number of shareholders			.055***					.043***
			(.00079)					(.0009)
Shareholder geog. dispersion				.062***				.00068
				(.0027)				(.003)
Non-family ownership					.15***			.094***
					(.0027)			(.0033)
Innovative sector						.039***		.0084**
						(.0032)		(.0034)
Idiosyncratic volatility							.18***	.15***
							(.0084)	(.009)
Fixed Effects								
Year of creation	✓	✓	✓	✓	✓	✓	✓	✓
Observations	415,440	415,440	415,440	415,440	415,440	415,440	415,440	415,440

The table reports WLS estimates for firms created between 2004 and 2012. Each observation corresponds to one version of a firm's bylaws. Observations are weighted by the inverse of the number of bylaws per firm so that each firm receives equal weight. The dependent variable is a dummy equal to one if the bylaws include tailored provisions. All regressions include creation-year fixed effects. Standard errors are clustered at the firm level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

likelihood of tailored bylaws, representing a 23.6% increase relative to the mean.[17]

4.2.2 Entrepreneur Sophistication

To measure entrepreneurs' sophistication, we use data from a survey of French entrepreneurs conducted by the French Census Bureau. The survey covers approximately one-third of all entrepreneurs who start a business in the first semester of every fourth year, i.e., 2006 and 2010 during our sample period. The survey includes the official firm identifier (SIREN number), which allows us to link the survey data to our other data sources.

From the survey data, we use several variables that proxy for the entrepreneur's sophistication: (i) College is a dummy equal to one if the entrepreneur graduated from any university or post-secondary institution. (ii) Elite college is a dummy equal to one if the entrepreneur graduated from one of the French elite schools, which are a subset of the university system. (iii) Age is the entrepreneur's age (in logarithm). (iv) Serial entrepreneur is a dummy equal to one if the entrepreneur had already started one or more firms prior to the current venture.

The results in Table 4 show that the likelihood of tailoring the bylaws increases with all proxies

[17]The rate of bylaws tailoring in the sample used for Table 3 is 0.24, so the effect of moving from a 80% to a 20% family ownership block is $(0.1\times(0.8-0.2))/0.24 = 23.6\%$.

Table 4: Tailored Bylaws and Entrepreneurs' Characteristics

Dependent variable:	Tailored bylaws				
	(1)	(2)	(3)	(4)	(5)
Education					
College	.056***				.044***
	(.0075)				(.0079)
Elite college		.11***			.078***
		(.016)			(.017)
Age			.065***		.054***
			(.014)		(.015)
Serial entrepreneur				.031***	.022***
				(.0078)	(.008)
Fixed Effects					
Year of creation	✓	✓	✓	✓	✓
Observations	15,580	15,580	15,580	15,580	15,580

The table reports OLS estimates for firms participating in the 2006 or 2010 SINE surveys. The dependent variable is a dummy equal to one if the bylaws include tailored provisions. All regressions include creation-year fixed effects. Standard errors are clustered at the firm level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

of entrepreneur sophistication.

Overall, the correlational evidence between the tailoring of bylaws and proxies of asymmetric information, shareholder heterogeneity, and entrepreneur sophistication is consistent with an efficient use of tailored contracts rather than with exploitation of unsophisticated entrepreneurs. Of course, such correlational evidence is far from sufficient to draw conclusions regarding the efficient use and value of contractual flexibility. The next section turns to the more challenging task of evaluating the causal impact of contractual flexibility at the startup stage on firm performance.

5 The Reform

5.1 Flexible Bylaws versus Restricted Bylaws

As described in Section 2, French new firms incorporate under one of two main legal forms. While the *SAS* (hereafter, flexible form) imposes virtually no restrictions on contractual flexibility in the bylaws, the *SARL* (hereafter, restricted form) restricts the set of contractual provisions that can be included in the bylaws.

The main restrictions imposed by the restricted form are the following:

- Restricted bylaws firms are limited to issuing a single class of shares and cannot issue stock options, which rules out non-linear payoffs, deviations from one-share-one-vote, and other forms of preferential ownership, control, and cash flow rights. Flexible bylaws firms can issue multiple share classes and tailor the allocation of these rights.

- In restricted bylaws firms, share transfers must be approved by a majority of shareholders. While the required majority can be tailored to some extent, it must be no less than two-thirds and cannot require unanimity. In flexible bylaws firms, the bylaws determine whether share transfers are unrestricted or subject to shareholder approval. If approval is required, both the approval threshold and its scope can be flexibly tailored.

- Restricted bylaws firms cannot establish boards or other intermediate governance bodies. Their governance structure is limited to one or more managing directors and the shareholders' general meeting. By contrast, flexible bylaws firms face no such constraints: they may create one or more boards, whose roles and composition can be freely defined in the bylaws, along with executive directors whose powers are also specified contractually.

- In restricted bylaws firms, lockup periods that restrict the sale of shares must be justified by a serious and legitimate motive, and must be limited in duration to a reasonable period. In flexible bylaws firms, lockup periods require no justification and may last for up to 10 years.

Therefore, the flexible legal form is well suited for firms that are looking to grow and raise equity because tailoring the bylaws allows them to mitigate agency issues between shareholders. By contrast, the restricted bylaws legal form is better suited for simple firms, which are not looking to grow or raise equity. Reflecting this tradeoff, a popular website that advises entrepreneurs notes: *"If you're not looking to grow your business, the legal constraints of the SARL [restricted bylaws legal form] can be a source of comfort, and its operation is simpler, if not more tailor-made."*[18]

5.2 The Reform

The Economy Modernization Act was promulgated on August 5, 2008, by the French Parliament, one year after right-wing candidate Nicolas Sarkozy was elected President and his party secured a majority in Parliament. The stated goal of the reform was to "stimulate growth and employment by removing the structural and regulatory barriers hindering the French economy." The reform included several provisions that reduced the cost for entrepreneurs of choosing the flexible bylaws legal form.[19]

First, the reform removed the requirement for flexible bylaws firms to have at least €37,000 of share capital (French *capital social*). Share capital is defined as the total nominal value of

[18] https://www.captaincontrat.com/creer-son-entreprise/choisir-son-statut/sarl-ou-sas-comment-choisir-sa-societe

[19] The reform introduced other changes, none of which were related to flexible bylaws companies. It lifted restrictions on the opening of supermarkets, imposed limits on payment delays, simplified procedures for challenging unfair contract terms, and created a special legal form allowing employees to engage in side self-employed activities. In Appendix D.2, we show that our results are not driven by these other elements of the reform. In particular, we show that the results are virtually unaffected when we remove the wholesale trade and retail trade sectors (Table D.1), when we control for firm trade credit (Table D.2), for risk of unfair contract terms via the HHI in the focal, upstream, and downstream industries (Table D.3), and for the share of new firms created with the new legal form for self-employed (Table D.4).

the firm's issued shares. At incorporation, share capital corresponds to the equity of the firm.[20] Therefore, until 2008, entrepreneurs opting for flexible bylaws had to raise at least €37,000 in equity at creation. The reform eliminated this requirement, aligning the requirements for flexible bylaws firms with those for restricted bylaws firms, which had no minimum equity requirement during the sample period. Evidence that the equity requirement for flexible bylaws firms had been binding is provided by the fact that 90% of new flexible bylaws firms created four years after the reform started with less than €37,000 of equity.

Second, the reform reduced the cost of adopting the flexible form. Prior to the reform, all flexible bylaws firms were required to hire external auditors. After the reform, this requirement applies only to firms above a certain size—specifically, if at least two of the following three conditions are met: annual sales exceed €2,000,000; total assets exceed €1,000,000; or the firm has more than 20 employees. This change aligned the requirements for flexible bylaws firms with those for restricted bylaws firms.[21]

5.3 Take-Up of Flexible Bylaws

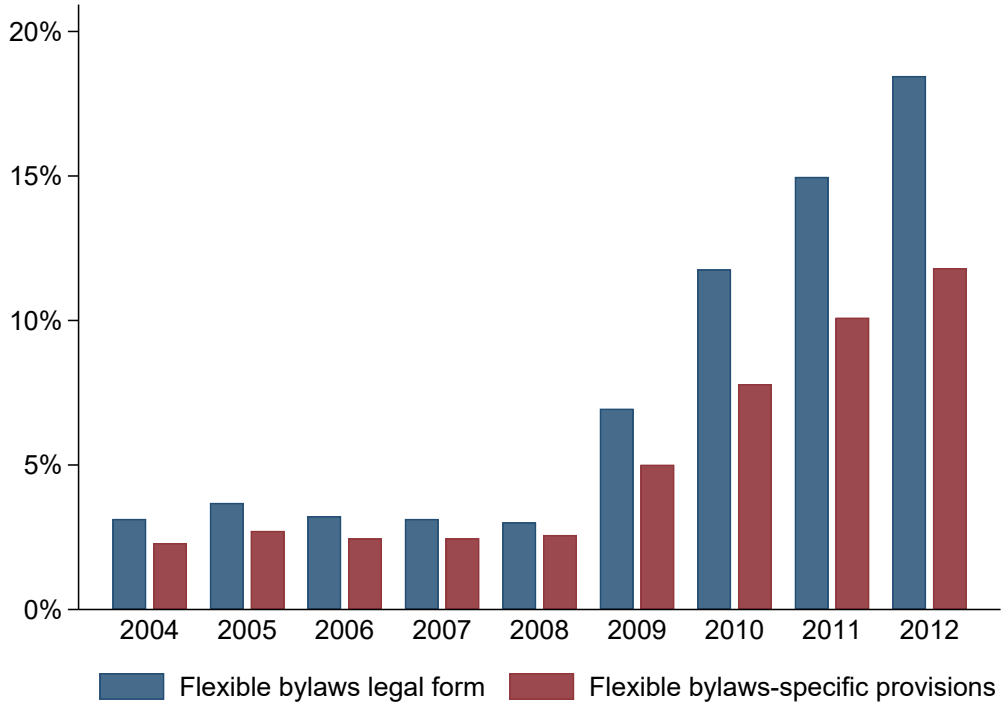
By reducing the costs associated with the flexible form, the reform substantially increased entrepreneurs' propensity to adopt this legal form when creating their firms, enabling them to implement more complex financial contracts and governance rules. The blue bars in Figure 1 show the fraction of newly incorporated firms that adopt the flexible bylaws form. While 3% of new firms adopted flexible bylaws prior to the 2008 reform, this fraction rises sharply afterward, reaching 18% by 2012.

Why don't all new firms choose flexible bylaws, given that they offer more contractual options than restricted bylaws? First, writing complex contracts entails higher costs—both cognitive and legal—as entrepreneurs must make more choices and may require legal advice. Second, a larger contract space increases the risk of mistakes and may leave unsophisticated entrepreneurs vulnerable to exploitation by more experienced co-founders or investors. The default contract associated with restricted bylaws protects entrepreneurs against this risk by limiting discretion. This risk is emphasized by legal scholars and practitioners, as exemplified by the quote in the excerpt of the paper characterizing the flexible form as the *"Formula One of corporate law, [not to] be put in*

[20] After entry, equity can diverge from share capital, as equity is the sum of share capital (the nominal value of shares), share premiums arising from new equity issuances (if new shares are issued above nominal value), and retained earnings. Share capital may also increase after entry through new share issuances and through capitalization of retained earnings, and decrease through capital reductions, subject to the minimum share capital requirements.

[21] The reform also harmonized registration duties on equity transfers across the two legal forms. Before the reform, the transfer duty was 5% for restricted-bylaws firms and 1.1% for flexible-bylaws firms; the reform introduced a uniform 3% rate for both. This change is favorable to the restricted form relative to the flexible form. The sharp post-reform increase in adoption of the flexible form (see the next section) indicates that this shift in transfer duties is more than offset by the removal of the flexible form's additional requirements.

Figure 1: Flexible Bylaws



The blue bars show the share of new firms incorporated with the flexible bylaws legal form, by vintage of firm creation year. The red bars show the share of new firms whose bylaws include at least one provision that is permitted exclusively under the flexible bylaws legal form.

the hands of inexperienced users," and by the quote from the specialized website mentioned above highlighting the comfort of restricted bylaws.

One potential concern is that the surge in flexible bylaws adoption was driven by reduced access to credit in the wake of the 2008–09 financial crisis, which may have induced new firms to rely more heavily on external financing—financing for which flexible bylaws are better suited. However, the joint dynamics of flexible bylaws adoption and credit growth do not support this explanation: in 2010, aggregate credit grew robustly as the effects of the 2008-09 crisis subsided, while the take-up of flexible bylaws continued to rise sharply.[22]

Does adopting flexible bylaws lead to more tailored contracting between entrepreneurs and shareholders, or do firms adopt this legal form without exploiting the contractual flexibility it allows? The red bars in Figure 1 plot the share of new firms whose bylaws include provisions permitted exclusively under the flexible bylaws. This share tracks overall adoption, rising from 2% before the reform to 12% by 2012, suggesting the reform increased both adoption and actual tailoring.

[22]New loans to domestic non-financial corporations (up to €1 million, monthly flows cumulated over one year) grows by 12.2% from December 2009 to December 2010 (source: Bank of France https://webstat.banque-france.fr/en/#/node/5384959).

Why do not all firms that adopt flexible bylaws include provisions that are uniquely allowed under this legal form? As shown in Figure 1, the share of flexible bylaws firms that write such provisions remains roughly constant over time, at around two-thirds. One caveat is that our NLP-based analysis may miss some provisions, leading us to understate the true extent of contract tailoring. Nevertheless, a more fundamental explanation is that some entrepreneurs value the option to tailor contracts in the future, even if they do not exercise that option immediately.

Figure D.1 breaks down contractual provisions into those related to ownership rights, control rights, and cash-flow rights. It plots the share of new firms that include at least one tailored provision in each of these three areas. We find that contract tailoring increases across all three domains. The absolute magnitude of the increase is greater for ownership and control rights than for cash-flow rights, consistent with the fact that the unconditional frequency of tailored provisions is higher in the former than in the latter (see Table 2).

