Contract Completeness of Company Bylaws and Entrepreneurial Success

Paul Beaumont, Johan Hombert, Adrien Matray

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Motivation

- Theory assigns a key role to financial contracts in entrepreneurial success:
  - Allocation of cash-flow rights and control rights to mitigate agency problems
- Evidence of sophisticated financial contracting in VC (Kaplan-Stromberg 2003)
- Little evidence beyond VC-backed firms
- Does sophisticated financial contracting matter?
  - May foster performance by mitigating agency problems
  - Risk of mistakes and exploitation of biased entrepreneurs (Landier-Thesmar 2009)

This Paper

1. Do entrepreneurs write sophisticated company bylaws? *[in progress]*
   - Company bylaws ≡ contract between entrepreneurs and external shareholders
   - Analyze bylaws of the universe of French startups 2003-2013
2. What is the impact of improving contract completeness?
   - Reform that reduced the cost of writing complex bylaws
   - Entrepreneurial success increases

Related Literature

1. **Financial contracting and entrepreneurship.** Kaplan and Strömberg (2003, 2004).

2. **Real effects of firms' legal form.** Tax: Goolsbee, 2004; Yagan, 2015; Giroud and Rauh, 2018; Matray, 2023. — Incorporation: Levine and Rubinstein (2016); Astebro and Tag, 2017; Bellon, Cookson, Gilje, and Heimer (2021). — Limited liability: Akey and Appel (2021).

3. **Regulation and entrepreneurship.** Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2002); Branstetter, Lima, Taylor, and Venancio (2014); Amici, Giacomelli, Manaresi, and Tonello (2016); Gregg (2020), and Guzman (2020).

4. **Financing frictions and entrepreneurship.** Kerr and Nanda (2010); Adelino, Schoar, and Severino (2015); Hombert, Schoar, Sraer, and Thesmar (2020); Adelino, Ma, and Robinson (2017); Kerr, Kerr, and Nanda (2022); and Jensen, Leth-Petersen, and Nanda (2022).

Outline

1. Do entrepreneurs write complex bylaws?

2. Impact on entrepreneurial success

Data

- Bylaws of every company started in France between 2003 and 2013
- Source: public administration API
- 1.2 Mns pdfs
- 60k startups per year
- 2 documents per firm on average (incl. updates of bylaws)

SARL vs SAS

- French entrepreneurs choose between two legal forms
  - SARL imposes boilerplate bylaws *("restricted")*
  - SAS allows for customized bylaws *("flexible")*

	SARL (restricted bylaws)	SAS (flexible bylaws)
Multiple share classes	Not allowed.	Allowed.
Sales of shares	Required shareholders approval. Bylaws specify majority rule, but at least 2/3 and less than unanimity.	May be freely tradable or subject to any customized limitations.
Governance	One or several managing directors.	May have board of directors, supervisory board, executive committee, etc. Customizable rules. Only requirement: CEO.
Voting	One share-one vote.	Customized voting rights and majority rules.

Example – Mas de Grille

<u>ARTICLE 1 - Forme</u>

La Société est une Société par actions simplifiée régie par les dispositions légales applicables et par les présents statuts.

Elle fonctionne indifféremment sous la même forme avec un ou plusieurs associés.

Elle ne peut faire appel public à l'épargne sous sa forme actuelle de Société par actions simplifiée.

Elle peut émettre toutes valeurs mobilières définies à l'article L 211-2 du Code monétaire et financier, donnant accès au capital ou à l'attribution de titres de créances, dans les conditions prévues par la loi et les présents statuts.

<u>ARTICLE 2 - Dénomination sociale</u>

La dénomination sociale est :

MAS DE GRILLE

Sur tous les actes et documents émanant de la Société, la dénomination sociale doit être précédée ou suivie immédiatement des mots «Société par actions simplifiée» ou des initiales «S.A.S.» et de l'énonciation du capital social.

<u>ARTICLE 3 - Siège social</u>

Le siège social est fixé :

Zone Industrielle les Trouyaux 34560 POUSSAN

Il peut être transféré en France métropolitaine par décision du Président qui est habilité à modifier les statuts en conséquence ; et partout ailleurs par décision des associés.

<u>ARTICLE 4 - Objet</u>

La Société a pour objet directement ou indirectement, tant en France qu'à l'étranger :

L'acquisition, la création, la gestion et l'exploitation sous quelle forme que ce soit de tous fonds de commerce d'hôtellerie, de restauration, de débits de boissons, préparations de plats à emporter.

Example – Mas de Grille

Article 1: Legal form

"The Company is a SAS [flexible bylaws legal form] governed by the applicable legal provisions and by these bylaws.

