Article



The Direct Effect of Corporate Law on Entrepreneurship

Jorge Guzman^{1,*}

¹Management Division, Columbia Business School, Kravis Hall, 975, 665 W 130th St, New York, NY 10027, USA

*Corresponding author: E-mail: jag2367@gsb.columbia.edu

ABSTRACT

From 1946 to 1983, US states modernized their corporate law by adopting the Model Business Corporation Act (MBCA), a compendium of legal best practices. Better corporate law increased entrepreneurship. After the adoption of the MBCA, the number of new local corporations increased by 26% on average, half of which was substitution from other firm types, and the rest was net-new firms. States that only partially adopted saw no benefit, and the largest increases were concentrated in regions with ex ante lower quality law. At the individual level, people in states adopting the MBCA also report higher self-employment levels, but not higher wage employment or labor force participation. Consistent with the MBCA increasing efficiency and decreasing regulatory capture, the effect was larger for women, black, and those located outside the central city.

1. INTRODUCTION

Finance depends on good corporate law (La Porta et al. 1998; Landes et al. 2012). This is particularly true for risky investments such as entrepreneurship (Djankov et al. 2002; Lerner and Schoar 2005). By providing clear rules governing the behavior of firms and their managers, good corporate law reduces transaction costs and alleviates principal-agent problems (Williamson 1975; Romano 1993; Cooter and Schäfer 2011). This article asks whether corporate law improvements can ultimately increase regional entrepreneurship, considering the case of the United States.

The United States has a distinct approach to corporate law, anchored around its federalist tradition (Romano 1985, 1993). Rather than corporate law being centralized at the national level, states choose and introduce their corporate law charters virtually independently. Firms are allowed to choose any state as their state of incorporation—a sort of statutory domicile—independent of their physical presence. Because incorporation fees and taxes provide states with revenue, there is competition among states that leads to the quick adoption of good practices (Romano 1985). The most common way for these practices to be adopted is

through an intermediary general purpose act, named the Model Business Corporation Act (MBCA). The MBCA is a prototype legal act maintained by the American Bar Association, capturing well-vetted principles of good corporate law. State legislatures use this prototype to develop their own state-level acts. As argued most prominently by La Porta et al. (1997), these improvements in corporate law should increase entrepreneurship through multiple channels, such as improving the willingness of entrepreneurs to engage with investors and increasing their prospects at raising debt. Furthermore, if the prior law contained inefficiencies that benefited a core number of constituents—that is, leading to regulatory capture (Laffont and Tirole 1991)—then the benefits should be larger for those outside of this group, such as women, minorities, and those outside the core city.

This article provides an empirical assessment of the impact of adopting the first version of the MBCA—released in 1946—on regional entrepreneurship. Using a difference-indifferences approach, I study the number of new corporations created each year before and after the adoption of the MBCA in each state. Registering as a corporation is the legal procedure required to create a new firm (indeed, it is its filing that creates the firm). The process requires both a jurisdiction for the firm and a physical business location. Firms must register in their jurisdiction of incorporation and also in each state in which they engage in meaningful business activity. However, corporate law improvements only benefit firms if they occur in their jurisdiction. For example, New York entrepreneurs registered under New York jurisdiction do not see a direct benefit from improvements in Nevada law, even if they hold a large branch office in Nevada. Similarly, Massachusetts entrepreneurs registered under Delaware jurisdiction do not benefit directly from improvements in Massachusetts corporate law, even if that is their home state. This article takes advantage of the fact that different firms in the same location may benefit differently from corporate law improvements to compare firm founding rates controlling for local business conditions and net out the effect of the law itself.

The main comparison is the rate of new registrations of local corporations relative to the control group of new registrations of firms headquartered in other states that expand into the state. The necessary assumption for this approach is that the omitted variables that increase entrepreneurship in the state, such as the local business cycle, make the state similarly more attractive for expanding firms. This article begins by showing that this assumption appears valid in the data. While the introduction of the law is obviously not random, and there is significant endogeneity in the introduction of corporate laws even with two-way fixed effects (i.e., state and year), once firm formation is measured relative to expanding firms from Delaware jurisdiction, the pre-trends become zero. The registration rate of firms in neighboring states, who are exposed to local economic cycles but not affected by corporate law changes, also changes from a pre-trend to zero. At a political level, the adoption of the MBCA appears unrelated to local politics such as the timing of elections and the composition of the state legislature, or other actions improving the state business environment, such as banking deregulation (Kerr and Nanda 2009). Taken together, this evidence suggests that the empirical approach controls for the necessary omitted variables.

I estimate a substantial impact of corporate law improvements on entrepreneurship. The number of local corporations (the type most benefited by the MBCA) formed annually increases by 26% on average after a state's adoption. This effect comes about quickly, after three years of adoption, and persists for up to 15 years. Yet, a meaningful portion of this increase is substitution from other firm types. Half of the main effect can be accounted for by

¹ The number of registrations shows visible pre-trends before the law and, consistent with the idea that this is driven by local economic shocks, the number of registrations in neighbor states (who do not enact the law) is also increasing.

reductions in either limited partnerships of local jurisdiction or in firms headquartered in the state but incorporated in Delaware. The net effect of corporate law is therefore about 13%.

Several additional robustness tests support this result. The result remains stable when including additional controls for state business activity, such as employment and employment growth. They are also robust to using other sets of firms as the control group, such as including expansions from other jurisdictions (and not only Delaware) as the control category, and changing the control category to be the rate of registrations in firms local to neighbor states. They are also not sensitive to dropping all observations for states that have had the MBCA act for more than a decade. I then perform two validations focused on recent concerns raised on the estimation of two-way fixed effects models. The first is a concern over treatment heterogeneity which can bias, and even invert the sign of, the estimated average treatment effect (de Chaisemartin and D'Haultfœuille 2020). Using the estimator by de Chaisemartin and D'Haultfœuille that corrects for this bias shows virtually identical estimates. The second is an additional validation for the potential endogeneity of treatment. Here, I consider the instrumental variables approach of Freyaldenhoven et al. (2019) who show that given the availability of an imperfect proxy for an endogenous variable, such as the foreign (non-local) firm expansions I use as a control group, it is possible to use the forward lag of treatment instrumenting the proxy to control for endogeneity. Once again, the effects are unchanged. Altogether, these validations emphasize the robustness of the main estimate to a series of potential concerns.

Finally, I present a placebo test using variation in the quality of corporate law implemented. To do so, I use historical accounts from the authors of the original MBCA that include their own assessment as to whether the MBCA was implemented well, or poorly, in different states. In contrast to the substantial main effect, which only used the full implementations of the MBCA, the effect for versions of the law that are implemented poorly is zero. This is consistent with the idea that increases in entrepreneurship are driven by an improvement in the quality of the law rather than the passage of a corporate act itself.

Next, I study heterogeneity across the level of development of corporate law in each state. The benefits of corporate law improvements to entrepreneurship must depend on the relative improvement compared with the local law. I find that states that have a smaller legal industry, and a lower density of incorporations in 1950 (as proxies for a poorer legal environment a priori) benefit more. Western states, which had relatively less developed institutions at the time, also see a higher benefit. On the other hand, adopting the MBCA had a small and non-significant effect on states in the Midwest. These states were more developed at the time and the Illinois corporate code had served as a starting point for writing the MBCA (the American Bar Association is located in Chicago). Thus, it is intuitive that adopting the MBCA would have no effect since the relative improvements in the legal environment were much lower.

In the final section, I use data from the US Current Population Survey (CPS) and move beyond firm registrations to study individuals instead. These data allow me to study the labor choices of individuals and consider heterogeneity across demographics. Using repeated cross-sections before and after the MBCA adoption with state and year fixed effects, I document that people in states that adopted the MBCA have higher self-employment, but no higher wage employment or labor force participation. These differences indicate that MBCA adoption increased entrepreneurship and not only firm registration. Furthermore, when considering the increase in self-employment across demographics, I find larger effects in groups that are more marginalized in the typical business environment of this time, including women, black, and those outside the central business district. These results suggest that by reducing regulatory uncertainty, the MBCA in turn reduced regulatory capture (Laffont and Tirole 1991). The effect for individuals who just moved from out of state is zero, suggesting the MBCA did not promote any inter-state migration.