6 Empirical Design

6.1 Identification Strategy

By reducing the costs of flexible bylaws and increasing their adoption by new firms, the reform provides a unique opportunity to study how greater contractual flexibility at the firm's creation affects its future outcomes. Our identification strategy relies on the premise that firms more dependent on equity financing are more responsive to the reform, as contracting flexibility is more valuable to them. Accordingly, we construct a measure of equity dependence at the industry level and posit that equity-dependent industries are more exposed to the reform. We define equity dependence as the average ratio paid-in equity over total assets among firms less than four years old within each industry, measured over 2000–2003, prior to the regression sample period. We use paid-in equity (equal to share capital plus the share issuance premium) because it captures equity funding provided through shareholder contributions rather than through retained earnings.[23]

Table 5 reports the ten most exposed industries—those in which we expect the strongest adoption of flexible bylaws in response to the reform, as firms in these industries rely more heavily on equity financing and thus benefit more from enhanced contractual flexibility. Likewise, we report the ten least exposed industries, which we expect to show weaker responses to the reform. The panels show no clear overrepresentation of particular types of activities, alleviating concerns that the

[23] We use five-digit industries. There are 271 distinct five-digit industries after applying the data filters described in Section 3.2. We construct the measure using young firms because their equity-to-asset ratios more closely reflect the reliance of newly created firms on equity financing. Table D.5 shows that the results are robust to alternative definitions of equity dependence: including new firms in the calculation alongside medium-aged firms, and using the median equity-to-asset ratio instead of the average. Table D.6 shows that the results are robust to using total equity (paid-in equity + retained earnings) as measure of equity dependence.

exposure measure captures specific industry characteristics rather than differences in reliance on equity financing.

Table 5: Top/Bottom Industries by Exposure to the Reform

Code	Sector	Average Equity/Assets (%)
	Most exposed industries	
2443Z	Lead, zinc, or tin metallurgy	49.5
6312Z	Internet portals	44.6
7211Z	Research and development in biotechnology	42.9
4791A	Mail order sales via general catalogue	40.8
1081Z	Sugar manufacturing	39.9
4791B	Mail order sales via specialized catalogue	39.6
4635Z	Wholesale trade of tobacco products	38.8
4789Z	Other retail sale via stalls and markets	38.3
5829B	Publishing of software development tools and programming languages	37.9
5829A	Publishing of system and network software	37.6
	Least exposed industries	
4110D	Legal structures for development programs	9.1
7722Z	Rental of videotapes and video discs	9.1
7731Z	Rental and leasing of agricultural machinery and equipment	8.7
4311Z	Demolition work	8.4
2594Z	Manufacture of screws and bolts	8.2
4711C	Convenience stores	8.1
5121Z	Air freight transport	7.2
4110C	Real estate development of other buildings	7.2
2364Z	Manufacture of dry morite and concrete	6.9
4711D	Supermarkets	6.8

The table presents the top ten and bottom ten five-digit industries in terms of their exposure to the reform. Our measure of exposure to the reform is the average paid-in-equity-to-assets ratio among young firms (i.e., firms younger than four years) between 2000 and 2003.

Our baseline specification is a difference-in-differences design that compares new firms started after versus before the reform (first difference) in more versus less exposed industries (second difference). By lowering the costs associated with flexible bylaws, the reform increases their adoption, which may in turn causally affect firm outcomes. This is the effect we seek to identify. However, the removal of requirements for flexible bylaws may also directly affect outcomes for inframarginal firms, i.e., firms that would adopt flexible bylaws regardless of the reform. For example, allowing firms that always opt for flexible bylaws to start with less equity or without external auditors may affect their performance.

Since the magnitude of the confounding effect depends on the mass of inframarginal firms, we can control for this effect by including the share of inframarginal firms in the industry interacted with a time dummy. Inframarginal firms are firms that choose flexible bylaws whether they are created before or after the reform. Accordingly, we measure the share of inframarginal firms in

each industry as the share of flexible bylaws among new firms created during the pre-reform period (2004–2007). To flexibly account for the fact that the effect on inframarginal firms may vary over time, we control for the industry pre-reform share of flexible bylaws in new firms interacted with year fixed effects. This control captures the reform's effect on firms that always choose flexible bylaws, allowing us to isolate how the increased adoption of flexible bylaws impacts firms' outcomes.[24]

Identifying assumptions. Identification relies on the standard parallel trends assumption: industry-specific shocks to outcomes in the post-reform period must not be correlated with exposure to the reform.

We implement four complementary strategies to validate this assumption. First, we test for pre-trends: section 7 shows that firms in more and less exposed industries evolve in parallel prior to the reform.

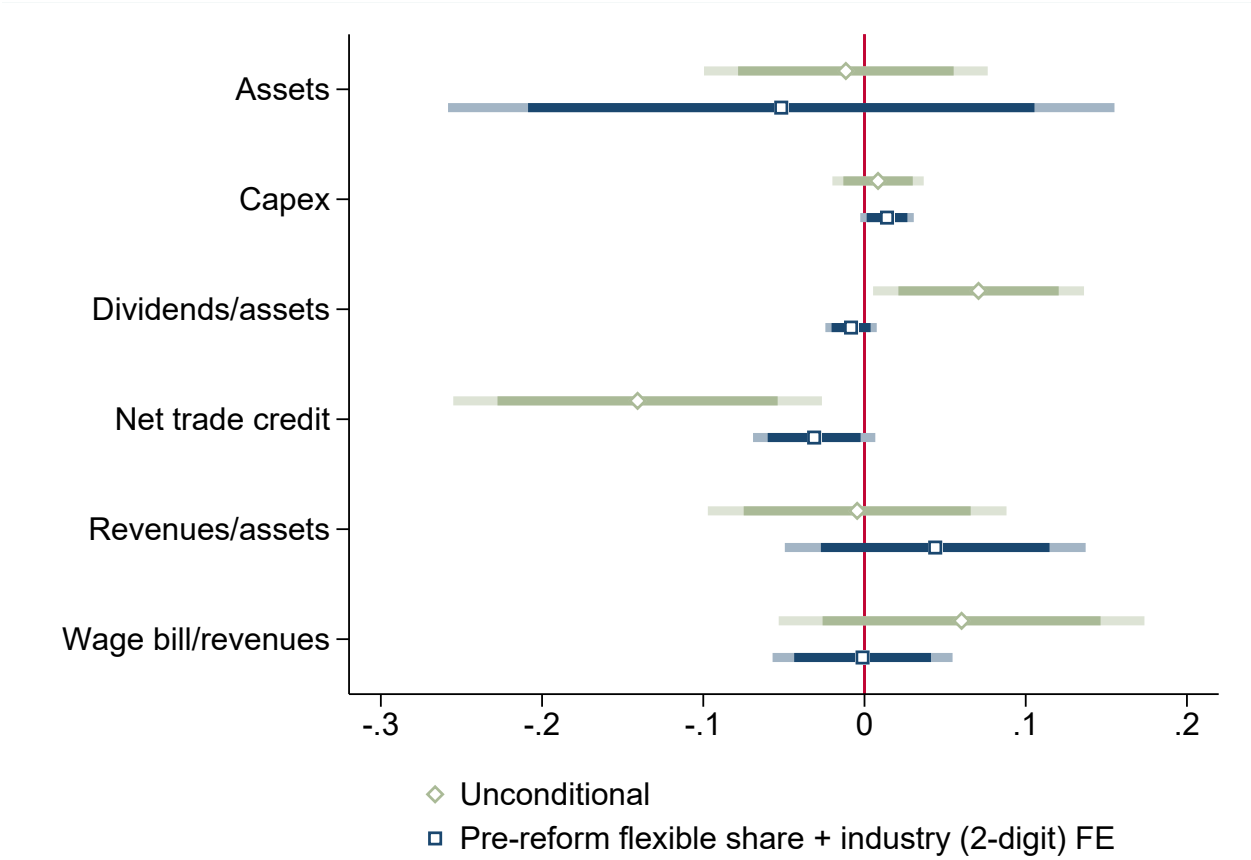
Second, we leverage the granularity of the exposure measure, which varies at the five-digit industry level, by including two-digit industry×year fixed effects. This approach ensures that the effect of the reform is identified from variation within two-digit industries. For example, within the two-digit industry *Chemical Industries* (code 20), we compare five-digit industries such as *Industrial Gases* (code 20.11.Z) and *Paints and Varnishes Based on Polymers* (code 20.30.Z), but we do not compare these with five-digit industries belonging to different two-digit sectors, such as *Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations* (code 21).

Third, we show that average firm characteristics are similar across more and less exposed industries prior to the reform. Figure 2 reports regression coefficients from industry-level regressions of pre-reform characteristics (measured over 2004–2007) on reform exposure. For comparability, each characteristic is standardized to have unit variance. We present both unconditional estimates and estimates controlling for the pre-reform share of flexible-bylaws firms and two-digit industry fixed effects, consistent with our main specification. Conditional on these controls, characteristics do not systematically differ by exposure intensity.

Fourth, in Section 7.5, we directly test for industry-specific shocks correlated with reform exposure. To do so, we focus on incumbent firms, which we show did not switch legal form following the reform, and examine whether their growth patterns differ between more and less exposed industries in the post-reform period. We find no evidence of differential post-reform trends among incumbent firms.

[24] See Appendix C for a formal treatment.

Figure 2: Balance Covariate Tests



All variables are winsorized at the 1% level and normalized to have a mean of zero and a standard deviation of one. Each coefficient is estimated by separately regressing the variable on our measure of exposure to the reform, which is normalized by its standard deviation. Our measure of exposure to the reform is the average paid-in-equity-to-assets ratio among young firms (i.e., firms younger than four years) in the five-digit sector before the reform. "Unconditional" refers to the sample comparing treated firms to all untreated firms without conditioning on any fixed effects. "Pre-reform flexible share + industry (2-digit) FE" controls for the share of firms with flexible bylaws in the five-digit sector before the reform and two-digit industry fixed effects.

Specification. To study the effect of the reform on entrepreneurial success, we estimate the following regression:

$$Y_{i,j,t} = \beta \cdot Exposure_j \times Post_t + \alpha_j + \delta_t + \Gamma \cdot \mathbf{X}_{i,t} + \epsilon_{i,j,t} \tag{1}$$

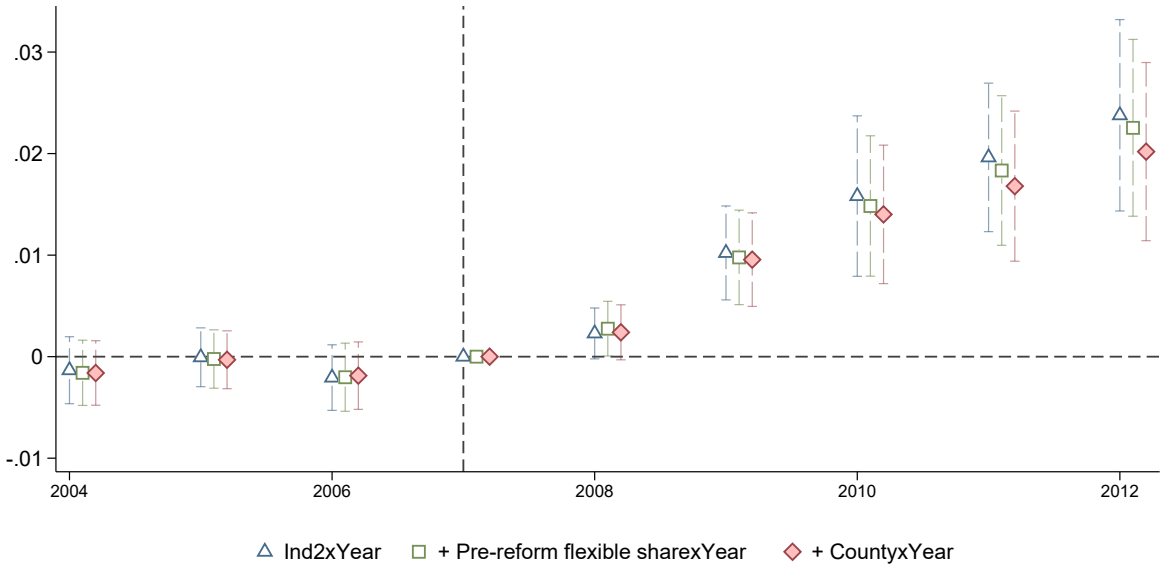
where the dependent variable is an outcome variable for firm i started in year t in five-digit industry j. As explained previously, $Exposure_j$ is defined as the average paid-in-equity-to-assets ratio among all firms younger than four year within each five-digit industry prior to the reform, scaled to have unit standard deviation. $Post_t$ is a dummy equal to one from 2009 onwards. In some specifications, we replace $Post_t$ with a collection of year dummies to estimate dynamic effects. α_j denotes industry fixed effects and absorbs time-invariant differences across industries.

$\mathbf{X}_{i,t}$ is a vector of additional controls measured at time t, which systematically includes quintiles of pre-reform industry share of flexible bylaws new firms, as well as two-digit industry fixed effects, all interacted with year fixed effects. In some specifications, we also include county×year fixed effects. We cluster standard errors at the level of the shock, that is, by industry.

6.2 Flexible Bylaws Adoption and Tailored Bylaws

We start by showing that our proxy for exposure to the reform predicts an increase in new firms' adoption of the flexible bylaws legal form. We estimate equation (1) where the dependent variable is a dummy equal to one if the firm chooses the flexible bylaws legal form. In Figure 3, we replace the post dummy with year dummies to estimate the event study relative to 2007, the year prior to the reform. We find no evidence of pre-trends, and the estimates remain virtually unchanged after controlling for two-digit industry shocks, local labor market conditions, and the pre-reform share of firms with flexible bylaws. The growth in flexible bylaws adoption starts building up after the reform, closely mirroring the aggregate take-up shown in Figure 1.

Figure 3: Effect of the Reform on Flexible Bylaws Adoption



The graph presents the OLS estimates of the β_t coefficients in equation (1), where *Post* is replaced by a collection of year dummies. 2007 is taken as baseline. The dependent variable is a dummy equal to one if the firm chooses the flexible bylaws legal form, and zero if it chooses the restricted bylaws form. The regression includes five-digit industry fixed effects and two-digit industry-by-year fixed effects (all specifications), pre-reform flexible bylaws share quintiles-by-year fixed effects (green squares and red diamonds), and county-by-year fixed effects (red diamonds). The bars give the 95% confidence intervals. Standard errors are clustered at the five-digit industry level.