It operates indifferently in the same form with one or more shareholders.

It may not issue shares to the public in its current form as an SAS.

It may issue any securities as defined in Article L 211-2 of the French Monetary and Financial Code, giving access to capital or the allocation of debt securities, under the conditions provided for by law and these bylaws."

Article 4: Purpose

"The purpose of the Company is the acquisition, creation, management and operation, in any form whatsoever, of all hotel, restaurant, beverage and takeaway businesses."

The Originals City, Le Mas De Grille, Montpellier Sud

458 reviews | #3 of 9 hotels in Saint-Jean-de-Vedas

93 Rue Theophraste Renaudot, 34430 Saint-Jean-de-Vedas France

Write a review

Example – Mas de Grille

Multiple share classes

“The share capital is set at 40,000 euros, divided into:

– 3,000 Class A shares with a par value of 10 euros allotted to SARL AUBRAC HOTEL

– 1,000 Class B shares with a par value of 10 euros allotted to Mr Christian Dalle”

Example - Mas de Grille

Differential cash flow rights

“(...) Class A shares are entitled to a cumulative preferential dividend limited to 100,000 euros. Once the cumulative preferential dividend has been paid, Class A shares and Class B shares will be entitled to the same dividend. (...)”

Example – Mas de Grille

Liquidation rights

- Approval:

  "Class A shares are freely transferable."

  "Class B shares may only be transferred to third parties with the approval of Class A shareholders."

- Preemptive rights:

  "Each shareholder has a preemptive right to the Class B shares to be sold."

- Tag-along rights:

  "If one of the shareholders intends to sell all or part of its shares to a third party, thereby reducing its ownership share to less than 5% (...), the selling shareholder must allow the other shareholders, if they so wish, to sell their shares under the same conditions and in the same proportions."

Example – Mas de Grille

Deviation from one-share-one-vote

“Quorum: (...) at least half of the Class A shares (...)”

“In order to be approved, any decision must receive both two-thirds of the votes of the shareholders present or represented and owning Class A shares, and two-thirds of the votes of the shareholders present or represented and owning Class B shares.”

Summary Statistics *IN PROGRESS*

- Before the reform, 5% of entrepreneurs opt for the flexible bylaws legal form
- Among them, 10% issue multiple share classes, which don't replicate VC contracts but use only some of the VC common provisions

  ≈1/3 use preferred dividend rights

  ≈1/3 use preferred cash-out rights

  ≈1/3 use preferred voting rights

  ≈1/3 use preferred board/CEO appointment rights

  [orders of magnitude – in progress]

- The choice of flexible bylaws correlates with firm performance. A priori both selection and treatment

Outline

1. Do entrepreneurs write complex bylaws?

2. Impact on entrepreneurial success

Ideal Experiment

- Q: Does the possibility to write more complete contracts foster entrepreneurial success?

- Ideal experiment: compare firms that can write complex contracts to firms that can't

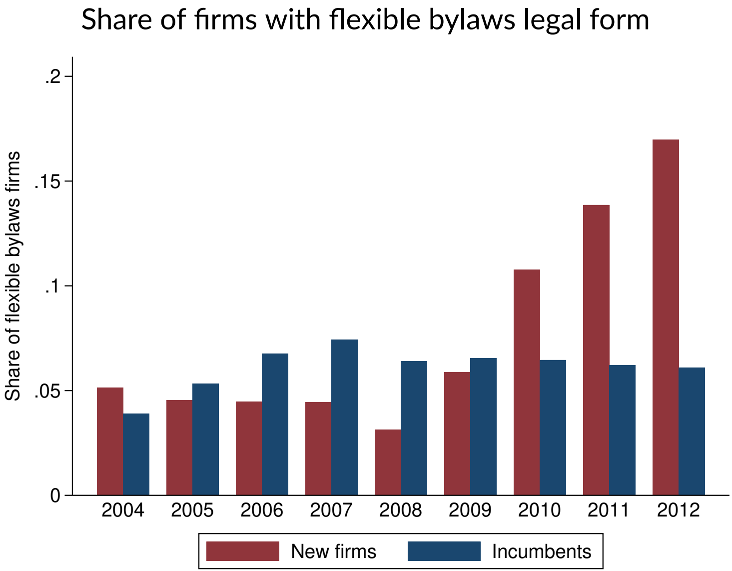
- Our experiment: a reform that reduced the cost to start a SAS (flexible bylaws) relative to a SARL (restricted bylaws)

The Reform

The French “Economy Modernization Act” reduced the costs of flexible bylaws and aligned them with restricted bylaws firms