These results contribute to multiple areas of the literature on finance, law, and entrepreneurship.

The first is the large body of empirical work studying the impact of law on regional outcomes, both across states (Berkowitz and Clay 2005) and across countries (Djankov et al. 2002; Armour and Cumming 2008). While this literature initially studied long-run legal institutions (La Porta et al. 1998; Acemoglu and Johnson 2005; Lerner and Schoar 2005), it has more recently moved to investigate short-term variation using panels of countries to consider outcomes such as lending (Haselmann et al. 2009), investment (McLean et al. 2012; Brown et al. 2013), and innovation (Brown et al. 2013; Levine et al. 2017). Within the United States, a small number of papers have also used exogenous variation created by the forced change from tribal law to US law in Native American areas to understand the long-run impact of US legal institutions on the rule of law, financing, and sovereignty (Brown et al. 2016; Wellhausen 2017).

Relative to these prior studies, this article contributes to understanding the impact of the legal environment on regional activity in several ways. These include considering the direct effect of 'good corporate law' in and of itself, without the contamination of other aspects of institutions that go beyond corporate law, such as culture or the quality of courts and the judicial system; focusing on state-level changes rather than cross-country comparisons; and studying entrepreneurship, an outcome well understood to be a key driver of regional economic growth (Haltiwanger et al. 2013).

Second, this article contributes to the literature studying financial policies that motivate entrepreneurial ecosystems. Recent evidence suggests that policy has little impact on local entrepreneurship. For example, estimates of the effects of R&D tax credits on entrepreneurship show that, initially, they mainly help existing firms (Babina and Howell 2018; Lanahan and Feldman 2018; Agrawal et al. 2020) and that they take many years to promote new firm entry (Fazio et al. 2020). Similarly, state tax credits for angel investing appear to have largely been unhelpful in propping up entrepreneurial activity and instead primarily increased investment in low-quality insider firms in the United States (Denes et al. 2020).² Finally, Feldman (2001) presents a detailed case study of the US Capitol region (the Washington DC area) to show that the catalyst event for the formation of this entrepreneurial ecosystem was the presence of "pioneering entrepreneurs" who then created the necessary institutions as they grew, rather than direct ex ante government intervention. Together, this evidence predicts weak or null effects of government policy in improving entrepreneurial entry over the short term. This article, by contrast, documents one aspect of government policy that seems to positively impact entrepreneurship: the legal framework. Furthermore, consistent with Laffont and Tirole (1991), this article presents suggestive evidence that by reducing regulatory uncertainty, the MBCA also reduced regulatory capture and its associated inequality.

The remainder of this article proceeds as follows. Section 2 describes the MBCA. Section 3 reviews the data. Section 4 is the empirical model. Section 5 reports the empirical results. Section 6 concludes.

² However, Gonzalez Uribe and Paravasini (2019) show that similar credit had a significant positive effect in the UK.

2. THE MODEL BUSINESS CORPORATION ACT

The MBCA is a prototype legal act (i.e., a model) created by the American Bar Association to provide guidance to states seeking to improve their corporate code. Model acts are amalgamations of best practices in corporate law that legislative bodies (such as states or cities) can copy or adapt when developing their law. They are used extensively in the United States and often constitute significant guidance for state and municipal legislative improvements.

As the United States recovered from the war effort of the 1940s, inter-state commerce and population boomed, and most states found their corporate laws lacking the quality necessary to support the needs of a more sophisticated business community. The few exceptions to this were Delaware—a state that had already emerged as a location of choice for firms requiring sophisticated transactions—and some economically important states that had already developed complex law, such as New Jersey, Ohio, and New York.

Even though they faced a need for better corporate law, most states lacked the capabilities to create it. Some states were still in the process of achieving statehood themselves (e.g., Hawaii), and others either had such a small population or relied on citizen-legislators³ (who spend a large portion of their time in non-legislative activities) that state knowledge of how to set up and design new corporate law was roughly non-existent.

To fill this need, the American Bar Association, a non-profit entity dedicated to developing legal practice and teaching standards, decided in 1943 to create the MBCA. The original Model Act was released in 1946 and revised in 1950 and 1953, after long periods of open comment from the Association's members (Campbell 1956). The Model Act contained 145 sections, including:

The process of incorporation, corporate powers, corporate purposes, authorized shares, shareholder meetings, directors' meetings, dividends, directors' liabilities, charter amendments, the sale and mortgaging of assets, mergers and consolidations, dissolution, receivership, the admission and ouster of foreign corporations, annual reports, license fees and franchise taxes, and general provisions. (Campbell 1956)

States began to adopt it quickly. Maryland was the first in 1951, followed by Oregon (1953), Texas (1955), North Carolina (1955), and Wisconsin (1956). Fourteen more states adopted it over the next 10 years.

The extent of adoption, however, was not always the same. In most cases, the adoption of the act was virtually "complete" (in fact, often verbatim), in part due to the aforementioned preference for using the best practices as-is. However, in a small number of cases, states decided to adopt only portions of the act. The most notable one was North Carolina. As Campbell (1956), the lead author of the Model Act, notes:

In 1955 North Carolina adopted a new statute. While the published work of the North Carolina committee contains many references to, and credit lines for, the model act, the Section's committee feels that such a poor job was done in North Carolina that it rejects the thought of any kinship between the new North Carolina act and the model act.

Citizen-legislators are legislators that spend the bulk of their time in 'citizen' (non-legislative) activities, such as professional jobs or businesses. Even though the US federal government relies fully on 'professional-legislators' who get the bulk of their compensation from their legislative work, many US states even today continue to work through citizen-legislators. Squire (2007) provides a measure of professionalism across state legislatures in the present day. MacRae (1954) provides an in-depth account of Massachusetts legislators' common activities during this paper's study period.

Gibson and Freeman (1967) concur and mention that the MBCA was incorporated only "to a lesser measure" in the acts of Maryland (1951), North Carolina (1955), Alabama (1959), and Connecticut (1959).

Consistent with the important role of corporate law in the economic environment, these authors also emphasize the vast benefits for improved economic transactions provided by the MBCA. Reflecting on the new South Carolina law, Folk (1962) mentions:⁴

The prior law was no more than a collection of ad hoc provisions, enacted by the General Assembly as the need arose from time to time over a period of 150 years, and given the semblance of a corporate law only by their arrangement in the usual corporate law sequence. As a consequence, the prior law suffered from a remarkable combination of gaps, ambiguities, uncertainties, redundancies, and archaic restrictions with little or no bearing on contemporary problems. (p. 351)

Once this wave of adoption passed, the MBCA moved to a quasi-dormant state until it underwent a significant revision in 1983, with the release of the Revised MBCA (Goldstein and Hamilton 1983). The present study focuses on the adoption of the original Model Act and its influence on local economic activity.

3. DATA

This study takes advantage of several distinct data sets. The core data are a state-level panel measuring new firm formation across each state using historical business registration records procured through the Startup Cartography Project (Andrews et al. 2022). I add indicators of the introduction of new corporate acts modeled after the MBCA, built using historical articles published in *The Business Lawyer* and other outlets, and measures of state-level business activity through the US Census County Business Patterns (CBP) data. Finally, I also employ in a separate analysis the US Census Current Population Survey (CPS). I describe each data in turn.

3.1 Measuring entrepreneurship using business registration records

Measures of state entrepreneurship come from the business registration records of firms registered across US states between 1946 when World War II ended, and 1983, when the Revised MBCA was introduced. Business registration is the act of legally establishing a new entity with which to conduct business. Between 1946 and 1983, states broadly offered two types of registration to entrepreneurs: a corporation, which is a limited liability entity without pass-through taxation benefits and a limited partnership, which is a pass-through entity with unlimited liability for the general partners. Registering their firm as a corporation or partnership offers several important benefits to entrepreneurs compared with remaining an unregistered firm (sole-proprietorship): it can provide limited liability in risk-taking, tax advantages, a common entity for shared ownership and management, and it is a practical necessity for any company that wishes to receive investment.