Table 6 reports the results using the post dummy and including additional controls. Entrepreneurs who start their businesses in more exposed industries are more likely to adopt the flexible bylaws legal form after the reform (column 1). The effect is quantitatively robust when controlling for shocks correlated with the pre-reform industry share of flexible bylaws firms (col-

umn 2) and geographical areas (column 3).

Table 6: Effect of the Reform on Flexible Form Adoption

Dependent variable:	Flexible Bylaws Legal Form		
	(1)	(2)	(3)
Exposure×Post	.018***	.016***	.015***
	(.0035)	(.0032)	(.0032)
Fixed Effects			
Industry	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓
County×Year	—	—	✓
Controls			
Pre-reform flexible share×Year	—	✓	✓
Observations	882,389	882,389	882,389

This table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is a dummy equal to one if the firm chooses the flexible bylaws legal form, and to zero if it chooses the restricted bylaws form. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 7 shows that the increase in adoption of the flexible bylaws legal form in more exposed industries is accompanied by a corresponding rise in the inclusion of provisions specific to flexible bylaws (column 1), mirroring the pattern observed in the aggregate time series (see Figure 1). The magnitude of the increase in these tailored provisions is smaller than the increase in adoption of the flexible bylaws legal form. This suggests that not all firms adopting the flexible bylaws legal form in response to the reform immediately exercise the option to tailor their bylaws, consistent with the unconditional pattern (see Figure 1).

6.3 Firm Creation

The reform may affect the average outcomes of new firms through increased flexible bylaws adoption (as shown in the previous section) and the subsequent effects of flexible bylaws on performance. This is the mechanism we seek to identify. Alternatively, the reform may also affect average outcomes of new firms if it increases the number of entrepreneurs who start a firm, thereby altering the composition of entrepreneurs who start up. This second channel seems unlikely since restricted bylaws firms consistently remain simpler and cheaper to establish, both before and after the reform. Therefore, by lowering flexible bylaws startup costs while leaving restricted bylaws costs unchanged, the reform should affect the intensive margin, i.e., the choice between restricted bylaws and flexible bylaws conditional on starting up, but not the extensive margin, i.e., it should not affect the decision to create a firm.

Table 7: Effect of the Reform on Tailored Bylaws

Dependent variable:	Flexible bylaws specific provisions	Tailored ownership rights	Tailored control rights	Tailored cash-flow rights
	(1)	(2)	(3)	(4)
Exposure×Post	.0073***	.0071**	.0068***	.00094**
	(.0022)	(.0029)	(.0025)	(.00043)
Fixed Effects				
Industry	✓	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓	✓
County×Year	✓	✓	✓	✓
Controls				
Pre-reform flexible share×Year	✓	✓	✓	✓
Observations	634,066	634,066	634,066	634,066

This table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is a dummy indicating whether the firm's bylaws include at least one flexible clause (column 1), one ownership-related clause (column 2), one control-related clause (column 3), or one cash-flow-related clause (column 4). We restrict the sample to firms for which at least one set of bylaws is observed within the first three years of existence. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Nonetheless, we test whether the number of new firms changes in more versus less exposed industries after the reform. For this test, we collapse the data at the industry-year level and use the growth rate of new firms in the industry as the dependent variable. As is common in the entrepreneurship literature (Davis, Haltiwanger and Schuh, 1996), we use the midpoint growth rate defined as $(X_t - X_{t_0})/[(X_t + X_{t_0}) \times 0.5]$ to handle industry-year observations with zero newly created firms. X_{t0} is the average value of X over the pre-reform period. Since the regression is at the industry level, it attributes an equal weight to each industry, while firm-level regressions attribute more importance to more populated industries. To check that our results are not driven by the choice of weighting, we report the results of industry-level regression of firm creation using two different weighting schemes: unweighted, which overweights small industries relative to the firm-level regressions; and weighted by the number of new firms, which weights industries similarly to the firm-level regressions.

Table 8 reports the results. Under both weighing schemes, the reform has no effect on the number of firms created. Composition effects should therefore be muted, allowing us to interpret the effect of the reform on average firm performance as the effect of allowing entrepreneurs and shareholders to write more complex contracts.

Table 8: Effect of the Reform on Firm Creation

Dependent variable:	Midpoint growth rate (# firms)			
Weights:	Equal-weighted		# firms	
	(1)	(2)	(3)	(4)
Exposure×Post	.022	.018	.026	.024
	(.017)	(.017)	(.024)	(.022)
Fixed Effects				
Industry	✓	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓	✓
Controls				
Pre-reform flexible share×Year	—	✓	—	✓
Observations	4,752	4,752	4,418	4,418

The table presents the estimates of an industry-year panel regression where the dependent variable is the midpoint growth rate defined as $(X_t - X_{t0})/[(X_t + X_{t0}) \times 0.5]$ of the number of new firms started at the industry-year level, where X_{t0} is the average value of X over the pre-reform period. In columns 1-2, the regressions are estimated via OLS. In columns 3-4, the regressions are estimated via WLS, where the weights are equal to the number of new firms in the industry-year so as to weight industries similarly to firm-level regressions. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

7 Impact of Flexible Bylaws on Entrepreneurial Success

We now study the impact of the reform on entrepreneurial success. We evaluate the success of new firms based on outcome variables (capital, labor, and revenue) measured three years after firm creation. We measure these outcomes in levels, as growth rates are not meaningful for new firms that start at zero. To mitigate the influence of outliers, we remove observations in the right tail, defined as values exceeding five times the interquartile range above the median.[25] For firms that become inactive (i.e., file tax returns with values equal to zero) or exit (i.e., no longer file tax returns), we set the outcome variables to zero. In Section 7.3, we vary the time horizon at which we measure entrepreneurial success, and we separately estimate the effect of the reform on the exit likelihood.

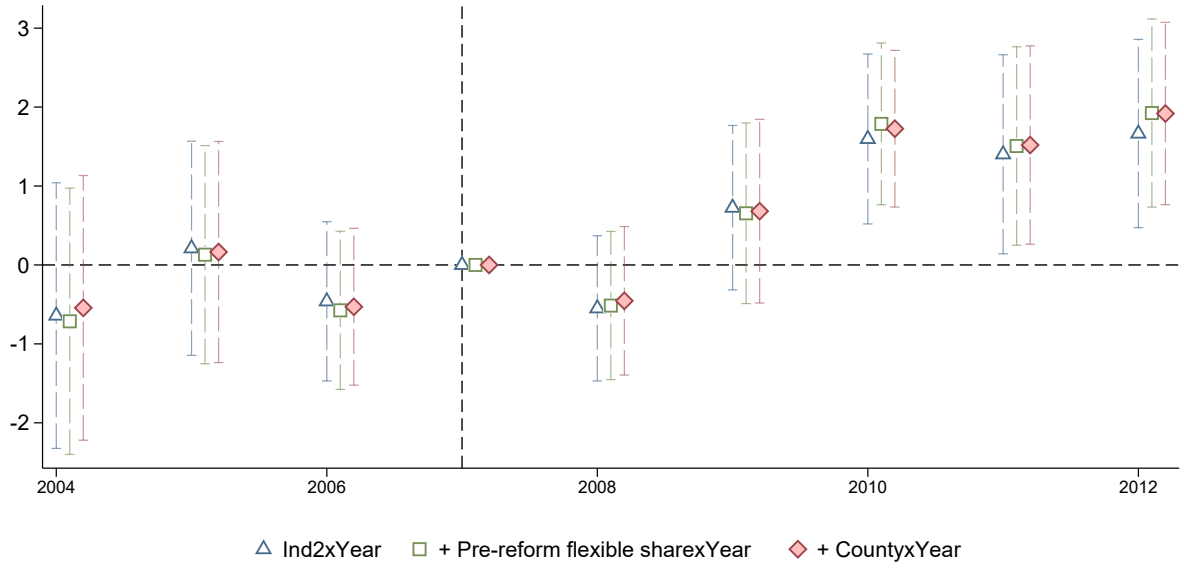
7.1 Capital

By expanding the set of contracts that entrepreneurs and investors can write, flexible bylaws may affect entrepreneurs' ability to finance investment. We first focus on firm success measured by capital, which includes property, plants, equipment, and intangible capital, three years after creation.

[25] Results are robust to alternative treatments of outliers: defining outliers as observations beyond three times versus five times the interquartile range, in the top 1% versus top 5% of the distribution, and trimming versus winsorizing (see Table D.7).

To estimate the event-study specification relative to the year prior to the reform (2007), we replace the post-reform dummy with a full set of year dummies.

Figure 4: Effect of the Reform on Capital



This figure presents the OLS estimates of the β_t coefficients in equation (1). *Post* is replaced by a collection of year dummies, and 2007 is taken as baseline. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. The regression includes five-digit industry fixed effects and two-digit industry-by-year fixed effects (all specifications), pre-reform flexible bylaws share quintiles-by-year fixed effects (green squares and red circles), and county-by-year fixed effects (red circles). The bars give the 95% confidence intervals. Standard errors are clustered at the five-digit industry level.

In Figure 4, we find that the reform is followed by a sharp increase in the amount of capital three years after creation. Table 9 presents the results using the post dummy instead of year dummies for different specifications. The results are quantitatively robust when we include the pre-reform industry share of flexible bylaws firms to control for the potential effects of the reform on inframarginal firms (column 2), and county×year fixed effects to account for differences in regional dynamism (column 3). Since the exposure measure is normalized to have unit standard deviation, the point estimate in the full specification (column 3) implies that a one-standard-deviation increase in exposure to the reform leads to an average increase of €1,800 in capital. This corresponds to a 3.3% increase relative to the mean.

Tailoring bylaws should be especially valuable for growth-oriented firms and less so for firms that have no ambition to grow. Therefore, we expect the effect of the reform to be stronger at the top of the firm growth distribution and muted at the bottom of the distribution. To test this prediction, we replace the dependent variable with a dummy variable equal to one if the firm's capital three years after creation is above the k^{th} percentile of the distribution for $k = 20, 40, 60, 80$.

The results in Table 10 show that, consistent with the prediction, the effect is concentrated at the top of the firm growth distribution. The effect is positive above the 60^{th} percentile and stronger

Table 9: Effect of the Reform on Capital

Dependent Variable	$K_{i,t+3}$		
	(1)	(2)	(3)
Exposure×Post	1.7***	1.9***	1.8***
	(.48)	(.44)	(.44)
Fixed Effects			
Industry	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓
County×Year	—	—	✓
Controls			
Pre-reform flexible share×Year	—	✓	✓
Observations	840,857	840,857	840,857

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

at the 80$^{\text{th}}$ percentile. A one-standard-deviation increase in exposure to the reform leads to a 0.98 percentage point increase in the firm's likelihood of reaching the 80$^{\text{th}}$ percentile. By contrast, the reform has no significant effect below the 60$^{\text{th}}$ percentile.

Table 10: Effect of the Reform on Reaching Top Percentiles of Capital

Dependent Variable	$\mathbf{Pr[K}_{i,t+3} > \mathbf{Percentile]}$			
Percentile:	>20$^{\text{th}}$	>40$^{\text{th}}$	>60$^{\text{th}}$	>80$^{\text{th}}$
	(1)	(2)	(3)	(4)
Exposure×Post	-.0041	.0014	.0047*	.0098***
	(.0027)	(.003)	(.0028)	(.0019)
Fixed Effects				
Industry	✓	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓	✓
County×Year	✓	✓	✓	✓
Controls				
Pre-reform flexible share×Year	✓	✓	✓	✓
Observations	840,857	840,857	840,857	840,857

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is an indicator variable equal to one if the firm's tangible plus intangible capital (in thousand euros) three years after creation exceeds the specified percentile. Percentile breakpoints are computed year-by-year. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

The results are robust to alternative specification choices. Table D.7 shows that the results are robust to alternative treatments of outliers: trimming versus winsorizing, and different cutoffs. Figure D.2 shows the results are not driven by any specific industry. We estimate the baseline regression removing one (four-digit) industry at a time, and plot the distribution of regression coefficients and t-statistics. The regression coefficients are tightly distributed around 1.8 (our baseline coefficient) and always significant at 1%. Table D.5 shows that the results are robust to different ways of measuring the exposure to the reform: using the median rather than the mean of the equity-to-assets ratio; constructing this ratio using all firms rather young firms only and taking the mean at the four-digit industries instead of five-digit. Table D.6 does the same using total equity (paid-in equity + retained earnings) over assets rather than paid-in equity over assets to measure exposure to the reform.

7.2 Equity Financing

Why do firms accumulate more capital when they can tailor contracting at the startup stage? One possibility is that this allows entrepreneurs to raise more equity. To test this hypothesis, we re-estimate equation (1) using as the dependent variable the amount of equity at creation.[26]

Table 11: Effect of the Reform on Startup Equity

Dependent Variable	$E_{i,t+1}$		
	(1)	(2)	(3)
Exposure×Post	.21***	.24***	.25***
	(.071)	(.075)	(.074)
Fixed Effects			
Industry	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓
County×Year	—	—	✓
Controls			
Pre-reform flexible share×Year	—	✓	✓
Observations	809,511	809,511	809,511

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is the firm's paid-in equity (in thousand euros) one year after creation. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

We report results in Table 11. Across the different specifications, the reform has a stable and

[26]The first observation in the tax files for a new firm may be in the year of incorporation or the year after, depending on the end date of the firm's first fiscal year. For consistency, we define equity at creation as paid-in equity in the year following the year of incorporation, even if the firm has reported information for the year of incorporation. Paid-in equity is equal to the total amount of equity injected by shareholders.

positive effect on the amount of equity entrepreneurs are able to raise when they create their firms. The coefficient in column 3 implies that a one-standard deviation increase in exposure translates into an additional €250 of equity raised.

The magnitude is consistent with the effect we estimate on capital. It implies an equity multiplier of 7.3 (€1,800 of additional productive assets three years out for 250 of additional initial equity), which is in line with the unconditional ratio of assets three years out to initial equity (8.1).

Overall, contractual flexibility allows entrepreneurs to raise more equity, which translates into higher amounts of capital through an equity multiplier.