1. Minimum equity requirement
   - Until 2008: minimum of 37k€ to start a flexible bylaws firm vs €1 for a restricted bylaws firm
   - After 2008: €1 for both
   - Pre-reform requirement was binding: 4 years after the reform, 90% of flexible bylaws firms are started with equity $<$ 37k€
2. Reduced taxes on capital gains for flexible bylaws firms
3. Relaxed audit requirements for flexible bylaws firms

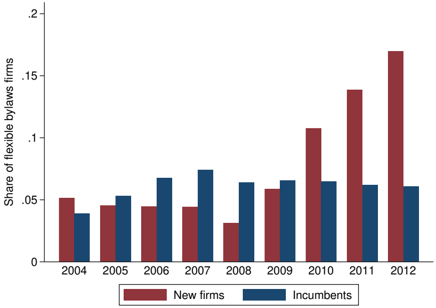
Adoption of Flexible Bylaws



Adoption of Flexible Bylaws

- Large take-up of flexible bylaws by new firms
- No take-up by incumbents
  - Organizational inertia, legal costs
  - Consistent with literature (MacKie-Mason 1994, Giroud-Rauh 2018, Matray 2023)

⇒ **Use incumbents as control group**



Data

1. **Business registry:** startup date, legal form
2. **Corporate tax filings:** annual financial statements
3. **Payroll tax filings:** worker-level occupations, wages and demographics

$\Rightarrow$ **Main sample**

- SARL and SAS, 2004–2012
- New firms
- Incumbents aged 5-10

Isolating the Effect of Flexible Bylaws

- The reform makes some firms choose flexible bylaws (marginal firms)
- It also reduces costs for firms that would have chosen flexible bylaws anyway (inframarginal firms)
- Taking the average firm outcome in sector *j*:

$$\Delta \text{FirmOutcome}_{j,Pre \to Post} =$$

$$\underbrace{\beta \times \Delta \text{Share of flexible bylaws}_{j,Pre \to Post}}_{\text{Effect of flexible bylaws on marginal firms}} + \underbrace{\gamma \times \text{Share of flexible bylaws}_{j,Pre}}_{\text{Effect of removing requirements on inframarginal firms}}$$

Specification: A Treatment Intensity Approach

$$Y^{k}_{i,j,t\rightarrow t+3} = \beta \; Exposure_j \times Post_t + \alpha_j + \delta_{j_2,t} + \gamma \; X_{i,t} + \epsilon_{i,j,t}$$

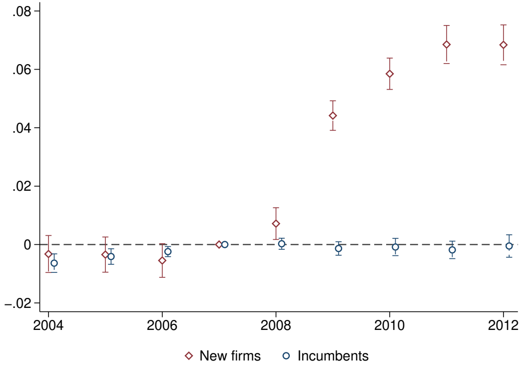
- $Y^{k}_{i,j,t\rightarrow t+3} = 1$ if firm i, in industry j, started in year t, is in the top k% of the distribution of firm outcome in year $t+3$
- $Exposure_j$: Δshare of flexible bylaws firms$_{j,Pre\rightarrow Post}$
- $Post_t$: Year $\geq$ 2009
- α_j: 5-digit industry FE
- $\delta_{j_2,t}$: 2-digit industry$\times$year FE
- $X_{i,t}$: pre-reform share of flexible bylaws firms $\times$ Post

Threat to Identification

- Firms more exposed to the reform could be hit by post-reform industry shocks
- Solutions:
    1. Pre-reform parallel trends
    2. Compare new and incumbent firms in the same 5-digit industry (industry-year FE)
        - Incumbent $\equiv$ firms between 5 and 10 years old
        - Exposed to similar industry shocks, but not to the reform

First Stage: Flexible Bylaws Adoption

- LHS: =1 if firm has flexible bylaws legal form
  - ⇒ Higher take-up of flexible bylaws in more exposed sectors ← Mechanical
  - ⇒ No pre-trends for new firms + no effects on incumbent ← Not mechanical