As is the case today, entrepreneurs registering a new firm in the mid-twentieth century were not required to register their company under the state jurisdiction where they lived or where the company had its main business operations. Since the end of the 19th century, when the process of firm registration opened, a non-trivial number of new firms have been

⁴ Additional quotes by some of these authors on the improvements provided by the MBCA are presented in Supplementary Appendix A.

registered under Delaware jurisdiction, even when their principal headquarters are located elsewhere. This foreign (i.e., out of state⁵) registration does not imply that those firms do not register in their local state: firms are also required to register as a foreign firm in every state in which they conduct meaningful business.⁶

I received data on all corporations and limited partnerships of both local and foreign jurisdictions through the Startup Cartography Project (Andrews et al. 2022). The Startup Cartography Project is a project measuring the quality and quantity of entrepreneurship across US regions in the present day. With a team of collaborators, we engaged in an effort to request and purchase business registration data from the Secretaries of State (or Commonwealth) of each state. Even though the Startup Cartography Project focuses on entrepreneurship after 1988, most states provided the full database of their registrations, allowing us to also observe earlier years. Specifically, I received information on registered firms for 46 states after excluding 3 states that did not provide data before 1988—Illinois, Nebraska, and Pennsylvania—and excluding local Delaware firms, due to that state's unique nature in the US firm registration process. The analysis in this article is limited to the data from firms founded between 1946 and 1983. Limiting the time period to 1983 is also useful in that a different corporate law change—the introduction of limited liability companies (LLCs)—was starting to gain traction at this point since its invention by Wyoming in 1977, and it would go on to significantly alter the legal structure and incidence of US firms in the follow-on decades.8

I aggregate these data into a balanced panel of new firm registrations. Each observation includes several mutually exclusive measures of the number of firm registrations occurring in a given state and year. Local Corporations is the outcome variable of interest in most regressions. It represents the total number of new corporations registered in the local state jurisdiction in that state and year. This is the variable that the introduction of better corporate law should impact if corporate law does influence entrepreneurship. Local Partnerships represents the number of limited partnerships registered locally under the focal state's jurisdiction in a given year. While the MBCA also improved the quality of law for local limited partnerships, the relative improvement was higher for corporations. From the entrepreneur's perspective, it is therefore not clear if the appeal of registering as a local partnership increases or decreases after MBCA adoption. Local Delaware is the yearly count of new firm registrations for firms that are local to the state but have chosen to register under Delaware jurisdiction rather than the jurisdiction of the state in which they are located. Foreign Delaware is the yearly count of registrations of firms that are not local to the state and register as they enter the state in the process of expansion. While the first three variables indicate entrepreneurship in the state, the fourth one does not and indicates only expanding firms.

Finally, I include four more alternative measures that proxy for the level of local business activity. The first three are business expansions from other states besides Delaware. New Jersey Firms, New York Firms, and Ohio Firms are the number of firms registered in each state from these three jurisdictions, which represent the most economically developed and institutionally advanced states during this period. The fourth measure, Neighbor State Corporations, is the total sum of corporations registered as local firms in the states directly neighboring the

In US corporate law, the term 'foreign firm' simply reflects one registered under a different state jurisdiction, and not a

Generally, state legislatures require all companies that either lease property, hire employees, or get a bank account to register in the local jurisdiction.

Namely, while the entrepreneur usually chooses between a local firm and a Delaware firm in most states, these two choices are not available for firms located in Delaware, for obvious reasons.

See Gazur (1995) for a detailed account of the adoption of the LLC and its impact.

focal one. This is an additional proxy for the localized business activity occurring in a geographic area.

3.2 Documenting MBCA adoptions

To record the year when states adopted the MBCA, I take advantage of historical articles authored in creating either the MBCA itself or the state-level acts. A particularly useful source was the volumes of *The Business Lawyer*. Published by the American Bar Association, *The Business Lawyer* is the top trade journal for corporate law and the main channel of public commentary on the MBCA. It includes articles written by the lead author of the MBCA, Whitney Campbell (Campbell 1956), tallies of adoptions produced by the Association itself (American Bar Association 1965), and articles by the authors of specific state acts (Gibson 1956). I complemented this with law review articles by authors of individual pieces of legislation, especially the comprehensive accounts by George Gibson (Gibson 1956, 1958; Gibson and Freeman 1967) on the introduction of the Virginia Corporation Law, and by Siegel (1970) on the Michigan Business Corporation Act. Gibson and Freeman (1967) are particularly useful as it includes a list of all the states that adopted the MBCA up to 1967 and the year of adoption. Finally, I also found value in the more recent retrospective of the MBCA by Booth (2000), and the foreword on the state of corporate law in 1983 by Goldstein and Hamilton (1983) who wrote the Revised MBCA.

Table 1 documents the year of adoption of the MBCA in each adopting state, divided into two groups, complete and partial adoptions. I define two variables from these data. *MBCA Adopted* is a binary variable equal to 1 full for adoptions of the MBCA and 0 otherwise, and *MBCA Partial Adoption* is a binary variable equal to 1 for partial or "poor" adoptions of the MBCA and 0 otherwise.

3.3 Employment from CBP

I control for employment by using digitized versions of the County Business Patterns (CBP). CBP is an annual series provided by the US Census documenting business activity by industry at different levels of geographic granularity. I consider CBP data by SIC sector starting in 1956. I use manually digitized versions from 1956 to 1973⁹ and the CBP data created by Eckert et al. (2020) afterward. The CBP was not done by the US Census for all years, skipping the years 1957, 1958, 1960, 1961, and 1963. I use the value in the latest available previous year for these years.

3.4 Individual data from the CPS

Finally, I downloaded the CPS records from the Integrated Public Use Micro Series (IPUMS) database. IPUMS offers CPS information for the March version of the CPS starting in years 1962. I downloaded all observations from 1962 to 1989. For each response, I included their location, whether they are self-employed, whether they are a wage worker, whether they are in the labor force, their age, sex, race, metropolitan area, where in the metro area they are located, and whether they arrived to the state in the last year.

Between the years 1968 and 1976, the CPS recorded some regions, but not all, as groups of states, rather than individual states, such as "Arkansas-Oklahoma" and "South Carolina-Georgia." Since the shock in this article is purely at the state level, I exclude these observations. Finally, to avoid concerns of wrong comparisons in difference-in-differences (Goodman-Bacon 2021), I focus only on data from states adopting the MBCA during the

 $^{^{9}}$ I am thankful to Dan Gross for sharing the digitized records collected from the physical copies of the CBP data from 1956 to 1973.

Table 1. Adoption of MBCA.

Adoptions of MBCA						
State	Year	Source	In sample			
Oregon	1953	Campbell (1956)	Yes			
Texas	1955	Campbell (1956)	Yes			
Virginia	1956	Campbell (1956)	Yes			
Alaska	1957	Gibson and Freeman (1967)	Yes			
North Dakota	1957	Gibson and Freeman (1967)	Yes			
Colorado	1958	Gibson and Freeman (1967)	Yes			
Iowa	1959	Gibson and Freeman (1967)	Yes			
Utah	1961	Gibson and Freeman (1967)	Yes			
Wyoming	1961	Gibson and Freeman (1967)	Yes			
Mississippi	1962	Gibson and Freeman (1967)	Yes			
South Carolina	1962	Gibson and Freeman (1967)	Yes			
Nebraska	1963	Gibson and Freeman (1967)	No			
Missouri	1965	Gibson and Freeman (1967)	Yes			
Pennsylvania	1965	Gibson and Freeman (1967)	No			
Wisconsin	1965	Gibson and Freeman (1967)	Yes			
Arkansas	1965	American Bar Association (1965)	Yes			
Washington	1965	American Bar Association (1965)	Yes			
South Dakota	1965	American Bar Association (1965)	Yes			
Michigan	1971	Siegel (1970)	Yes			
Other Corporation	Acts only P	artially Adopting the MBCA				
Maryland	1951	Gibson and Freeman (1967)	Yes			
North Carolina	1955	Campbell (1956), Gibson and Freeman (1967)	Yes			
Alabama	1959	Gibson and Freeman (1967)	Yes			
Connecticut	1959	Gibson and Freeman (1967)	Yes			

time period of study and include only observations from 10 years before this adoption to 20 years after.