7.3 Dynamics and Survival

Does contractual flexibility enable entrepreneurs to sustain high growth over time, or does the outperformance fade in the medium run? To explore this question, we first estimate the effect of the reform on capital at multiple horizons, from one year to five years after entry. The results are reported in panel A of Table 12. We find that across all horizons, entrepreneurs in more exposed industries accumulate more capital, with no decay over time. Five years after entry, entrepreneurs in industries one-standard-deviation more exposed to the reform have, on average, an additional €2,100 in capital.

Starting a business involves substantial experimentation and uncertainty regarding the likelihood of success (Kerr, Nanda and Rhodes-Kropf, 2014; Kisseleva, Mjøs and Robinson, 2023). More flexible contracting may encourage investors to fund riskier ventures with higher upside conditional on success but also greater downside risk. To test this hypothesis, in panel B we analyze the probability of survival at various horizons. Across all horizons, we observe no change in survival probability, both quantitatively (the coefficient is close to zero, to be compared with an unconditional probability of survival of 81%) and statistically.

7.4 Labor and Revenue

We next study the impact of the reform on labor, as improved access to financing may enable entrepreneurs to hire more workers. Although labor is often modeled as a fully adjustable input across periods, in practice it is likely to entail fixed costs due to wage rigidity and hiring or firing frictions. Consequently, when there is a mismatch between the timing of labor costs and cash flow, financial constraints may limit firms' labor demand.[27] This mechanism may be particularly relevant for new firms, which often lack internal cash flow and must therefore rely on external financing.

[27] See, e.g., Jermann and Quadrini (2012) and Schoefer (2021) for theoretical analyses of labor demand under financing frictions. For empirical evidence, see, among many others, Peek and Rosengren (2000); Benmelech, Bergman and Seru (2021); Hombert and Matray (2017); Bai, Carvalho and Phillips (2018); Berton, Mocetti, Presbitero and Richiardi (2018); Caggese, Cunat and Metzger (2019); Benmelech, Frydman and Papanikolaou (2019); Fonseca and Doornik (2022); Baghai, Silva, Thell and Vig (2021); Fonseca and Matray (2022).

Table 12: Dynamics and Survival

	Panel A: $\mathbf{K}_{i,t+h}$				
	t+1	t+2	t+3	t+4	t+5
Exposure×Post	2.4***	1.8***	1.8***	1.9***	2.1***
	(.48)	(.42)	(.44)	(.44)	(.48)
Fixed Effects					
Industry	✓	✓	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓	✓	✓
County×Year	✓	✓	✓	✓	✓
Controls					
Pre-reform flexible share×Year	✓	✓	✓	✓	✓
Observations	832,466	836,882	840,850	832,773	824,349
	Panel B: Survival$_{i,t+h}$				
	t+1	t+2	t+3	t+4	t+5
Exposure×Post		-.003***	.00071	.0013	.0025
		(.0011)	(.002)	(.0027)	(.0031)
Fixed Effects					
Industry		✓	✓	✓	✓
Industry (2-digit)×Year		✓	✓	✓	✓
County×Year		✓	✓	✓	✓
Controls					
Pre-reform flexible share×Year		✓	✓	✓	✓
Observations		882,381	882,381	882,381	882,381

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. In Panel A, the dependent variable is the firm's fixed assets (in euros) from one to five years after creation. The variable is set equal to zero if the firm disappears. In Panel B, the dependent variable is a dummy equal to one if the firm survives until a given time horizon, zero otherwise. The variable is not defined one year after creation as we impose that firms survive at least one year to be included in the sample. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

We measure labor input using the total wage bill, which captures both the quantity and the quality of labor hired. As with capital, the dependent variable is measured in levels at the three-year horizon.

Columns 1 to 3 of Table 13 reports the results as we progressively include different fixed effects and shows that our findings are quantitatively robust. In the specification that includes all controls (column 3), we find that a one-standard deviation increase in exposure to the reform increases the wage bill by €1,510 three years after firm creation, or 2.2% relative to the mean.

Thus far, we have shown that enabling entrepreneurs to write more sophisticated contracts leads to greater input use, i.e., higher levels of capital and labor. We now examine whether these increases in input investment translate into higher output by using firm revenues at the three-year horizon as the dependent variable.

Columns 4 to 6 of Table 13 reports the results. Across all specifications, we find a significant positive effect on revenues. In the fully controlled specification (column 6), the point estimate implies that a one-standard deviation increase in exposure to the reform results in a €4,620 increase in annual revenues three years after firm creation, or approximately 2.0% relative to the mean.

Table 13: Effect of the Reform on Labor and Revenues

Dependent Variable	$L_{i,t+3}$			$Y_{i,t+3}$		
	(1)	(2)	(3)	(4)	(5)	(6)
Exposure×Post	1.5**	1.6**	1.5**	4.6**	5.1**	4.6**
	(.71)	(.66)	(.67)	(2.2)	(2)	(2)
Fixed Effects						
Industry	✓	✓	✓	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓	✓	✓	✓
County×Year	—	—	✓	—	—	✓
Controls						
Pre-reform flexible share×Year	—	✓	✓	—	✓	✓
Observations	856,580	856,580	856,580	844,708	844,708	844,708

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is the firm's total wage bill three years after creation (columns 1 to 3) and the firm's revenues (columns 4 to 6). Dependent variables are expressed in thousands of euros. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

7.5 A Placebo Test: Incumbents

The key identifying assumption is parallel trends: industry-specific shocks after the reform are not correlated with exposure. While we cannot directly test the identifying assumption, we can use incumbents for a placebo test. Since incumbents do not switch legal forms in response to the reform, any differential post-reform performance in exposed industries would indicate correlated industry shocks—violating parallel trends.

We consider young incumbent firms, defined as being aged between five and ten years, because they are likely to face similar shocks as new firms.[28] To establish the fact that incumbents do not

[28] We impose a minimum age of five years to ensure that incumbent firms were not started after the reform (the reform is in 2008, and the last year of the sample is 2012).

switch legal form after the reform, we define for restricted bylaws incumbents in year t a dummy variable $Switch_{i,t}$ equal to one if the firm switches to flexible bylaws in year t. We estimate the impact of the reform on the probability of switching from restricted to flexible bylaws using the same difference-in-differences specification as for new firms.

The event study reported in Figure D.3 shows that the probability of switching in more exposed industries relative to less exposed industries remains flat after the reform.

With this placebo group in hand, we test whether post-reform incumbents' growth is correlated with exposure to the reform using the difference-in-differences regression. To mirror the specification used for new firms, the dependent variable is incumbents' growth rate of capital at a three-year horizon.

Table 14: Placebo Test: Incumbent Firms

Dependent Variable	$\Delta K_{i,t+3}$		
	(1)	(2)	(3)
Exposure×Post	.0058	.0058	.0056
	(.0057)	(.0056)	(.0056)
Fixed Effects			
Industry	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓
County×Year	—	—	✓
Controls			
Pre-reform flexible share×Year	—	✓	✓
Observations	2,121,039	2,121,039	2,121,039

The table presents the OLS estimates of equation (1). The dependent variable is the growth rate of the firm's fixed assets between time t and time $t+3$. We only include incumbent firms in the sample, i.e., firms aged five to ten years. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Results are reported in Table 14. Across the different specifications, we find no significant relation between our measure of exposure and incumbents' growth after the reform. Importantly, this test does not rely on the assumption that new and young incumbent firms have the same sensitivity to industry shocks.[29] All it requires is that new and young incumbents are affected in the same direction by industry shocks. The insignificant effect on incumbents in exposed industries provides reassurance on the plausibility of the identifying assumption.

[29]See Haltiwanger, Jarmin and Miranda (2013) and Adelino, Ma and Robinson (2017) for evidence of different sensitivity to the business cycle across firm age.

8 Conclusion

While much attention has been devoted to the default rules set by corporate law that govern how firms are organized and how investors are protected, less is known about the scope corporate law leaves to firms to depart from these rules through private contracting. Financial contracting theories suggest that greater flexibility should help entrepreneurs and investors address agency problems, but complex contractual provisions may also impose costs on entrepreneurs, making the net effect of flexibility ambiguous ex ante. Using a novel dataset of company bylaws covering the near-universe of firms created in France between 2004 and 2012, we examine the role of contractual flexibility at incorporation for firm growth.

We first show that firms frequently depart from default provisions in their bylaws. Contractual tailoring is common at the startup stage and occurs far beyond the narrow set of VC backed firms. Deviations occur most often in ownership rights, followed by governance rights, and only rarely in cash flow rights. The dominance of ownership provisions underscores the importance to new firms of protecting shareholders' investments. Tailoring is more frequent when shareholder relationships are likely to involve greater informational frictions or coordination problems and when entrepreneurs appear more sophisticated.

We then provide causal evidence that expanding firms' ability to depart from default provisions leads to stronger firm growth. Exploiting a 2008 reform that reduced the cost of adopting the flexible SAS legal form, we find that firms affected by the reform raise more equity at creation, which translates into more capital accumulation, more hiring, and higher revenues. Firms created in more exposed industries are more likely to appear in the right tail of the growth distribution, consistent with the idea that flexible contracting facilitates growth-oriented entrepreneurship.

Taken together, our findings highlight the importance of the contracting space left by corporate law. Our results suggest that contractual flexibility is an important channel through which corporate law affects firm financing and growth.

References

Adelino, Manuel, Antoinette Schoar, and Felipe Severino. 2015. "House prices, collateral, and self-employment." *Journal of Financial Economics*, 117(2): 288–306.

Adelino, Manuel, Song Ma, and David Robinson. 2017. "Firm Age, Investment Opportunities, and Job Creation." *Journal of Finance*, 72(3): 999–1038.

Akey, Pat, and Ian Appel. 2021. "The Limits of Limited Liability: Evidence from Industrial Pollution." *Journal of Finance*, 76(1): 5–55.

Allen, Eric, Jeffrey Allen, Sharat Raghavan, and David Solomon. 2023. "On the Tax Efficiency of Startup Firms." *Review of Accounting Studies*, , (forthcoming).

Amici, Monica, Silvia Giacomelli, Francesco Manaresi, and Marco Tonello. 2016. "Red Tape Reduction and Firm Entry: New Evidence from an Italian Reform." *Economics Letters*, 146: 24–27.

Anderson, Ronald C., and David M. Reeb. 2003. "Founding-Family Ownership and Firm Performance: Evidence from the S&P 500." *Journal of Finance*, 58(3): 1301–1328.

Astebro, Thomas, and Joacim Tag. 2017. "Gross, Net, and New Job Creation by Entrepreneurs." *Journal of Business Venturing Insights*, 8: 64–70.

Astebro, Thomas, Holger Herz, Ramana Nanda, and Roberto Weber. 2014. "Seeking the roots of entrepreneurship: Insights from behavioral economics." *Journal of Economic Perspectives*, 28(3): 49–69.

Baghai, Ramin, Rui Silva, Viktor Thell, and Vikrant Vig. 2021. "Talent in Distressed Firms: Investigating the Labor Costs of Financial Distress." *Journal of Finance*, 76(6): 2907–2961.

Bai, John, Daniel Carvalho, and Gordon Phillips. 2018. "The Impact of Bank Credit on Labor Reallocation and Aggregate Industry Productivity." *Journal of Finance*, 73(6): 2787–2836.

Bellon, Aymeric, Anthony Cookson, Erik Gilje, and Rawley Heimer. 2021. "Personal Wealth, Self-Employment, and Business Ownership." *Review of Financial Studies*, 34(8): 3935–3975.

Bena, Jan, and Ting Xu. 2017. "Competition and Ownership Structure of Closely Held Firms." *Review of Financial Studies*, 30(5): 1583–1626.

Benmelech, Efraim, Carola Frydman, and Dimitris Papanikolaou. 2019. "Financial Frictions and Employment During the Great Depression." *Journal of Financial Economics*, 133(3): 541–563.

Benmelech, Efraim, Nittai Bergman, and Amit Seru. 2021. "Financing Labor." *Review of Finance*, 25(5): 1365–1393.

Bennedsen, Morten, and Daniel Wolfenzon. 2000. "The Balance of Power in Closely Held Corporations." *Journal of Financial Economics*, 58(1-2): 113–139.

Berton, Fabio, Sauro Mocetti, Andrea Presbitero, and Matteo Richiardi. 2018. "Banks, Firms, and Jobs." *Review of Financial Studies*, 31(6): 2113–2156.

Bilicka, Katarzyna, and Sepideh Raei. 2023. "Output Distortions and the Choice of Legal Form of Organization." *Economic Modelling*, 119: 106159.

Bilicka, Katarzyna, Irem Guceri, and Evangelos Koumanakos. 2022. "Dividend Taxation and Firm Performance with Heterogeneous Payout Responses." National Bureau of Economic Research Working Paper 30808.

Branstetter, Lee, Francisco Lima, Lowell Taylor, and Ana Venâncio. 2014. "Do Entry Regulations Deter Entrepreneurship and Job Creation? Evidence from Recent Reforms in Portugal." *Economic Journal*, 124: 805–832.

Brav, Omer. 2009. "Access to Capital, Capital Structure, and the Funding of the Firm." *Journal of Finance*, 64(1): 263–308.

Burkart, Mike, Fausto Panunzi, and Andrei Shleifer. 2003. "Family Firms." *Journal of Finance*, 58(5): 2167–2201.

Burkart, Mike, Salvatore Miglietta, and Charlotte Ostergaard. 2023. "Why do boards exist? Governance design in the absence of corporate law." *The Review of Financial Studies*, 36(5): 1788–1836.

Caggese, Andrea, Vicente Cunat, and Daniel Metzger. 2019. "Firing the Wrong Workers: Financing Constraints and Labor Misallocation." *Journal of Financial Economics*, 133(3): 589 – 607.

Chen, Daphne, Shi Qi, and Don Schlagenhauf. 2018. "Corporate Income Tax, Legal Form of Organization, and Employment." *American Economic Journal: Macroeconomics*, 10(4): 270–304.

Claessens, Stijn, Simeon Djankov, and Larry H.P. Lang. 2000. "The Separation of Ownership and Control in East Asian Corporations." *Journal of Financial Economics*, 58(1–2): 81–112.

Claessens, Stijn, Simeon Djankov, Joseph P.H. Fan, and Larry H.P. Lang. 2002. "Disentangling the Incentive and Entrenchment Effects of Large Shareholdings." *Journal of Finance*, 57(6): 2741–2771.

D'Acunto, Francesco, Jin Xie, and Jiaquan Yao. 2022. "Trust and Contracts: Empirical Evidence." *Working Paper*, , (32).