Firm Creation

– No effect at the extensive margin

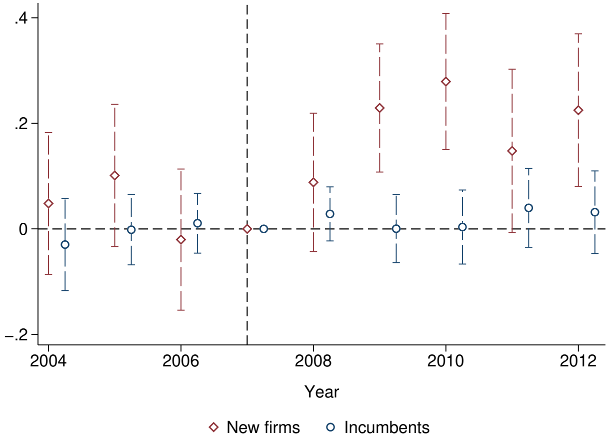
	Log(# firms)	
Weights:	E-W (1)	# firms (2)
Exposure×Post	-0.0047 (0.026)	0.010 (0.078)
Fixed Effects		
Industry	✓	✓
Industry (2-digit)×Year	✓	✓
Controls		
Pre-reform flexible share×year	✓	✓
Observations	4,635	4,366

Effect on Capital

– LHS: =1 if fixed assets after three years is in top 20% (new firms)
  if three-year fixed assets growth is in top 20% (incumbents)

⇒ New firms in more exposed sectors experience faster capital growth

⇒ No effect on incumbents



Effect on Capital

	New firms	Incumbents	All		
	(1)	(2)	(3)	(4)	(5)
Exposure×Post	0.17***	0.044	0.044		
	(0.050)	(0.029)	(0.029)		
Exposure×Post×New firm			0.13**	0.12*	0.14**
			(0.059)	(0.062)	(0.059)
Fixed Effects					
Industry×New	✓	✓	✓	✓	✓
Industry (2-digit)×New×Year	✓	✓	✓	✓	✓
Industry×Year	–	–	–	✓	✓
County×New×Year	–	–	–	–	✓
CEO demographics×New×Year	–	–	–	–	✓
CEO wage×New×Year	–	–	–	–	✓
Controls					
Pre-reform flexible share×New×Year	✓	✓	✓	✓	✓
Observations	688,846	1,432,548	2,121,394	2,121,394	2,121,394

Magnitudes

1. $Exposure_j$ is scaled by first stage coefficient $\Rightarrow$ IV interpretation

$\Rightarrow$ Flexible bylaws increase the probability of reaching the top 20% of fixed assets by 14 pp

i.e., by 29% given baseline probability of 48 pp for flexible bylaws firms

2. The effect is concentrated in top quantiles

Probability of reaching P50 increases by 5 pp

	P66	16^{**} pp
	P75	18^{**} pp
	P80	14^{**} pp
	P90	18^{***} pp

Mechanism: Equity Issuance

- Hypothesis: Improved contracting allows firms to raise more equity
- Replace the LHS with equity at $t = 3$
- To neutralize the effect of retained earnings: (equity at $t = 1$) + (issuance at $t = 2$) + (issuance at $t = 3$)

Mechanism: Equity Issuance

⇒ New firms in exposed sectors are more likely to raise equity

	New firms	Incumbents	All		
	(1)	(2)	(3)	(4)	(5)
Exposure×Post	0.22***	-0.038	-0.038		
	(0.082)	(0.032)	(0.032)		
Exposure×Post×New firm			0.26***	0.32***	0.39***
			(0.081)	(0.066)	(0.060)
Fixed Effects					
Industry×New	✓	✓	✓	✓	✓
Industry (2-digit)×New×Year	✓	✓	✓	✓	✓
Industry×Year	–	–	–	✓	✓
County×New×Year	–	–	–	–	✓
CEO demographics×New×Year	–	–	–	–	✓
CEO wage×New×Year	–	–	–	–	✓
Controls					
Pre-reform flexible share×New×Year	✓	✓	✓	✓	✓
Observations	496,956	995,746	1,492,702	1,492,702	1,492,702

Effect on Labor

- If labor needs upfront financing, improved financing should increase employment
- If labor is a per-period variable cost, employment should respond less than capital
- Test: replace the LHS with the wage bill (account for both quantity and quality of employment)

Effect on Labor

⇒ New firms in more exposed sectors are more likely to be in the top 20% of labor growth