3.5 Summary statistics

Table 2 presents the summary statistics for each variable in the state-level data using business registrations. There are 1748 observations. Twenty-two percent of the observations have a new corporate act that adopted the MBCA, and 6% have a partial MBCA adoption. The number of annual local corporations and local limited partnerships founded in a state is on average 3709 and 264, respectively. There is substantial skewness in these measures driven by the skewed distribution of population and economic activity across US states. The number of local and foreign Delaware companies is lower but meaningful.

Figure 1 provides a sense of the evolution of firm registrations in the United States by plotting each variable over time with the *y*-axis on a log scale. We observe a clear log-linear trend in the data, consistent with firm formation growing on a balanced growth path on par with the broader US economy. This log-linearity supports the idea of including variables in their log form in the regression analysis. The slope of the curves reflects annual average growth on the firm formation rate between 1.1% and 1.9%, depending on the measure. Delaware local firm counts grew at 1.1% while Delaware foreign firms grew at 1.2%, a difference that is not statistically significant in the data.

Table 2. Summary statistics of state by year data set.

Variable	Details	Mean	Std. Dev.	N	
MBCA measures					
MBCA adopted	1 if the state has previously done a full adoption of the MBCA and 0 otherwise.	0.22	0.42	1748	
MBCA partial adoption	1 if the state has previously done a partial adoption of the MBCA and 0 otherwise.	0.06	0.24	1748	
Startup cartography measures					
Local corporations	The number of corporations of the state's local jurisdiction registered in a state and year.	3709.35	8704.46	1748	
Local partnerships	The number of partnerships of the state's local jurisdiction	263.5	1099.21	1748	
Local Delaware	registered in a state and year. The number of local firms registered under Delaware jurisdiction in a state and year.	24.72	60.01	1748	
Foreign Delaware	The number of foreign (other state) firms registered under Delaware jurisdiction in a state and year.	101.55	194.42	1748	
Neighbor state corporations	The number of firms registered in all neighboring states in each year.	13,631.48	18,529.45	1748	
Ohio firms	The number of firms from Ohio jurisdiction registered in a state and year.	188.83	1472.65	1748	
New Jersey firms	The number of firms from New Jersey jurisdiction registered in a state and year.	200.64	1776.5	1748	
New York firms	The number of firms from New York jurisdiction registered in a state and year.	21.36	56.09	1748	
Log(Local Corp./Foreign Del.)	The log ratio of local corporations to foreign Delaware firms.	3.26	1.04	1712	
Log(Local Part./Foreign Del.)	The log ratio of local partner- ships to foreign Delaware firms.	-0.21	2.07	1333	
Log(Local Del./Foreign Del.)	The log ratio of local Delaware firms to foreign Delaware firms.	-1.57	1.33	1208	
CBP measures					
Log(Total Emp. + 1)	Total employment in a state and year.	13.17	1.17	1748	
Log(Manufacturing Emp. + 1)	Total employment in the manufacturing sector in a state and year.	11.89	1.5	1748	
Log(Mining Emp. + 1)	Total employment in the mining sector in a state and year.	8.59	1.56	1748	
Log(Finance Emp. + 1)	Total employment in the finance sector in a state and year.	10.31	1.24	1748	

 $\it Notes:$ Data are state by year spanning the years 1946–1983 for 47 US states.

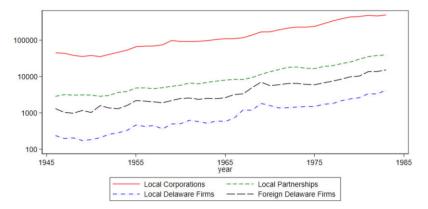


Figure 1. Number of new registrations by year in sample states. The figure presents the annual number of new firms registered in the USA in four mutually exclusive groups of firms. The *y*-axis is in a log-scale to reflect the exponential growth of population and the economy in this time-period. The observed log-linearity supports well the idea of using the log of firm counts as the dependent variable.

Supplementary Appendix Table A1 provides the summary statistics of the CPS data set. There are 192,483 observations in the data.

4. EMPIRICAL MODEL

The empirical approach focuses on the rate at which new local corporations are founded relative to the incidence of foreign Delaware firms, which are used as a proxy measure for the underlying economic activity of a region. The dependent variable of interest is the log ratio between local corporations and foreign Delaware firms. Specifically, for each state s at year t, I estimate

$$Log\left(\frac{Local\ Corporations_{s,t}}{Foreign\ Delaware_{s,t}}\right) = \alpha + \beta \times M_{s,t} + \gamma_s + \delta_t + \epsilon_{s,t},\tag{1}$$

where $M_{s,t}$ is an indicator equal to one if the state has adopted the MBCA (and zero otherwise), γ_s is a state fixed effect, δ_t is a year fixed effect, and $\epsilon_{s,t}$ is random noise. Standard errors are clustered at the state level. The advantage of this specification is that it forces the coefficient of *Foreign Delaware*_{s,t} to one, thus allowing β to be interpreted as the change in the registration of local corporations relative to the registration of foreign Delaware registrations for that state and year.

When year-by-year coefficients are reported, I instead estimate a coefficient β_{τ} where τ indicates the number of years after the new act goes into effect, taking a negative value for years before the act. The baseline category in these models is the year right before the act is adopted (i.e., $\tau=-1$, the last full year the prior corporate law is in effect). The estimating equation is then

12

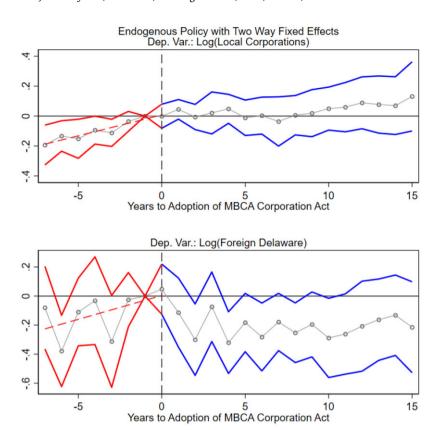


Figure 2. Graphical estimates on endogenous policy. The top panel reports the annual coefficients for the number of local corporations—the variable that is likely to be impact by the new law-before and after the law is adopted. The points represent the estimated coefficient and the lines are the 93% confidence interval. The baseline category is the year before the new law starts. The red dashed line represents the fitted values of all coefficients from t=-7 to t=0. Controls for the log of total employment, and of employment in the sectors of finance, manufacturing, and mining are included, as well as year and state fixed effects included. Standard errors clustered by state.

$$Log\left(\frac{Local\ Corporations_{s,t}}{Foreign\ Delaware_{s,t}}\right) = \alpha + \beta_{\tau} \times M_{s,\tau} + \gamma_{s} + \delta_{t} + \epsilon_{s,t}. \tag{2}$$

4.1 Validation of pre-trends

I assess whether this empirical approach controls for the endogeneity of the MBCA adoption graphically in Figure 2. Here, I report the annual coefficients of a two-way fixed effects model around the introduction of new acts adopting the MBCA, using the year before their introduction as the baseline. The top figure plots the yearly coefficients of local corporations registered including state and year fixed effects. There are noticeable pre-trends in the data that accentuate closer to the adoption of the new corporate law. This suggests that laws are adopted at the top of the business cycle. The bottom figure is the rate of foreign Delaware firms. There is a similar, though noisier, pre-trend before the introduction of corporate law, which peaks at the same time. The rate of foreign Delaware firms then decreases after the

introduction of the law. 10 In short, while there appears to be endogeneity in the law, this endogeneity is well captured by other control categories that are not affected by the law, so that studying the rate of firm registrations relative to these control categories could account for this endogeneity.