Davis, Steven J., John C. Haltiwanger, and Scott Schuh. 1996. *Job Creation and Destruction.* Cambridge, MA:MIT Press.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de Silanes, and Andrei Shleifer. 2002. "The Regulation of Entry." *Quarterly Journal of Economics*, 117(1): 1–37.

Ellul, Andrew, Marco Pagano, and Fausto Panunzi. 2010. "Inheritance Law and Investment in Family

Firms." *American Economic Review*, 100(5): 2414–2450.
Elschner, Christina. 2013. "Special tax regimes and the choice of organizational form: Evidence from the European Tonnage Taxes." *Journal of Public Economics*, 97: 206–216.
Ewens, Michael, Alexander Gorbenko, and Arthur Korteweg. 2022. "Venture Capital Contracts." *Journal of Financial Economics*, 143(1): 131–158.
Fonseca, Julia, and Adrien Matray. 2022. "Financial Inclusion, Economic Development, and Inequality: Evidence from Brazil." *NBER Working Paper*.
Fonseca, Julia, and Bernardus Van Doornik. 2022. "Financial Development and Labor Market Outcomes: Evidence from Brazil." *Journal of Financial Economics*, 143(1): 550–568.
Ganglmair, Bernhard, and Malcolm Wardlaw. 2017. "Complexity, Standardization, and the Design of Loan Agreements." *Working Paper*.
Gao, Huasheng, Jarrad Harford, and Kai Li. 2013. "Determinants of Corporate Cash Policy: Insights from Private Firms." *Journal of Financial Economics*, 109(3): 623–639.
Giroud, Xavier, and Joshua Rauh. 2018. "State Taxation and the Reallocation of Business Activity: Evidence from Establishment-Level Data." *Journal of Political Economy*, 127(3): 1262–1316.
Goolsbee, Austan. 2004. "The Impact of the Corporate Income Tax: Evidence from State Organizational Form Data." *Journal of Public Economics*, 88(11): 2283–2299.
Gregg, Amanda. 2020. "Factory Productivity and the Concession System of Incorporation in Late Imperial Russia, 1894–1908." *American Economic Review*, 110(2): 401–427.
Guyon, Yves. 1994. "Présentation générale de la société par actions simplifiée." *Revue Societe*.
Guyon, Yves. 1999. "L'Élargissement du domaine des sociétés par actions simplifiées (loi du 12 juillet 1999, art. 3)'." *Revue Societe*, 3: 505–509.
Guzman, Jorge. 2020. "The Direct Effect of Corporate Law on Entrepreneurship." *Working Paper*.
Haltiwanger, John, Ron Jarmin, and Javier Miranda. 2013. "Who Creates Jobs? Small versus Large versus Young." *Review of Economics and Statistics*, 95(2): 347–361.
Hart, Oliver, and John Moore. 1994. "A theory of debt based on the inalienability of human capital." *The Quarterly Journal of Economics*, 109(4): 841–879.
Holmström, Bengt. 1979. "Moral hazard and observability." *The Bell journal of economics*, 74–91.
Hombert, Johan, and Adrien Matray. 2017. "The Real Effects of Lending Relationships on Innovative Firms and Inventor Mobility." *Review of Financial Studies*, 30(7): 2413–2445.
Hombert, Johan, Antoinette Schoar, David Sraer, and David Thesmar. 2020. "Can Unemployment Insurance Spur Entrepreneurial Activity? Evidence from France." *Journal of Finance*, 75(3): 1247–1285.
Hvide, Hans, and Georgios Panos. 2014. "Risk tolerance and entrepreneurship." *Journal of Financial Economics*, 111(1): 200–223.
Jensen, Thais Laerkholm, Soren Leth-Petersen, and Ramana Nanda. 2022. "Financing constraints, home equity and selection into entrepreneurship." *Journal of Financial Economics*, 145: 318–337.
Jermann, Urban, and Vincenzo Quadrini. 2012. "Macroeconomic Effects of Financial Shocks." *American Economic Review*, 102(1): 238–71.
Kaplan, Steven N, and Per ER Strömberg. 2003. "Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts." *Review of Economic Studies*, 70(2): 281–315.
Kerr, Sari Pekkala, William Kerr, and Ramana Nanda. 2022. "House prices, home equity and entrepreneurship: evidence from U.S. census micro data." *Journal of Monetary Economics*, 130: 103–119.
Kerr, William, and Ramana Nanda. 2010. "Banking Deregulation, Financing Constraints, and Firm Entry Size." *Journal of the European Economic Association*, 8(2/3): 582–593.
Kerr, William R, Ramana Nanda, and Matthew Rhodes-Kropf. 2014. "Entrepreneurship as experimentation." *Journal of Economic Perspectives*, 28(3): 25–48.
Kerr, William, Sari Pekkala, and Tina Xu. 2018. *Personality Traits of Entrepreneurs: A Review of Recent Literature.* Vol. 14.
Kisseleva, Katja, Aksel Mjøs, and David Robinson. 2023. "Evaluating Selection Bias in Early-Stage Investment Returns." *Working Paper*.
La Porta, Rafael, Florencio Lopez-de Silanes, and Andrei Shleifer. 1999. "Corporate Ownership Around the World." *Journal of Finance*, 54(2): 471–517.
La Porta, Rafael, Florencio Lopez-de Silanes, Andrei Shleifer, and Robert W. Vishny. 1998. "Law and Finance." *Journal of Political Economy*, 106(6): 1113–1155.
Landier, Augustin, and David Thesmar. 2009. "Financial Contracting with Optimistic Entrepreneurs." *Review of Financial Studies*, 22(1): 117–150.
Lerner, Josh, and Antoinette Schoar. 2005. "Does Legal Enforcement Affect Financial Transactions? The Contractual Channel in Private Equity." *Quarterly Journal of Economics*, 120(1): pp. 223–246.
Levine, Ross, and Yona Rubinstein. 2016. "Smart and Illicit: Who Becomes an Entrepreneur and Do They Earn More?" *The Quarterly Journal of Economics*, 132(2): 963–1018.
Lins, Karl V., Paolo Volpin, and Hannes F. Wagner. 2013. "Does Family Control Matter? International Evidence from the 2008–2009 Financial Crisis." *Review of Financial Studies*, 26(10): 2583–2619.

Masulis, Ronald W., Peter Kien Pham, and Jason Zein. 2011. "Family Business Groups around the World: Financing Advantages, Control Motivations, and Organizational Choices." *Review of Financial Studies*, 24(11): 3556–3600.

Matray, Adrien. 2023. "Dividend Taxes, Firm Growth, and the Allocation of Capital." *Working paper*.

Matvos, Gregor. 2013. "Estimating the benefits of contractual completeness." *The Review of Financial Studies*, 26(11): 2798–2844.

Michaely, Roni, and Michael R. Roberts. 2012. "Corporate Dividend Policies: Lessons from Private Firms." *Review of Financial Studies*, 25(3): 711–746.

Murfin, Justin, and Haokun Sun. 2024. "Contractual Innovation and the Evolution of Corporate Credit Agreements." *Working Paper*.

Peek, Joe, and Eric Rosengren. 2000. "Collateral Damage: Effects of the Japanese bank crisis on real economic activity in the United States." *American Economic Review*, 90(1): 30–45.

Pérez-González, Francisco. 2006. "Inherited Control and Firm Performance." *American Economic Review*, 96(5): 1559–1588.

Puri, Manju, and David Robinson. 2007. "Optimism and Economic Choice." *Journal of Financial Economics*, 86(1): 71–99.

Robb, Alicia M., and David T. Robinson. 2014. "The Capital Structure Decisions of New Firms." *Review of Financial Studies*, 27(1): 153–179.

Schoefer, Benjamin. 2021. "The Financial Channel of Wage Rigidity." Working Paper 29201.

Shleifer, Andrei, and Robert W. Vishny. 1986. "Large Shareholders and Corporate Control." *Journal of Political Economy*, 94(3): 461–488.

Shleifer, Andrei, and Robert W Vishny. 1997. "A survey of corporate governance." *The journal of finance*, 52(2): 737–783.

Sraer, David, and David Thesmar. 2007. "Performance and behavior of family firms: Evidence from the French stock market." *Journal of the european economic Association*, 5(4): 709–751.

Tazhitdinova, Alisa. 2020. "Are changes of organizational form costly? Income shifting and business entry responses to taxes." *Journal of Public Economics*, 186: 104187.

Villalonga, Belén, and Raphael Amit. 2006. "How Do Family Ownership, Control and Management Affect Firm Value?" *Journal of Financial Economics*, 80(2): 385–417.

Villalonga, Belén, and Raphael Amit. 2009. "How Are U.S. Family Firms Controlled?" *Review of Financial Studies*, 22(8): 3047–3091.

Yagan, Danny. 2015. "Capital Tax Reform and the Real Economy: The Effects of the 2003 Dividend Tax Cut." *American Economic Review*, 105(12): 3531–3563.

Appendix

A Construction of Variables

Tax Files and Business Registry	
Assets	Total gross assets: variable *tactibt* from the tax files.
Capital	Tangible + intangible assets: variable *immotot* + *immoinc* from the tax files.
Capital expenditures	Yearly variation in fixed assets scaled by contemporaneous total assets.
County	Département: variable *depcom* from the Business registry.
Dividends	Variable *dividen* from the tax files.
Exposure	Industry-level exposure to the reform. Mean equity-to-assets ratio among firms aged at most four years in a given 5-digit industry during the 2000-2003 period.
Firm age	Current year minus year of creation. Year of creation: first year in the tax files.
HHI (downstream)	Weighted average of the 2000–2007 Herfindahl index of revenues in the 3-digit industries that are downstream from the focal firm's industry. The weights correspond to the intensity of downstream input–output links in the 2017 3-digit Input–Output matrix produced by the Census Bureau.
HHI (focal)	Average Herfindahl index of revenues in the focal firm's 3-digit industry over the 2000–2007 period.
HHI (upstream)	Weighted average of the 2000–2007 Herfindahl index of revenues in the 3-digit industries that are upstream from the focal firm's industry. The weights correspond to the intensity of upstream input–output links in the 2017 3-digit Input–Output matrix produced by the Census Bureau.
Labor	Gross total wage bill: *saltrai* + *charsoc* from the tax files.
Legal form	Two-digit variable $cj = 54$ for SARL; $= 57$ for SAS from the tax files.
Leverage	Total debt over total gross assets: variable *empdett* over *tactibt*, from the tax files.
Net trade credit	Trade credit received from suppliers minus trade credit extended to customers, scaled by revenues. Supplier credit is *detfour*+*avancou* and customer credit is *creaclir*+*avanver*.
Paid-in equity	Share capital + share issuance premiums: variable *capisoc* from the tax files.

Revenues	Total sales: variable *ca* from the tax files.
Sales volatility	Standard deviation of firm revenue growth at the 5-digit industry level, averaged over the 2000–2007 period.
Survival	Indicator equal to one if the firm has nonzero revenues three years after the creation year.
SINE	
Age (entrepreneur)	Log entrepreneur age in the SINE survey: variable *annais*.
College	Indicator equal to one if the entrepreneur has at least an undergraduate degree in SINE: variable *diplo*.
Elite college	Indicator equal to one if the entrepreneur graduated from a *grande école* in SINE: variable *diplo*.
Innovative sector	Indicator equal to one if the firm operates in an innovative sector. *inov*.
Serial entrepreneur	Indicator equal to one if the entrepreneur previously created at least one firm in the SINE survey: variable *nbcre*.
Bylaws	
Distant shareholders	Share of shareholders who reside outside the firm's department.
External CEO	Indicator equal to one if the CEO is not a shareholder.
Non-family ownership	One minus the family share of equity, where the family share is the largest capital share held by shareholders sharing the same last name.
Number of shareholders	Number of distinct shareholders recorded in the shareholder list extracted from the bylaws. =
Shareholder geographical dispersion	Geographic dispersion of shareholders' residence departments, measured as (Number of distinct counties of residence $-$ 1)/(Number of shareholders $-$ 1).
Tailored bylaws	Indicator equal to one if the bylaws deviate from the template on any dimension.
Tailored cash-flow rights	Indicator equal to one if the bylaws feature any tailored cash-flow right.
Tailored control rights	Indicator equal to one if the bylaws feature any tailored control right.
Tailored ownership rights	Indicator equal to one if the bylaws feature any tailored ownership right.
VC-backed	Indicator equal to one if the firm is identified as venture-capital backed either based from the shareholder data or in Crunchbase.

B Natural Language Processing of Bylaws

B.1 Detection of Contractual Provisions

B.1.1 Methodology

We extract contractual provisions from corporate bylaws using a rule-based NLP pipeline implemented in `R`. The main challenge is that bylaws are long legal documents written in heterogeneous language, where the same contractual right can be expressed in multiple ways, and where boilerplate text can generate false positives. Our approach therefore combines keyword-based detection with systematic contextual filtering and validation.

Structured parsing of bylaws. French bylaws are typically organized into numbered articles, each devoted to a specific topic (e.g., share transfers, governance, liquidation). We exploit this structure by first segmenting documents into articles and restricting the analysis to sections that are likely to contain the clause of interest. For instance, transfer-related clauses are almost always discussed in articles mentioning *cession* or *transmission*, while governance provisions tend to appear in articles referring to the *président* or to boards and committees. We exclude documents that are not organized into articles from the analysis of contractual provisions.

Keyword patterns and legal expressions. Within relevant articles, we search for predefined legal expressions that are strongly associated with specific contractual rights. These expressions are based on recurring terminology in French corporate law. For example, freely tradable shares are often described as *librement cessibles* or *librement négociables*, while drag-along clauses are commonly referred to as *droit d'entraînement*. Similarly, preferred cash-flow rights are frequently introduced through terms such as *dividende prioritaire* or *boni de liquidation*.

Sentence-level extraction and contextual checks. To ensure that matches correspond to operative contractual provisions, we conduct detection at the sentence level rather than relying on raw keyword counts. For each match, we extract the surrounding sentence (or a short context window) and apply additional filters. This helps distinguish binding clauses from generic or hypothetical statements. For example, bylaws sometimes mention that a board *may* be created (*peut être créé*) without actually establishing one; such conditional language is excluded.