⇒ No effect on incumbents

	New firms	Incumbents	All		
	(1)	(2)	(3)	(4)	(5)
Exposure×Post	0.14*** (0.042)	-0.0018 (0.037)	-0.0018 (0.037)		
Exposure×Post×New firm			0.14*** (0.047)	0.18*** (0.052)	0.24*** (0.045)
Fixed Effects					
Industry×New	✓	✓	✓	✓	✓
Industry (2-digit)×New×Year	✓	✓	✓	✓	✓
Industry×Year	–	–	–	✓	✓
County×New×Year	–	–	–	–	✓
CEO demographics×New×Year	–	–	–	–	✓
CEO wage×New×Year	–	–	–	–	✓
Controls					
Pre-reform flexible share×New×Year	✓	✓	✓	✓	✓
Observations	688,846	1,432,548	2,121,394	2,121,394	2,121,394

Effect on Revenue

- Capital increases + Labor increases $\Rightarrow$ Output should increase
- Test: replace the LHS with revenue

Effect on Revenue

⇒ New firms in exposed sectors are more likely to be in the top 20% of revenue growth

⇒ No effect on incumbents

	New firms	Incumbents	All		
	(1)	(2)	(3)	(4)	(5)
Exposure×Post	0.15***	-0.024	-0.024		
	(0.046)	(0.036)	(0.036)		
Exposure×Post×New firm			0.17***	0.21***	0.25***
			(0.055)	(0.055)	(0.050)
Fixed Effects					
Industry×New	✓	✓	✓	✓	✓
Industry (2-digit)×New×Year	✓	✓	✓	✓	✓
Industry×Year	–	–	–	✓	✓
County×New×Year	–	–	–	–	✓
CEO demographics×New×Year	–	–	–	–	✓
CEO wage×New×Year	–	–	–	–	✓
Controls					
Pre-reform flexible share×New×Year	✓	✓	✓	✓	✓
Observations	688,846	1,432,548	2,121,394	2,121,394	2,121,394

Entry Size vs Post-Entry Growth

- At which stage does improved contracting matter most for growth?
- So far, we focused on performance at 3 years
- Decompose into entry size (year 1) and post-entry growth (from year 1 to year 3)

Entry Size vs Post-Entry Growth

- $\Rightarrow$ New firms start larger
- $\Rightarrow$ New firms grow more post-entry (employment not significant $\rightarrow$ firms frontload hiring)

Panel A: Size at entry.						
	$\Pr[K_{t+1} > \text{p80}]$		$\Pr[L_{t+1} > \text{p80}]$		$\Pr[Y_{t+1} > \text{p80}]$	
	New firms	All	New firms	All	New firms	All
Exposure×Post	0.24***		0.11**		0.14***	
	(0.049)		(0.047)		(0.046)	
Exposure×Post×New firm		0.21***		0.15***		0.19***
		(0.058)		(0.048)		(0.053)
Panel B: Post-entry growth.						
	$\Pr[\Delta K_{t+1\rightarrow t+3} > \text{p80}]$		$\Pr[\Delta L_{t+1\rightarrow t+3} > \text{p80}]$		$\Pr[\Delta Y_{t+1\rightarrow t+3} > \text{p80}]$	
	New firms	All	New firms	All	New firms	All
Exposure×Post	0.26***		0.035		0.10**	
	(0.042)		(0.041)		(0.044)	
Exposure×Post×New firm		0.19***		0.061		0.14**
		(0.045)		(0.055)		(0.056)

Allocative Efficiency

- Does more flexible contracting allow capital to be better reallocated across firms?

- Test whether post-entry growth (from year 1 to year 3) is correlated with the marginal return to capital in year 1

Allocative Efficiency

(1) Capital grows more in new firms with high MRPK ⇒ allocative efficiency improves

(3) Not true for labor (consistent again with frontloaded hiring)

	New firms (1)	Incumbents (2)	New firms (3)	Incumbents (4)
	$\mathbf{Pr}[\Delta \mathbf{K}_{t+1 \to t+3} > \mathbf{p80}]$		$\mathbf{Pr}[\Delta \mathbf{L}_{t+1 \to t+3} > \mathbf{p80}]$	
	(1)	(2)	(3)	(4)
Exposure×High MRP×Post	0.29***	0.050	0.027	0.047
	(0.062)	(0.034)	(0.051)	(0.031)
Fixed Effects				
Industry×High MRP	✓	✓	✓	✓
Industry×Year	✓	✓	✓	✓
High MRP×Year	✓	✓	✓	✓
Revenues deciles×Year	✓	✓	✓	✓
Capital deciles×Year	✓	✓	✓	✓
Labor deciles×Year	✓	✓	✓	✓
Observations	586,798	1,251,460	605,775	1,218,691

Conclusion

- More complete contracts foster entrepreneurial success
  - Firms raise more equity $\Rightarrow$ larger at creation, grow more post entry
  - Capital flows to the more productive firms
- Standardizing contracts to promote entrepreneurship could backfire
- Work in progress: more information about contracts