4.2 Other omitted variables: policy and politics

Controlling for foreign Delaware firms allows addressing changes in the endogenous role of business cycles and state growth in precipitating the adoption of the MBCA. However, there are other potential avenues for bias. A key concern is related to trends in policy or politics across locations. For example, the adoption of the MBCA could be correlated with the adoption of other business-friendly policies such as taxes (Fazio et al. 2020) or banking deregulation (Kerr and Nanda 2009). Then, the impact of these policies would be wrongly attributed to the MBCA. Similarly, changes in political cycles may precipitate the adoption of the MBCA in ways that would also relate to other business environment outcomes.

I consider these concerns before delving into the analysis.

Conceptually, while changes in policy and politics appear as plausible omitted variables, it is not obvious given the institutional nature of corporate law updates. The process of updating corporate law is a slow process of several years that is led by the legal bar association and practicing lawyers of a state, hoping to improve the practice of corporate law. Because it is led by practicing lawyers, it is not linked to other business environment areas that are more tightly linked to politics. For example, George Gibson, who led the MBCA-adopting act in Virginia, was a partner at the prestigious Richmond-based firm Hunton & Williams, LLP. Similarly, the South Carolina 1962 update was driven by Ernest Folk who worked initially in the Antitrust Division of the US Department of Justice, and then was a professor of corporate law (playing also a key role in the update of Delaware Corporate Law in 1967 and creating the Revised Model Corporation Act in 1983). Furthermore, an important component in the adoption of the MBCA was the existence of a Model Act to be incorporated, rather than simply the need for better corporate law. Indeed, both Gibson and Folk emphasize that the laws of their states had been in need of updating for a long time, but it had previously proved a difficult task due to the difficulties of finding a good model law to build on. Supplementary Appendix A provides a long and detailed description of the types of changes that the MBCA brought into Virginia and South Carolina. As can be appreciated, the changes are about the details" of corporate law and do not appear connected to generally perceived politically sensitive topics.

Empirically, the endogeneity of policy and politics also appears not to be important. To study this, in Supplementary Appendix Figure A8, I repeat the empirical approach of the article using the entry of state deregulation laws documented in Kerr and Nanda (2009) as the dependent variable. The adoption of the MBCA does not predict any type of state deregulation (de novo intrastate, M&A intrastate, or interstate). In Supplementary Appendix Figure A9, I consider instead the political environment surrounding the adoption of the MBCA using the state-level data set created by Weir and Martin (2012). The adoption of the MBCA does not predict the timing of elections, whether the state has a republican governor or the number of legislators in either the upper or lower house of the state legislature.

Supplementary Appendix Figure A2 reports the same analysis using the number of corporations in neighbor states instead. The results are similar to those of foreign Delaware firms.

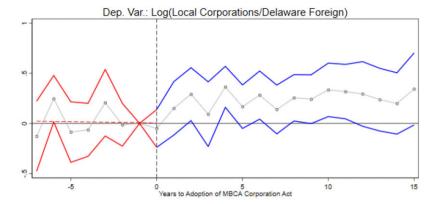


Figure 3. Main estimate. The figure reports the annual coefficients using the relative increase of local corporations compared with Delaware foreign registrations. The baseline category is one year before the law goes into effect. The red dashed line represents the fitted values of all coefficients from t=-7 to t=0. Controls for the log of total employment, and of employment in the sectors of finance, manufacturing, and mining are included, as well as year and state fixed effects included. Standard errors clustered by state.

5. RESULTS

5.1 Main estimates

I now proceed to the main estimates of the benefit of adopting the MBCA on regional entrepreneurship. Figure 3 presents the coefficients of the main regression (Equation (2)) graphically. The pre-trends are now effectively zero. The coefficients then turn positive and significant two years after the act is introduced and remain stable at an average level of 23% for up to 15 years. Supplementary Appendix Figures A3–A5 report this same graph in three other variations: including a 15-year pre-period panel, adding one to the number of corporations to avoid dropping any zeroes, and adding firms from other states to the control category. The results are virtually unchanged. There appears to be a meaningful benefit of adopting the MBCA on state-level entrepreneurship.

Table 3 estimates the effect using a two-way fixed effects regression with the preferred dependent variable. Columns (1) and (2) are preliminary models that suggest the unconditional correlation between adopting MBCA and regional entrepreneurship is negative. This makes sense because the states in most need of standardizing their corporate law were smaller and younger. Column (3) is the main estimate. The coefficient is 0.24 and statistically significant. It suggests that improvements in corporate law led to an average increase of 26% in firm formation during the period. 11

Columns (4)–(6) introduce a series of controls based on reported employment levels in the CBP. Column (4) controls for total employment. The coefficient is positive and significant, close to 1. This is reassuring as the amount of employed population in a location should have a very close link to total firm formation. Yet, while positive, introducing this control does not change the main effect of the MBCA.

Column (5) controls for employment in the manufacturing, mining, and finance sectors. Column (6) also includes two-year lags for all employment measures, in essence allowing to control for their growth rate. Once again, the main effect is effectively unchanged.

Table 3. Main estimate.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
MBCA adopted						0.219**	0.230**
$Log(Total\ Employment + 1)$	(0.225)	(0.253)	(0.126)	1.025**	1.025**	, ,	(0.0921) 0.152 (0.144)
Log(Manufacturing Employment + 1)				(0.203)	(0.203)	0.198	0.854**
$Log(Mining\ Employment + 1)$							(0.236) -0.0316 (0.0543)
$Log(Finance\ Employment + 1)$						0.570	-0.161
L2.Log(Total Employment + 1)						(0.339)	(0.368) 0.466**
L2.Log(Manufacturing Employment + 1))						(0.203) $-0.738**$
L2.Log(Mining Employment + 1)							(0.231) 0.0330 (0.0573)
L2.Log(Finance Employment + 1)							0.524
State fixed effects Year fixed effects Observations R2	No No 1712 0.011	No Yes 1712 0.038	Yes Yes 1712 0.825	Yes Yes 1712 0.846	Yes Yes 1712 0.846	Yes Yes 1712 0.848	(0.280) Yes Yes 1627 0.855

 $\it Notes: OLS model. Dependent variable is Log(Local Corporations/Delaware Foreign). Standard errors clustered at the state level.$

Significance denoted as: *p < 0.10, **p < 0.05, ***p < 0.01.

Table 4 studies substitution patterns in firm formation from the MBCA adoption. Columns (1) and (2) are variations of Equation (1) using local partnerships and local Delaware firms instead in the numerator. The coefficients are negative though noisy. The introduction of new corporate law did not increase the rate of local partnerships or the rate of new firms of Delaware jurisdiction headquartered in the state. This is reassuring and serves as a placebo test. Since the new law did not target these firm types, we should not see them increase.

However, the negative coefficients also suggest that there could have been substitution from these firm types into corporations. If this is the case, then some of the increase in corporations may not represent net new firms, but rather a shift in the choice of registration for some firms. To study this possibility, Columns (3)–(5) change the denominator of the dependent variable by replacing these local categories in the denominator. This allows the coefficient to represent the change in corporations relative to these other groups. The coefficients all hover around 0.4. Since this is about twice the magnitude of Table 3, 12 it implies that about half of all new corporations are substituting from other types, rather than net new firms. Furthermore, since Delaware firms are usually considered more growth-oriented firms, and partnerships less growth-oriented, than corporations, the similarity of coefficients suggests that this substitution pulled from both sides of the quality distribution.