Filtering false positives. A key component of the pipeline is the removal of spurious detections. We systematically filter out: (i) negations (e.g., *pas libre*), (ii) purely hypothetical possibilities, and (iii) unrelated uses of similar terminology (e.g., executive revocation versus shareholder exclusion)

Class-specific provisions. When bylaws include multiple share classes, many rights are expressed in class-specific terms (e.g., Category A shares having different voting or transfer rules). We therefore complement the baseline clause detection with additional patterns that capture the joint presence of governance or transfer language together with category-share terminology such as *actions de préférence* or *actions de catégorie A/B/C*.

Validation through examples and manual review. For each clause family, we retain representative matched sentences, which serve both as diagnostic outputs and as a way to validate the extraction. For instance, lock-up clauses are typically phrased as *les actions sont inaliénables pendant deux ans*, while preferred dividend rights often state that dividends are *d'abord versés aux titulaires des actions de préférence*. These extracted examples allow us to verify that the algorithm captures the intended contractual meaning.

Overall, this methodology leverages the standardized structure of bylaws and the stability of legal terminology, while relying on contextual filters to achieve high precision in detecting contractual provisions at scale.

B.1.2 Examples

In this section, we provide actual examples of clauses that we detect in the bylaws, along with the corresponding firm names.

Ownership Rights

Priority in share issuance. Bylaws may grant existing shareholders priority to subscribe to newly issued shares, limiting dilution and helping preserve the initial ownership structure.

- *"In the event of a capital increase through a cash contribution, each partner has, in proportion to the number of shares they hold, a pre-emptive right to subscribe to the new shares representing the capital increase."* (SOGAS PREVENTION)
- *"If one or more shareholders of Group A exercise their pre-emptive right in respect of part of the shares subject to the proposed transfer and for which they benefit from a pre-emptive right, and if one or more shareholders of Group C exercise their pre-emptive right in respect of the remaining shares for which the shareholders of Group A have a pre-emptive right, such shares shall be allocated to the shareholder(s) of Group A up to the amount of their request, and to the shareholder(s) of Group C who have exercised their pre-emptive right in respect of the balance of the shares subject to the proposed transfer, provided that the shareholder(s) of Group C have previously exercised their pre-emptive right over all of the shares subject to the*

proposed transfer for which they benefit from a pre-emptive right, namely the other half of the shares subject to the proposed transfer." (ETIX EVERYWHERE OUEST)

Unrestricted share transfers. Bylaws may allow shares to be freely transferable, i.e., without requiring approval from other shareholders or a governance body.

- *"Any transfer or assignment of shares held by the shareholders, in any form whatsoever, shall be freely permitted."* (SABRICLEAN)

Priority in share transfer. Bylaws may grant existing shareholders priority to acquire shares that a shareholder wishes to sell (often referred to as preemptive rights in transfers), thereby limiting the entry of new shareholders.

- *"All transfers of shares, including those between shareholders, are subject to compliance with the following pre-emption right. If one of the shareholders wishes to dispose of all or part of their shareholding in the company's capital, the other shareholders shall have an irreducible pre-emption right, in proportion to their participation in the company's capital."* (NOLA CONSEIL)
- *"The Majority Shareholder may exercise their pre-emption right by notifying the President of the Company and the Minority Shareholder, by registered letter with acknowledgment of receipt, of their intention to acquire all of the securities whose transfer is contemplated, under the same terms and conditions as those set out in the notice of the proposed transfer, within thirty (30) days from the date of receipt of said notice (hereinafter referred to as the "Pre-emption Period")."* (PRECIM)

Non-compete. Bylaws may restrict shareholders (and sometimes executives) from engaging in activities that compete with the firm, during their participation and potentially for a defined period afterward.

- *"It is prohibited for all members of the company, whether founders or not, or executives, to engage in any activity outside the company that could prove to be competitive or unfair towards said company; to establish a posthumous mandate in contradiction with the provisions herein."* (MF DISTRIBUTIONS)
- *"Diligence and Non-Competition. Unless granted an exemption by the collective of partners, the manager, or each of the managers if there are several, must devote all their time and efforts to the Company's affairs. During their mandate, any manager is prohibited from engaging, directly or indirectly, in any activity, in any capacity whatsoever, that competes with or is related to the Company's business."* (ISTANBUL)

- *"Any partner and any executive of a partner that is a legal entity is prohibited from becoming involved, directly or indirectly, through creation, acquisition, employment, or partnership, whether directly or indirectly, personally or through an intermediary, for compensation or without charge, on their own behalf or for any third party, or in any other way, in an activity of the same nature as that of the Company, during the entire period they remain a partner of the Company and for three years from the date they cease to be a partner, within a 10 km radius of the headquarters or establishments operated by the Company, under penalty of damages for the benefit of the Company, its partners, or their successors, and without prejudice to the Company's right to put an end to the disruption.* (DISTRIBUTION M.T.)

Shareholder exclusion. Bylaws may define circumstances under which a shareholder can be excluded from the firm and compelled to transfer their shares.

- *"Any shareholder may be excluded from the company by a reasoned decision of the shareholders, taken in a general meeting and decided by the majority required for amending the bylaws, in cases of serious misconduct or violation of the bylaws."* (CSM LD-TENDANCE)
- *"Automatic exclusion and exclusion for just cause result in the immediate suspension of the non-financial rights attached to all the shares of the excluded shareholder upon the decision's enactment (. . .) All the shares of the excluded shareholder must be transferred to the buyers designated by the company at the time of the exclusion decision or, failing that, reimbursed to the shareholder within sixty (60) days of the exclusion decision."* (LIBERTHE)

Class-specific ownership rights. When firms issue multiple share classes, bylaws may attach different transfer, approval, or preemptive rules to specific categories of shares.

- *"Any transfer or assignment of Category A shares to a shareholder holding Category A and/or Category B shares, or to any third party, shall be subject to the prior approval of the holders of Category A shares acting unanimously."* (GEMPRO)
- *"The transfer of Category B shares to a shareholder holding Category A shares shall be freely permitted."* (CARRIERES DE VIGNATS ET DE NORMANDIE)
- *"Pursuant to Article 8, each holder of Category A shares shall benefit from a pre-emptive right over any Category A shares that are subject to a transfer."* (STARGEL SEAFOODS)

Lock-up period. Bylaws may restrict the sale of shares for a specified period, typically to retain key shareholders and limit early exits.

- *"Lock-up clause: The shares shall be non-transferable, meaning neither negotiable, assignable, nor transferable by any means whatsoever or for any reason whatsoever, for a period of two (2) years from their subscription in the event of a capital increase, or from their acquisition."* (GAZONOR HOLDING)

- *"For a period of five (5) years from the date of the Company's registration, the shareholders may not transfer their shares, nor any subscription rights, allotment rights, or any other rights having the purpose or effect of directly or indirectly conferring any right whatsoever over all or part of the Company's share capital and/or voting rights."* (GEOTECHNOLOGIES)

- *"Lock-up: The securities, with the sole exception of Category C shares, shall be non-transferable for a period of five (5) years from their subscription, i.e., until March 29, 2010. Shares acquired or subscribed after the execution of these Articles of Association shall likewise be non-transferable until that same date of March 29, 2010."* (MILLBAKER)

Tag-along. Tag-along clauses allow minority shareholders to sell on the same terms as a controlling shareholder in the event of a sale to a third party.

- *"In the case of any block transfer by one or more partners involving Securities granting access to more than half of the share capital, or any transfer of Securities that could grant the transferee, directly or indirectly, control of the Company within the meaning of Article L 233-3 of the Commercial Code, the transferring partner(s) undertake to allow the other partners to transfer all their Securities under the same conditions and at the same price."* (CITY PART)

- *"If one or more partners, holding control of the Company either individually or collectively within the meaning of Article 233-3 of the New Commercial Code, plan a transfer resulting in a change of control, the notification sent to the partners in accordance with Article 14-1 above must include a firm offer from the prospective transferee (the Offer) to acquire, simultaneously with the transfer by the majority partners, all the shares proposed to them by the beneficiaries under the same financial terms as those offered to the majority transferring partners."* (COTEAMTECHNO)

Drag-along. Drag-along clauses allow majority shareholders to require minority shareholders to sell on the same terms in a sale, mitigating hold-up problems.

- *"In the event that an irrevocable offer to acquire 100% of the Company's Securities is made by a third party (hereinafter the "Purchase Offer") and MAGELLAN CONSULTING wishes to*

accept such offer, the Shareholders who did not accept the offer when it was initially submitted to them undertake to transfer all of their Securities to the third-party purchaser under the terms and conditions offered by the latter, in particular as regards the price (the "Drag-Along Right")." (MAGELLAN STRATEGY)

Control Rights

Governance body. By default, SAS governance includes the president and the shareholder assembly. Bylaws may also create intermediary governance bodies (e.g., board of directors, executive committee, supervisory board, strategic committee) and define their composition and appointment rights.

- *"The Executive Committee of the Company is composed of a maximum of five (5) members, including: a Chairman, whose role will be fulfilled by the Chairman of the Company; two members, who will be appointed by a simple majority vote of the partners holding category O shares; and two members, who will be appointed by a simple majority vote of the partners holding category P shares."* (SILLAGE)
- *"The Board of Directors is composed of at least five (5) members, including: as long as the Founders collectively hold more than 33.33% of the Company's share capital and voting rights, three (3) members may be appointed by the Founders, with the understanding that Frederique Grigolato and Guillaume Andre will necessarily be two of these three members; and two (2) members may be appointed by the holders of category P shares, should they request it."* (CLIC AND WALK)
- *"The sole partner decides, subject to the condition precedent of the capital increase through the issuance of preferred shares called ADP1, to appoint as a member of the Company's Strategic Committee: (. . .)"* (NDHI ENERGY)

CEO can appoint executive officers. Bylaws may grant the CEO (President) the authority to appoint executive officers (e.g., managing directors) who can represent and bind the company.

- *"Upon the president's proposal, the shareholders' group determines the scope and duration of each managing director's powers. If no specific determination is made, the managing director is appointed for the remaining term of the president's mandate and exercises the same powers as the president concurrently."* (ACP ET ASSOCIES)
- *"The President may delegate authority to one or more natural persons, whether shareholders or not, to assist in their duties as managing director."* (AXEMOTION)

Ad nutum CEO termination. Bylaws may allow the CEO to be dismissed at any time, without cause, notice, or severance, by the appointing authority.

- *"The President may be removed at any time, without the need to demonstrate just cause, by decision of the shareholders acting collectively and adopted by a three-quarters majority."* (S.P. LOGISTIQUE)
- *"The President may be removed ad nutum, without any compensation of any kind."*(DEJ'LIGHT)

Suspension of voting rights. Bylaws may provide for suspending a shareholder's voting rights under specified conditions (e.g., a change in control of a corporate shareholder).

- *"If the exclusion procedure of a corporate shareholder is initiated, its non-financial rights, including voting rights, are automatically suspended retroactively from the date of the change in control."* (ANSAUTO)
- *"From the moment the notification of the change in control is received, the Company may initiate the exclusion procedure and the suspension of the non-financial rights of the corporate shareholder whose control has changed, as provided in the article on the exclusion of a shareholder."* (GBV INVEST)

Class-specific control rights. When firms issue multiple share classes, bylaws may allocate differential control rights across classes, including voting rights and appointment rights for executives or board members.

- *"Each Class B share entitles its holder to one vote. Each Class A share entitles its holder to two votes."* (HR14)
- *"Holders of Class C shares are deprived of voting rights with respect to collective decisions during both ordinary and extraordinary general meetings."* (SOLVENCIA)
- *"The President is appointed and may be dismissed at any time by the shareholders holding Class 1 shares, by a simple majority of said shareholders. The dismissal may occur without compensation, notice, or the need to provide reasons."* (SODAREX RIVE DROITE)
- *"The oversight of the actions of the President and, where applicable, the Chief Executive Officer, is carried out by a Supervisory Board (. . .) At least two-thirds of the members must be shareholders of the Company and holders of Class B shares."* (GRIFFON TECHNOLOGIES)

Cash-flow Rights

Preferred dividend rights. Bylaws may grant a class of shareholders a priority or otherwise preferential dividend relative to ordinary shareholders, potentially cumulative and/or defined as a function of investment or benchmarks.

- *"Category B shares are preferred shares with a priority dividend and no voting rights. The priority dividend attached to the Category B shares shall be a double dividend per share."* (KREP)
- *"The B Shares shall entitle their holders, for each completed financial year and for a period of fifteen (15) financial years, to a priority dividend taken from the distributable profit of each year, equal to a total amount of 6% of the dividends distributed by the Company, regardless of the number of B Shares, and allocated among the holders of B Shares pro rata to their percentage ownership."* (AXS MEDICAL)
- *"Category P Shares shall entitle their holders to 66% of the dividends distributed by the Company for a given financial year, until the holders of the Category P Shares have each received an amount equal to 1.5 times the price paid for the subscription of their Category P Shares. Once this amount has been received by each holder of Category P Shares, all shareholders shall be entitled to receive dividends distributed by the Company pro rata to their shareholding in the Company's capital."* (CITY-M)

Stock options. Bylaws may provide for stock options that grant upside exposure and contribute to non-linear payoffs.

- *"The exercise price of each stock option shall be equal to the nominal value of one share of the Company on the exercise date of the stock option, increased by an issue premium equal to 33.33% of such nominal value. As of the date hereof, this exercise price is €1.33."* (ARRAS DA)
- *"The share capital was increased by a nominal amount of €11,466,984 (together with a contribution premium of €819,094.37), raising the share capital from €133,733,092 to €145,200,076, through the issuance of 11,466,984 new shares, allocated as follows:*
  - *Five million seven hundred thirty-three thousand four hundred ninety-two (5,733,492) Ordinary Shares (to which are attached 5,733,492 options to subscribe for Ordinary Shares, known as "BSA 2"),*
  - *Five million seven hundred thirty-three thousand four hundred ninety-two (5,733,492) Preferred Shares,*

representing a capital increase with a nominal amount of €5,733,492 (for each class), together with a total contribution premium of €819,094.37, in consideration for contributions to the Company consisting of:

- *2,931,448 ordinary shares of Spotless Group SAS, valued at €4.091958 per ordinary share, and*
- *44,745 ordinary shares with attached options of Spotless Group SAS, valued at €6.497179 per share with warrants,*

representing a total contribution value of €12,286,078.37." (SPOTLESS GROUP)

- *"The share capital increase resulting from the exercise of the 2,353 share subscription warrants (BSA) shall be carried out, and the bylaws shall be amended accordingly."* (NUTRIXAIM)

Preferred liquidation rights. Bylaws may give preferred shareholders priority in liquidation, often equal to the initial investment or a multiple/IRR-based claim, with residual proceeds allocated afterward.