Table 4. Substitution from other outcomes.	
--	--

	$Log\left(\frac{LocalPart.}{ForeignDel.}\right)$	$(2) \\ Log\left(\frac{LocalDel.}{ForeignDel.}\right)$	$Log\left(\frac{LocalCorps.}{LocalPart.}\right)$	$Log\left(\frac{LocalCorps.}{LocalDel.}\right)$	$Log\left(\frac{LocalCorps.}{LocalPart.+LocalDel.}\right)$
MBCA adopted	-0.254 (0.380)	-0.137 (0.210)	0.396 [*] (0.206)	0.456 (0.364)	0.433 (0.262)
Observations R^2	1333 0.726	1208 0.789	1214 0.732	1354 0.719	1597 0.777

Notes: OLS model. Dependent variables are constructed relative to the number of Foreign Delaware firms. Columns (1)–(3) replace local corporations from the main dependent variable with local partnerships (Column (1)), local Delaware firms (Column (2)), and the neighbor state local corporations (Column (3)). State and year fixed effects are included. Standard errors double clustered at the state and year level. Significance denoted as: *p < 0.10, **p < 0.05, ***p < 0.01.

5.2 Robustness tests

Table 5 reports a series of robustness tests including different control variables, subsamples, and dependent variables. Column (1) focuses more closely on the changes around the timing of treatment by dropping all observations for treated states that occur 10 years after treatment. The main estimate is now more precise and remains very close in magnitude to the main estimate. Columns (2) and (3) use two other proxies for the local economy instead of the count of foreign Delaware firms as the denominator in the dependent variable. Column (2) brings together the different measures of foreign firms in the data—foreign Delaware, New Jersey, New York, and Ohio. The coefficient is practically the same. Column (3) uses the number of corporations in neighbor states as the reference category. This is a different proxy for local economic conditions that does not use the registrations in the treated state. The coefficient is positive and slightly larger in magnitude.

Column (4) is a placebo test that considers the impact of treatment on the rate of corporations in neighboring states. If the effect I document is driven by unobservables that are correlated across states, then the MBCA may also show a positive treatment effect on the number of corporations in neighbors. Reassuringly, the effect is zero.

Supplementary Appendix Figure A6 considers more directly well-known challenges with two-way fixed effects models. To do so, I implement the estimator of de Chaisemartin and D'Haultfœuille (2020), who show that if there is treatment heterogeneity in a two-way fixed effects model, then some individual treatment effects could have negative weights biasing (and even changing the sign of) the estimated average treatment effect. The coefficients using their estimator are strikingly close to the main estimate. Concerns about bias induced through treatment heterogeneity are not first order in this data.

Table 6 considers an instrumental variable approach building on Freyaldenhoven et al. (2019). These authors show that in a panel setting with binary treatment and a proxy for potential confounders, the forward lags of treatment used as an instrument on the proxy can purge the effect of the confounders. In this article, I have throughout used foreign Delaware firms as a proxy for local business cycles, making the Freyaldenhoven et al. approach applicable. Column (1) reports the OLS regression for comparability. Column (2) implements the instrumental variable regression. The estimator used is LIML rather than OLS since the instrument is slightly weak, with a reported *F*-statistic of 2.8. The resulting estimates are once again the same.

Table 5. Robustness tests.

	(1) Subsample Drop 10 years after treatment	$Log\left(\frac{LocalCorps.}{ForeignDel. + NY + OH + NJ}\right)$	$Log\left(\frac{LocalCorps.}{NeighborCorps.}\right)$	$Log\left(\frac{\text{NeighborCorps.}}{\text{ForeignDel.}}\right)$
MBCA adopted	0.232**	0.237*	0.381**	0.0183
Observations	(0.102) 1511	(0.136) 1727	(0.166) 1746	(0.142) 1712
R^2	0.834	0.871	0.931	0.902

Notes: OLS model. Column (1) drops all states after they have been treated for 10 years using Log(Local Corporations/ Foreign Delaware) as the dependent variable. Column (2) includes firms from New York, Ohio, and New Jersey to the denominator count of all foreign firms. Column (3) uses a different proxy for the local economic cycle, the total number of local corporations in neighbor states. State and year fixed effects included in all regressions. Standard errors clustered at the state and year level.

Significance denoted as: *p < 0.10, **p < 0.05, ***p < 0.01.

Table 6. Robustness test: absolute change in local corporations.

	(1) OLS	(2) Instrumental variables (Freyaldenhoven et al. 2019) LIML
MBCA adopted	0.222**	0.240*
-	(0.103)	(0.133)
Log(Foreign Delaware)	0.221**	1.055
(0.0539)	(0.662)	
Observations	1712	1666
R^2	0.114	-1.185
Kleibergen-Paap weak ident. F-Stat.		2.792

Notes: OLS model. The dependent variable is Log(Local Corporations) and foreign Delaware firms are included as a control rather than the preferred specification that puts them as a ratio. Column (1) is the OLS model. Column (2) implements the approach in Freyaldenhoven et al. (2019) in which an endogenous control is instrumented by the forward lag of the treatment variable (i.e., MEGA adopted). State and year fixed effects included in all regressions. Standard errors clustered at the state and year level.

Significance denoted as: *p < 0.10, **p < 0.05, ***p < 0.01.

5.3 The quality of the MBCA adoption

Table 7 considers heterogeneity across the quality of the law implemented. Recall from Section 2 that while most states adopted the MBCA fully, which has been the focus of the analysis so far, there are some other states that only did a partial or poor implementation of the MBCA. Table 7 reports in Columns (1) and (2) the effect of these implementations on entrepreneurship. The coefficient is noisy and negative in sign. Figure 4 repeats this regression by plotting annual coefficients for these partial MBCA adoptions. We do not observe any pre-trends, but we also observe no positive increase subsequent to the new law. Incomplete or poor adoptions of the MBCA did not increase entrepreneurship.

	(1)	(2)
	$Log\left(rac{\left(LocalCorps. ight)}{ForeignDel.} ight)$	$Log\left(\frac{LocalCorps.}{ForeignDel.+NY+OH+NJ}\right)$
MBCA partial adoption	-0.302	-0.200
•	(0.309)	(0.201)
Observations	1712	1727
R^2	0.823	0.869

Table 7. Placebo test—poor and incomplete MBCA adoptions.

Notes: OLS model. Columns (1) and (2) are placebo tests using their adoption of corporate acts that are not the MBCA act. State and year fixed effects included in all regressions. Standard errors clustered at the state and year level. Significance denoted as: *p < 0.10, **p < 0.05, ***p < 0.01.

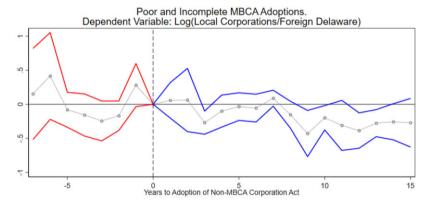


Figure 4. Partial MBCA adoption. The figure reports the coefficients of the main model of Section 4 for acts that did not implement the MBCA fully, the measurement of which is described in Section 2. Consistent with the principle that law leads to entrepreneurship, there is no effect from the act. Controls for the log of total employment, and of employment in the sectors of finance, manufacturing, and mining are included, as well as year and state fixed effects included. Standard errors clustered by state.

5.4 Heterogeneity by state legal development and timing

I next study the heterogeneity across states focusing on the level of development of the legal institutions at the beginning of the period. The goal is to assess whether states with less developed legal institutions saw a larger benefit from adopting the MBCA. Such evidence would be consistent with an improvement in the legal framework leading to higher entrepreneurship rather than other confounding factors.

In Table 8, I report a series of heterogeneity analyses dividing states by more and less developed legal institutions. For each test, we observe larger effects for states with less developed legal institutions, consistent with the idea that those states experiencing a larger improvement saw larger benefits from the law.