- *"In the event of the Company's liquidation, the preferred shares shall grant their holders a first-ranking preferential right over the portion of the liquidation surplus that is less than €2,450,000, as follows:*
  - *Repayment to the Company's shareholders of the nominal value of their shares;*
  - *Repayment, by priority to the holders of Category P preferred shares, of the issue premium attached to the preferred shares;*
  - *Distribution of the remaining balance among all security holders pro rata to their fully diluted ownership in the Company's capital, that is, assuming the exercise of all outstanding securities of the Company.* (ATHEOR)
- *"In the event of the Company's voluntary or compulsory liquidation, after settlement of debts owed to third parties, the liquidation proceeds, if any, shall be paid by priority to the holders of Preferred Shares up to an amount equal to their subscription price, increased, where applicable, by any amounts due in respect of Preciput Dividends that have not been paid to the holders of Preferred Shares."* (SPOTLESS HOLDING)

Class-specific cash-out rights. Bylaws may define priority allocation rules for cash-out events (e.g., sale of the firm), potentially combining reimbursement of nominal value, repayment of issuance premia, conversion triggers, and pro-rata sharing.

- *"In the event of a transfer of the Company's securities, occurring for any reason whatsoever, including in particular in connection with a tag-along right, a drag-along obligation, or the buyback right of the holders of P1 Shares referred to below, and paid exclusively in cash, a portion (the "Success Clawback") of the sale price of the transferred securities (the "Proceeds") shall, under the conditions set out below, be deducted from the share of the Proceeds allocated to the holders of P3 Shares and P2 Shares and reallocated to the holders of P1 Shares."* (BLOIS GESTION)

- *In the event of:*

  - *a transfer of the Company's Securities by one or more shareholders to a third-party purchaser resulting in the exercise by a holder of preferred shares of their withdrawal right referred to in Article 3 of the Shareholders' Agreement entered into by the Company's shareholders on May 26, 2010, or*
  - *a transfer of 100% of the Company's share capital pursuant to the implementation of Articles 5 and 6 of said Shareholders' Agreement entitled respectively "Undertaking to Transfer" and "Liquidity Clause",*
  - *and provided that the holders of Category "P1" preferred shares do not receive, in connection with either of the aforementioned transfers, a price for the sale of their preferred shares at least equal to the nominal value plus the issue premium they paid to the Company upon subscription of their preferred shares (whether such subscription occurred through the issuance of new shares or through the exercise of securities, including notably through the exercise of warrants (BSA)), then the Category "P1" preferred shares shall benefit from a preferential allocation of the sale price offered by the third-party purchaser(s), in accordance with the provisions set out below.* (INTUISKIN)

B.2 Extraction of Shareholders and CEO Information

In addition to the rule-based NLP extraction of contractual provisions, we rely on large language models to recover structured information on firm ownership and management directly from bylaw texts. We use the OpenAI API with `ChatGPT-4.1-mini` to identify shareholders and CEOs mentioned in the bylaws, both at incorporation and in subsequent amendments.

Step 1: Conservative entity extraction. The first stage consists in extracting all entities explicitly mentioned as shareholders or CEOs in a given document. The model is prompted with a detailed extraction protocol that instructs it to operate conservatively, with minimal false positives.

Entities are classified into four categories: (i) CEO (individual), (ii) CEO (company), (iii) shareholder (individual), and (iv) shareholder (company). If an entity belongs to both CEO and shareholder categories, it appears twice in the dataset as two separate observations sharing the same entity identifier.

CEOs are only recorded when they are explicitly designated as *président* (for SAS firms) or *gérant* (for SARL firms). Shareholders are included only when the text provides direct evidence of shareholding, such as an explicit capital contribution, a stated number of shares held, or a formal designation as an *associé*, *actionnaire*, or *souscripteur*. The protocol also includes systematic exclusion rules to prevent misclassification of auditors, banks, spouses, or representatives who are mentioned in the document but are not shareholders themselves.

When available, the model additionally extracts structured attributes such as birth information for individuals, headquarters location and SIREN identifiers for companies, and the number or value of shares held. The output is returned in a standardized JSON format, allowing direct aggregation across documents.

Step 2: Harmonization of entity names across documents. A key difficulty in large-scale bylaw analysis is that the same shareholder or company may appear under multiple spellings across documents, due to OCR noise, abbreviations, or inconsistent naming conventions. We therefore apply a second LLM-based harmonization step.

In this stage, the model is prompted to group together names that plausibly refer to the same underlying entity and to generate a standardized cleaned version of each name. For individuals, the harmonization step separates first and last names when possible, and it resolves minor typographical differences or ordering inconsistencies. For companies, it prioritizes the most comprehensive legal denomination rather than short acronyms. This procedure ensures that shareholders and CEOs can be tracked consistently across the full corpus of bylaws and amendments.

Post-processing. A central challenge in using shareholder extractions from bylaws is that raw LLM outputs may contain incomplete or partially missing ownership information. In particular, some shareholders are listed with a number of shares but no associated nominal value, while others are reported with values that do not mechanically add up to the firm's total stated capital.

To address this issue, we implement a systematic post-processing procedure that enforces internal accounting consistency at the document level. For each document (firm $\times$ year), we aggregate the extracted shareholder-level information and compute:

- the total nominal value of shares reported across all shareholders,
- the total number of shares reported across all shareholders,

- the fraction of missing share values or missing share counts.

We then compare these aggregates to the firm's stated equity structure in the bylaws, namely total share capital and total number of shares outstanding. This yields two diagnostic flags: (i) whether extracted share counts add up exactly to the total number of shares, and (ii) whether extracted share values add up exactly to total stated capital.

When share counts are complete but share values are partially missing, we infer missing shareholder values using the implied nominal price per share (capital divided by total shares). When share values are present but appear mis-scaled (for instance due to OCR errors in decimal placement), we rescale all reported values proportionally so that their sum matches total capital. Finally, when no shareholder values are reported but share counts are complete, we reconstruct all nominal values using the same implied price per share.

After these corrections, we recompute all diagnostics and retain only documents in which the shareholder base is complete and the reconstructed ownership composition is internally consistent. In practice, this step ensures that shareholder-level ownership measures (such as ownership shares or concentration indices) are based on documents where extracted holdings match the accounting totals stated in the bylaws.

C Controlling for the Effect on Inframarginal Firms

In this appendix, we outline a simple econometric framework to show that controlling for the pre-reform industry share of flexible-bylaws firms absorbs the direct effect of the reform on inframarginal firms.

The intuition is as follows. We model the reform as reducing the regulatory cost of choosing the flexible bylaws legal form. Therefore, the reform leads to an increase in flexible form adoption, which may causally impact firms' outcomes. This is the effect we want to estimate. The removal of the regulatory requirements may also directly affect outcomes for inframarginal firms, i.e., firms that would adopt flexible bylaws even before the reform. This latter effect is a confounding effect that we need to control for.

Specifically, suppose that firm i's potential outcome if it adopts restricted bylaws is

$$Y_i^R = u_i. \tag{C.1}$$

The potential outcome if the firm adopts flexible bylaws and flexible bylaws after the reform is

$$Y_i^{F,post} = u_i + v_i. \tag{C.2}$$

Equations (C.1) and (C.2) allow for firm heterogeneity in both unconditional outcome (u_i) and in the benefits of flexible bylaws (v_i). Our object of interest is the effect of flexible bylaws on firm outcomes, i.e., v_i.

The potential outcome if the firm adopts flexible bylaws prior to the reform is

$$Y_i^{F,pre} = u_i + v_i + \lambda. \tag{C.3}$$

λ reflects the effect of the pre-reform additional requirements for flexible bylaws firms, conditional on adopting flexible bylaws. λ may be positive or negative.

Suppose the entrepreneur incurs a cost $\gamma > 0$ to adopt flexible bylaws after the reform. γ includes cognitive and legal costs of writing bylaws in a larger contract space than restricted bylaws. Prior to the reform, the cost of adopting flexible bylaws is $\gamma + \delta$. The additional cost $\delta > 0$ reflects the pre-reform additional regulatory costs of creating a flexible bylaws firm.

Firms adopt flexible bylaws when benefits exceed costs. We denote by F_i^{pre} and F_i^{post} the dummy variables equal to one if firm i adopts flexible bylaws before and after the reform, respectively. Firms'

choices of legal form imply:

$$F_i^{post} = 1\{v_i > \gamma\}, \tag{C.4}$$

$$F_i^{pre} = 1\{v_i + \lambda > \gamma + \delta\}. \tag{C.5}$$

Given the evidence that the reform led to an increase in flexible bylaws adoption, we assume that $\lambda < \delta$.

Firm i's outcome in period $t \in \{pre, post\}$ is

$$Y_i^t = (1 - F_i^t)Y_i^R + F_i^t Y_i^{F,t}. \tag{C.6}$$

Taking expectation over (u_i, v_i), the population average outcome in period t is

$$E[Y_i^t] = E[Y_i^R] + E[F_i^t(Y_i^{F,t} - Y_i^R)]. \tag{C.7}$$

Therefore, following standard manipulations, the impact of removing requirements on the average outcome is

$$\begin{aligned} \underbrace{E[Y_i^{post}] - E[Y_i^{pre}]}_{\substack{\text{total effect} \\ \equiv \Delta Y}} = & \underbrace{E[F_i^{post} - F_i^{pre}]}_{\substack{\text{share of compliers} \\ \equiv \Delta F}} \times \underbrace{E[Y_i^{F,post} - Y_i^R \mid F_i^{post} - F_i^{pre} = 1]}_{\substack{\text{effect on compliers} \\ \equiv \beta}} \\ & + \underbrace{E[F_i^{pre}]}_{\substack{\text{share of} \\ \text{inframarginal} \\ \equiv F^{pre}}} \times \underbrace{E[Y_i^{F,post} - Y_i^{F,pre} \mid F_i^{pre} = 1]}_{\substack{\text{effect on} \\ \text{inframarginal} \\ = -\lambda}} \end{aligned} \tag{C.8}$$

Equation (C.8) shows that the reform has two effects on the average outcome. The first term is the effect operating through the increase in flexible bylaws adoption. It is equal to the share of compliers, i.e., firms that adopt flexible bylaws after the reform but not before, multiplied by the average effect of flexible bylaws for these compliers. The second term is the direct effect of the reform on inframarginal firms, i.e., firms that would adopt flexible bylaws even before the reform. It is equal to the share of inframarginal firms times the effect on removing requirements for inframarginal firms.

Suppose that potential firm outcomes (u_i, v_i) vary across industries. In each industry j, a share π_j^R of firms have $v_i < \gamma$ and thus always choose restricted bylaws. A share π_j^F have $v_i > \gamma + \delta - \lambda$ and thus always choose flexible bylaws. The remaining share $1 - \pi_j^R - \pi_j^F$ have v_i following a Pareto distribution with scale parameter $\mu_j \in (0, \gamma)$ and shape parameter $\alpha > 1$. Therefore, the shares of

compliers and of inframarginal firms in industry j are:

$$\Delta F_j = P[\gamma < v_i < \gamma + \delta - \lambda] = (1 - \pi_j^R - \pi_j^F)\mu_j^\alpha(\gamma^{-\alpha} - (\gamma + \delta - \lambda)^{-\alpha}) \tag{C.9}$$

$$F_j^{pre} = P[v_i > \gamma + \delta - \lambda] = \pi_j^F + (1 - \pi_j^R - \pi_j^F)\mu_j^\alpha(\gamma + \delta - \lambda)^{-\alpha} \tag{C.10}$$

The average effect of the reform on compliers is constant across industries:

$$\beta = E[v_i \,|\, \gamma < v_i < \gamma + \delta - \lambda] = \frac{\alpha}{\alpha - 1}\frac{(\gamma + \delta - \lambda)^{\alpha-1} - \gamma^{\alpha-1}}{(\gamma + \delta - \lambda)^\alpha - \gamma^\alpha}\gamma(\gamma + \delta - \lambda) \tag{C.11}$$

The intuition is that while the mass of compliers vary across industries, compliers in all industries lie in the same range of value of v_i.

Consider an industry-level characteristic $Exposure_j$ positively correlated with the industry share of compliers, i.e., $\Delta F_j = \theta\, Exposure_j + \varepsilon_j$ with $\theta > 0$ and $\varepsilon_j \perp Exposure_j$. Substituting into Equation (C.8):

$$\Delta Y_j = \beta\theta \cdot Exposure_j - \lambda \cdot F_j^{pre} + \beta\varepsilon_j \tag{C.12}$$

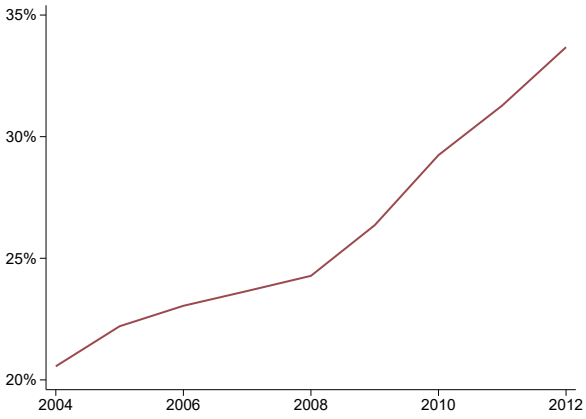
Equation (C.12) provides the rationale for controlling for the pre-reform share of flexible-bylaws firms. The confounding effect is proportional to F_j^{pre}, the share of inframarginal firms in industry j. In the data, we proxy this term using the pre-reform share of flexible-bylaws firms among newly created firms. Our regression equation (1) is the difference-in-differences analog to (C.12). The regression coefficient on exposure interacted with post identifies $\beta\theta$, that is, the average effect of a one-unit increase in exposure to the reform on compliers, which is equal to the product of the effect of exposure on flexible-bylaws adoption (θ) and the effect of flexible bylaws on compliers (β).

D Additional Figures and Tables

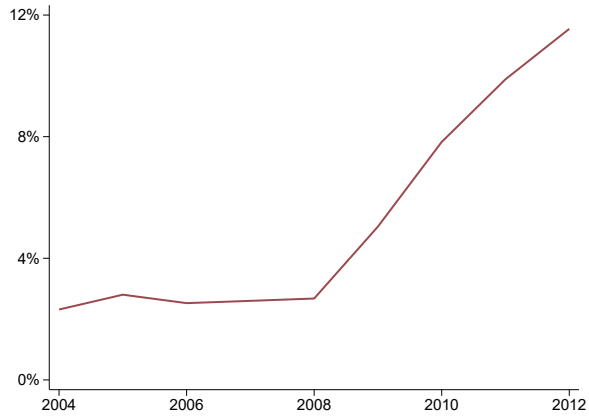
D.1 Contractual Tailoring over Time

Figure D.1: Evolution of Contractual Tailoring Around the Reform

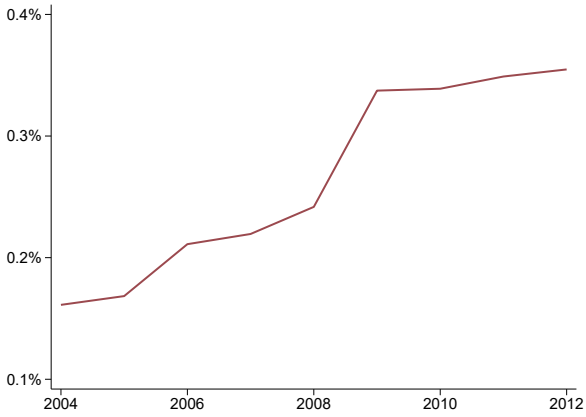
(a) Tailored ownership rights



(b) Tailored control rights



(c) Tailored cash-flow rights



Each panel shows the share of new firms whose bylaws include at least one tailored provision—relative to the default bylaws—pertaining to ownership rights in panel (a), control rights in panel (b), and cash flow rights in panel (c). Note that the share of firms with tailored ownership rights in panel (a) can be higher than the share of firms with the flexible bylaws legal form (see Figure 1) because the restricted bylaws legal form permits priority purchase rights in share issuances and share sales.

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D.2 Concomitant Shocks to the Reform

The reform introduced other changes, none of which were related to flexible bylaws companies. In this section, we show that our results are not driven by these other elements of the reform.

First, the reform lifted restrictions on the opening of supermarkets. To account for the potential effects of this provision, in Table D.1 we re-estimate our main specification removing the wholesale trade and retail trade sectors. We find that the magnitude of the effect is similar to that in the main specification (Table 9).

Second, the reform imposed limits on payment delays. To account for the potential effects of this provision, in Table D.2 we control for the industry-level average of net trade credit level taken during the pre-period reform interacted with year dummies. The results are quantitatively unchanged.

Third, the reform simplified procedures for challenging unfair contract terms. To account for the potential effect of this provision, in Table D.3 we control for the Herfindahl indexes of the focal, upstream, and downstream industries measured in the pre-period reform. The results are quantitatively unchanged.

Fourth, the reform created a special legal form allowing employees to engage in side self-employed activities (*auto-entrepreneur*). To account for the potential effect of this provision, in Table D.4 we control for the 2009 industry-level share of new firms created with the new legal form. The results are quantitatively unchanged.

Table D.1: Effect of the Reform on Capital: Excluding Distribution

Dependent Variable	$K_{i,t+3}$		
	(1)	(2)	(3)
Exposure×Post	1.6**	1.7***	1.7**
	(.64)	(.66)	(.66)
Fixed Effects			
Industry	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓
County×Year	—	—	✓
Controls			
Pre-reform flexible share×Year	—	✓	✓
Observations	636,597	636,597	636,597

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. We exclude the wholesale trade sector (naf 46) and retail trade sector (naf 47). The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

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Table D.2: Effect of the Reform on Capital: Controlling for Trade Credit

Dependent Variable	$K_{i,t+3}$		
	(1)	(2)	(3)
Exposure×Post	1.7***	1.9***	1.8***
	(.48)	(.44)	(.43)
Fixed Effects			
Industry	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓
County×Year	—	—	✓
Controls			
Pre-reform flexible share×Year	—	✓	✓
Trade credit×Year	✓	✓	✓
Observations	840,857	840,857	840,857

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004–2012 period. We control for the industry-level average of net trade credit over the pre-reform period. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

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Table D.3: Effect of the Reform on Capital: Controlling for HHI

Dependent Variable	$K_{i,t+3}$		
	(1)	(2)	(3)
Exposure×Post	1.8***	2***	1.9***
	(.49)	(.46)	(.45)
Fixed Effects			
Industry	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓
County×Year	—	—	✓
Controls			
Pre-reform flexible share×Year	—	✓	✓
HHI downstream×Year	✓	✓	✓
HHI upstream×Year	✓	✓	✓
HHI focal×Year	✓	✓	✓
Observations	840,857	840,857	840,857

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004–2012 period, when we control for HHI in the firm focal industry, as well as upstream and downstream HHI. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

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Table D.4: Effect of the Reform on Capital: Controlling for Share Auto-entrepreneur

Dependent Variable	$K_{i,t+3}$		
	(1)	(2)	(3)
Exposure×Post	1.7***	1.9***	1.8***
	(.48)	(.44)	(.44)
Fixed Effects			
Industry	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓
County×Year	—	—	✓
Controls			
Pre-reform flexible share×Year	—	✓	✓
Share auto-entrepreneur×Year	✓	✓	✓
Observations	840,857	840,857	840,857

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004–2012 period, when we control for the share of new firms created as auto-entrepreneurs in 2009. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

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D.3 Robustness checks

Table D.5: Alternative Definition of Exposure

	$\mathbf{K}_{i,t+3}$							
Sector:	5-digit				4-digit			
Statistic:	Mean	Mean	Median	Median	Mean	Mean	Median	Median
Exposure sample:	Young	All	Young	All	Young	All	Young	All
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Exposure×Post	1.7***	1.8***	2.4***	2.4***	1.1***	1.3***	2.1***	2.1***
	(.43)	(.44)	(.58)	(.54)	(.39)	(.4)	(.55)	(.52)
Fixed Effects								
Industry	✓	✓	✓	✓	✓	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓	✓	✓	✓	✓	✓
County×Year	✓	✓	✓	✓	✓	✓	✓	✓
Controls								
Pre-reform flexible share×Year	✓	✓	✓	✓	✓	✓	✓	✓
Observations	840,857	840,857	840,862	840,862	840,857	840,857	840,862	840,862

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. $Exposure_j$ is defined as paid-in equity-to-assets ratio between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. In columns 1 to 4, $Exposure_j$ is aggregated at the 5-digit industry level. In columns 1 to 4, $Exposure_j$ is aggregated at the 4-digit industry level. Columns 1 and 5 use the mean over firms less than 4-years old, columns 2 and 6 use mean over all firms, columns 3 and 7 use the median over firms less than 4-years old, columns 4 and 8 use the median over all firms. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

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Table D.6: Alternative Definition of Exposure using Total Equity

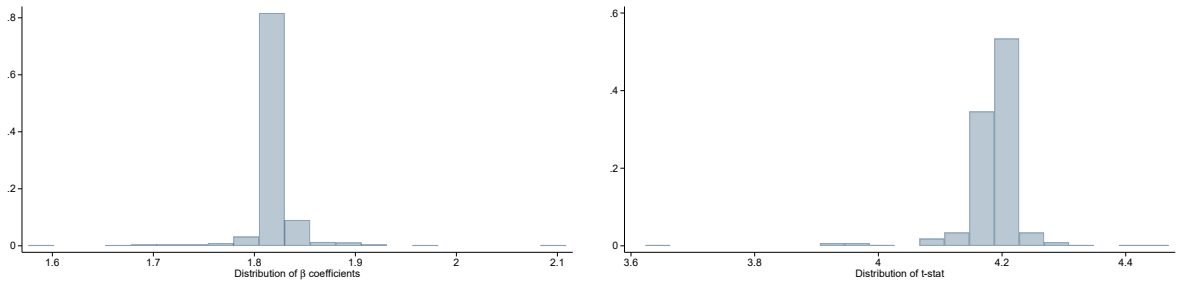
	$\mathbf{K}_{i,t+3}$							
Sector:	5-digit				4-digit			
Statistic:	Mean	Mean	Median	Median	Mean	Mean	Median	Median
Exposure sample:	Young	All	Young	All	Young	All	Young	All
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Exposure×Post	1.7***	1.9***	2.9***	3***	1.4***	1.6***	2.5***	2.6***
	(.47)	(.48)	(.67)	(.67)	(.5)	(.5)	(.83)	(.8)
Fixed Effects								
Industry	✓	✓	✓	✓	✓	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓	✓	✓	✓	✓	✓
County×Year	✓	✓	✓	✓	✓	✓	✓	✓
Controls								
Pre-reform flexible share×Year	✓	✓	✓	✓	✓	✓	✓	✓
Observations	840,857	840,857	840,862	840,862	840,857	840,857	840,862	840,862

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. $Exposure_j$ is defined as total equity (paid-in equity + retained earnings)-to-assets ratio between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. In columns 1 to 4, $Exposure_j$ is aggregated at the 5-digit industry level. In columns 5 to 8, $Exposure_j$ is aggregated at the 4-digit industry level. Columns 1 and 5 use the mean over firms less than 4-years old, columns 2 and 6 use mean over all firms, columns 3 and 7 use the median over firms less than 4-years old, columns 4 and 8 use the median over all firms. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

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Figure D.2: Effect of the Reform on Capital, Excluding Industries One-by-One

(a) β (b) t-stat



This figure reports the distribution of β and t-stats for the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period when we exclude four-digit industries one by one. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

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Table D.7: Alternative Treatment of Outliers

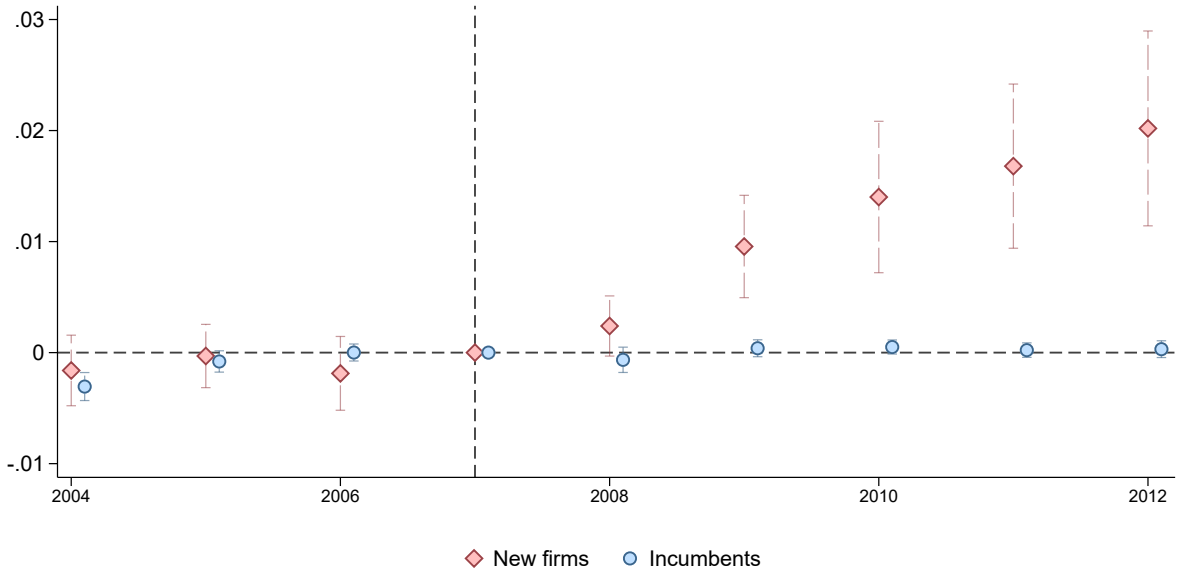
Dependent Variable	$\mathbf{K}_{i,t+3}$							
Outlier:	3IQR		5IQR		Top 5%		Top 1%	
Treatment:	T	W	T	W	T	W	T	W
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Exposure×Post	.82***	1.4***	1.8***	1.6***	1.8***	1.6***	1.3**	.55
	(.29)	(.41)	(.44)	(.56)	(.42)	(.55)	(.65)	(.93)
Fixed Effects								
Industry	✓	✓	✓	✓	✓	✓	✓	✓
Industry (2-digit)×Year	✓	✓	✓	✓	✓	✓	✓	✓
County×Year	✓	✓	✓	✓	✓	✓	✓	✓
Controls								
Pre-reform flexible share×Year	✓	✓	✓	✓	✓	✓	✓	✓
Observations	803,800	882,389	840,857	882,389	838,271	882,389	873,566	882,389

The table presents the OLS estimates of equation (1) on the sample of firms created in the 2004-2012 period. The dependent variable is the firm's tangible plus intangible capital (in thousand euros) three years after creation. We define outliers as observations above the median plus three times the interquartile range ("3IQR"), the median plus five times the interquartile range ("5IQR"), the top 5% of observations, or the top 1% of observations. We either trim outliers ("T") or winsorize them ("W"). $Exposure_j$ is defined as the average paid-in equity-to-assets ratio among young firms (i.e., younger than four years) between 2000–2003 and normalized to have a standard deviation of one. $Post_t$ is a dummy equal to one from 2009 onwards. All specifications include five-digit industry fixed effects and two-digit industry-by-year fixed effects. Standard errors are clustered at the five-digit industry level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

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D.4 Placebo test

Figure D.3: Effect of the Reform on Flexible Bylaws Adoption: New Firms vs Incumbents



The graph presents the OLS estimates of the β_t coefficients in equation (1), where *Post* is replaced by a collection of year dummies. 2007 is taken as baseline. The dependent variable is a dummy equal to one if the firm switches to flexible bylaws legal form in year t. The red diamonds give the point estimates for new firms, the blue circles the estimates for incumbent firms. The bars give the 95% confidence intervals. Standard errors are clustered at the five-digit industry level.

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