Columns (1) and (2) split the data based on the size of the law industry. Specifically, using the 1950 US Census 1% sample, I estimate the share of employed individuals in industry 841 (Legal Services) and split the states above and below the median of this value. The effects are substantially higher for those states with a smaller legal industry. While the coefficient in

	(1) Subsample below median law industry Size	(2) Subsample above median law industry Size	(3) Subsample below median Corps. per Emp.	(4) Subsample above median Corps. per Emp.	(5) Subsample below median Total Emp.	(6) Subsample above median Total Emp.
MBCA adopted	0.319**	0.109	0.369**	0.0429	0.282**	0.204
	(0.117)	(0.160)	(0.176)	(0.121)	(0.136)	(0.128)
Observations R^2	851	861	860	852	840	872
	0.864	0.836	0.776	0.886	0.820	0.783

Table 8. Heterogeneity by the development of state institutions in 1930.

Notes: OLS model. Dependent variable is Log(Local Corporations/Foreign Delaware). Columns (1) and (2) use the 1950 census 1% data and split states based on the average share of employed people who work in the law industry. All regressions include state and year fixed effects and control for the log of total employment, manufacturing employment, mining employment, and finance employment. Standard errors are clustered at state level. Significance denoted as: $^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table 9. Heterogeneity by location.

	(1) Subsample South	(2) Subsample West	(3) Subsample Midwest
MBCA adopted	0.232	0.269	0.0908
•	(0.184)	(0.304)	(0.181)
Observations	454	439	337
R^2	0.798	0.758	0.841

Notes: OLS model. Dependent variable is Log(Local Corporations/Foreign Delaware). South includes all confederate states. West includes Colorado, Wyoming, Utah, Idaho, Alaska, Hawaii, Nevada, Oregon, California, and Washington State. Midwest is Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, South Dakota, and Wisconsin. All regressions include state and year fixed effects. Standard errors are double clustered at state and year levels. Significance denoted as: $^*p < 0.10$, $^*p < 0.05$, $^{***}p < 0.01$.

states below the median of industry size is 0.319 and significant at the 5% level, the coefficient for those above the median is only 0.109 and not significant.

Columns (3) and (4) use the incidence of incorporation in 1950 instead as a measure of the sophistication of the legal industry by splitting states based on the number of local corporations by employed individuals established in that year. The effect is 0.369 and significant for states with a lower level of corporations per capita, but only 0.0429 and not significant for those with more corporations per capita.

Finally, Columns (5) and (6) focus on the state's size proxied through the total level of employed individuals, assuming that larger states generally require more complex corporate code. The effects are qualitatively similar to the previous ones, though the differences in magnitude are smaller.

Table 9 focuses on heterogeneity across locations. After World War II, the Midwest was an industrial powerhouse for the United States and a leading economic region, while the West was still in its ongoing process of settlement and the South was still largely an agricultural economy. The benefits of the MBCA on entrepreneurship are observed mostly in the (new states of) the West, and to a lesser extent on the South, with a minimal effect in the

	(1)	(2)	(3)
	Subsample	Subsample	Subsample
	Adopted 1950–1959	Adopted 1960–1969	Excluding 1965
MBCA adopted	0.382	0.229	0.281**
Observations	(0.230)	(0.139)	(0.137)
	1338	1421	1599
R^2	0.818	0.842	0.815

Table 10. Heterogeneity by time of adoption of MBCA.

Notes: OLS model. Dependent variable is Log(Local Corporations/Foreign Delaware). Column (1) considers only states that adopted the MBCA between 1950 and 1959. Column (2) is those that adopted between 1960 and 1969. Column (3) excludes the six states that adopted the MBCA in 1965. All regressions also include states that did not adopt the MBCA. State and year fixed effects included. Standard errors are clustered at state level. Significance denoted as: $^*p < 0.10$, $^*p < 0.05$, $^{***}p < 0.01$.

Midwest. This result is also consistent with the precedence of the law, since the Illinois corporate law was the original template from which the MBCA was developed.

Table 10 reports the coefficients across distinct periods. Column (1) considers only those states that adopted the MBCA before 1960, Column (2) contains those that adopted it between 1960 and 1969, and Column (3) excludes the six states that adopted it in 1965. The results appear broadly quite similar, though perhaps slightly higher for earlier adopters.

5.5 Heterogeneity based on state-level industry structure

Next, I assess heterogeneity in the benefits of adoption of the MBCA based on the industrial characteristics of the state that adopts it. To do so, I consider the state structure in 1956 and the relationship of employment in each SIC sector to the MBCA. Specifically, I measure the share of all employment that belongs to each SIC sector in the CBP data, and include the interaction of this share to the MBCA law.

Supplementary Appendix Figure A10 reports, for each SIC sector, the marginal effect of the MBCA at the 10th and 90th percentiles of the values of this distribution. There are no differences based on the size of the sector for agriculture, finance, retail trade, wholesale trade, and services. However, states with higher mining share or higher construction share do see larger effects, as do those with a lower manufacturing share.

The larger effect for mining and construction makes intuitive sense. These two sectors require some of the largest investments for a project and they have some of the longest timelines, so that good corporate law can prove particularly useful. The differences for manufacturing are less intuitive. However, manufacturing at this time was clustered in the Midwest, which was already shown in the previous section to have no treatment effects. Understanding the role of industrial composition better is an important area for future work.

5.6 Self-employment and distributional effects

Finally, I consider the impact of the MBCA on self-employment using data from the CPS. Using the CPS allows me to move beyond business registrations to labor force surveys and demographics, assessing the role of the MBCA on labor choices and its distributional impact.

Table 11 reports repeated cross-sections of the CPS data, including year and state fixed effects, and the relationship of adopting the MBCA to different outcomes. I also include fixed effects for age, race, sex, the individual cities (MSAs), and whether the person just moved. To focus on comparisons of states that have adopted versus not (Goodman-Bacon 2021), I

Table 11. MBCA and Self-Employment in the CPS.

1 /							
	(1) Self Emp.	(2) Wage worker	(3) Not in the labor force	(4) Self Emp.	(5) Self Emp.	(6) Self Emp.	(7) Self Emp.
MBCA adopted	0.0224** (0.00280)	-0.0231 (0.0115)	-0.0111 (0.00724)				
Gender Male × MBCA adopted Female × MBCA adopted Race (White and Black Only) White × MBCA adopted Black × MBCA adopted	,	, ,	` '	0.0176** (0.00316) 0.0267** (0.00601)	0.0208** (0.00260) 0.0329** (0.00906)		
Urban vs. Rural Not identifiable × MBCA adopted Not in metro area × MBCA adopted Central city × MBCA Adopted Outside central city × MBCA adopted Central city status unknown × MBCA adopted						0.0389** (0.00998) 0.0206** (0.00634) 0.0180** (0.00354) 0.0270** (0.00487) 0.0454** (0.0124)	
$\begin{aligned} & \text{Migration} \\ & \text{Moved last year} = 0 \times \text{MBCA adopted} \\ & \text{Moved last year} = 1 \times \text{MBCA adopted} \end{aligned}$							0.0229** (0.00285) 0.00401
Observations R^2	192,483 0.075	192,483 0.270	192,483 0.469	192,483 0.075	189,549 0.076	192,483 0.076	(0.0104) 192,483 0.075

Notes: OLS model. Sample is all data from the U.S. CPS. Fixed effects for state, year, age (individual years), race, gender, and metro area (individual cities). Standard errors double clustered at the state level.

Significance denoted as: *p < 0.10, **p < 0.05, ***p < 0.01.

Direct Effect of Corporate Law on Entrepreneurship

consider only observations in states from 10 years before MBCA adoption to 20 years after. Standard errors are clustered at the state level.

Columns (1)–(3) study the impact of adopting the MBCA on different types of labor market outcomes. Column (1) reports whether the individual reports being self-employed. The effect is positive and significant. Being in a state that has adopted the MBCA is associated with an increase of 2.2 percentage points in being self-employed. Columns (2) and (3) consider the relationship of the MBCA to being a wage worker or not in the labor force. Here, the effects are instead zero. These effects suggest that the MBCA increases the probability of entrepreneurship, while not increasing meaningfully other margins in the labor market.

I then report heterogeneity across different dimensions to try to understand better *who* benefits from the MBCA. I focus on individually interacted coefficients (the main effect of each interaction is already included in all fixed effects), to measure the treatment effect of the MBCA individually for each group.

Columns (4) and (5) are demographics. Female and black individuals see larger effects from the MBCA than men or white individuals. Column (6) considers the level of urbanization. The smallest effect is for those already located in the central city, while all others in less urban areas see a larger impact. These results suggest a pattern where the MBCA increases access more for individuals less core to the economic activities in the region, consistent with the mechanisms in Laffont and Tirole (1991) where reducing regulatory uncertainty also reduces regulatory capture.

Finally, Column (7) considers a different mechanism: whether the MBCA attracted migrants or helped those recently arriving. We see all the effect is limited to those that did not recently move into the state. The MBCA did not induce the migration of entrepreneurs.

6. CONCLUSION

I studied how corporate law influences entrepreneurship by considering the experiences of US states in the mid-twentieth century when many states improved corporate law by adopting the MBCA. The results reveal that the new law on average increased corporations by 26%, around half of which were substitutions from other firms, and the rest of which were net-new firms. The effects are larger in states with more rudimentary institutions and are zero for partial adoptions of the MBCA. The largest effects are concentrated in women, black individuals, and those located outside the central city.

At a policy level, these results suggest that the adequate tuning and updating of law is an essential aspect of a functioning economy. Legislating well matters. It is useful to highlight that the law studied here was a compendium of nationwide best practices developed by a single organization (the American Bar Association), which the individual state corporate laws copied closely. This implies that good corporate law principles have commonality across jurisdictions, albeit within the limited heterogeneity offered by US states. The experience of the MBCA further shows that a significant hurdle to the introduction of better law is the cost of developing this law and that guidelines, best practices, templates, and model acts, can make this process more efficient.

These insights are only the first set of results in a rich avenue of inquiry. More work is needed to fully understand the role of law in the development of financing and entrepreneurship and the way in which the legal environment can support the process of creative destruction and ultimately drive development and economic growth.

SUPPLEMENTARY MATERIAL

Supplementary material is available at Journal of Law, Economics, & Organization online.

Conflict of interest statement. I do occassional compensated talks about this data including talks at MIT and NBER.

ACKNOWLEDGMENTS

I am thankful to Tania Babina, Seth Carnahan, Dan Gross, Simon Freyaldenhoven, Ryan McDevitt, Will Mullins, Casimiro Nigro, Jean Oh, Roberta Romano, Caitlin Slattery, Scott Stern, Lori Yue, and Giorgio Zanarone for helpful comments. I also thank participants at the Law and Finance Seminar in Geothe University. Finally, the editor Rafaella Sadun and two very helpful reviewers. Yupeng Liu provided excellent research assistantship in this project. This project is supported by the Kauffman Foundation. All errors and omissions are my own.

DATA AVAILABILITY

Data to replicate all analysis is provided as part of the data appendix of this paper.

REFERENCES

Acemoglu, Daron, and Simon Johnson. 2005. "Unbundling Institutions," 113 Journal of Political Economy 949-95.

Agrawal, Ajay, Carlos Rosell, and Timothy Simcoe. 2020. "Tax Credits and Small Firm R&D Spending," 12 American Economic Journal: Economic Policy 1-21.

American Bar Association. 1965. Recent Adoptions of the Model Business Corporation Act.

Andrews, Raymond J., Catherine Fazio, Jorge Guzman, Yupeng Liu, and Scott Stern. 2022. "The Startup Cartography Project: measuring and mapping entrepreneurial ecosystems," 51 Research Policy 104581.

Armour, John, and Douglas Cumming. 2008. "Bankruptcy Law and Entrepreneurship," 10 American Law and Economics Review 303-50. ISSN 1465-7252. doi:10.1093/aler/ahn008. https://doi.org/10.1093/ aler/ahn008.

Babina, Tania, and Sabrina T. Howell 2018. "Entrepreneurial Spillovers from Corporate R&D." Technical Report, National Bureau of Economic Research.

Berkowitz, Daniel, and Karen Clay. 2005. "American Civil Law Origins: Implications for State Constitutions," 7 American Law and Economics Review 62–84.

Booth, Richard A. 2000. "A Chronology of the Evolution of the MBCA," 56 Business Lawyer 63-67.

Brown, James R., Gustav Martinsson, and Bruce C. Petersen. 2013. "Law, Stock Markets, and Innovation," 68 Journal of Finance 1517-49.

Brown, James R., J. Anthony Cookson, and Rawley Z. Heimer. 2016. "Law and Finance Matter: Lessons from Externally Imposed Courts," 30 Review of Financial Studies 1019-51.

Campbell, Whitney. 1956. "The Model Business Corporation Act," 11 Business Lawyer 98-110.

Cooter, Robert D., and Hans-Bernd Schäfer. 2011. Solomon's Knot. Princeton University Press.

de Chaisemartin, Clément, and Xavier D'Haultfœuille. 2020. "Two-Way Fixed Effects Estimators with Treatment Effects," 110 American Economic Heterogeneous Review 10.1257/aer.20181169. https://www.aeaweb.org/articles?id=10.1257/aer.20181169.

Denes, Matthew R., Sabrina T. Howell, Filippo Mezzanotti, Xinxin Wang, and Ting Xu. 2020. "Investor Tax Credits and Entrepreneurship: Evidence from US States." Technical Report, National Bureau of Economic Research.

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

Fabian Eckert, Teresa C. Fort, Peter K. Schott, and Natalie J. Yang. 2021. "Imputing Missing Values in the US Census Bureau's County Business Patterns." NBER Working Paper #26632.

- Fazio, Catherine, Jorge Guzman, and Scott Stern. 2020. "The Impact of State-Level Research and Development Tax Credits on the Quantity and Quality of Entrepreneurship," 34 Economic Development Quarterly 188–208. doi: 10.1177/0891242420920926. https://doi.org/10.1177/0891242420920926.
- Feldman, Maryann P. 2001. "The Entrepreneurial Event Revisited: Firm Formation in a Regional Context," 10 *Industrial and Corporate Change* 861–91. ISSN 0960-6491. doi: 10.1093/icc/10.4.861. https://doi.org/10.1093/icc/10.4.861.
- Folk, Ernest L., III. 1962. "The Model Act and the South Carolina Corporation Law," 15 SCL Review 275.
- Freyaldenhoven, Simon, Christian Hansen, and Jesse M. Shapiro. 2019. "Pre-Event Trends in the Panel Event-Study Design," 109 *American Economic Review* 3307–38. doi: 10.1257/aer.20180609. http://www.aeaweb.org/articles?id=10.1257/aer.20180609.
- Gazur, Wayne M. 1995. "The Limited Liability Company Experiment: Unlimited Flexibility, Uncertain Role," 58 Law & Contemporary Problems 135.
- Gibson, George D. 1956. "The Virginia Corporation Law of 1956," 42 Virginia Law Review 445-87.
- Gibson, George D. 1958. "Virginia's Experience with the Model Business Corporation Act," 13 Business Lawyer 706–17.
- Gibson, George D., and George C. Freeman, Jr. 1967. "A Decade of the Model Business Corporation Act in Virginia," 53 Virginia Law Review 1396–423.
- Goldstein, Elliot, and Robert W. Hamilton. 1983. "The Revised Model Business Corporation Act," 38 Business Lawyer 1019–29.
- Gonzalez Uribe, Juanita, and Daniel Paravasini. 2019. "How Sensitive Is Young Firm Investment to the Cost of Outside Equity? Evidence from a UK Tax Relief." Working Paper.
- Goodman-Bacon, Andrew. 2021. "Difference-in-Differences with Variation in Treatment Timing," 225 *Journal of Econometrics* 254–77.
- Haltiwanger, John, Ron S. Jarmin, and Javier Miranda. 2013. "Who Creates Jobs? Small versus Large versus Young," 95 Review of Economics and Statistics 347–61.
- Haselmann, Rainer, Katharina Pistor, and Vikrant Vig. 2009. "How Law Affects Lending," 23 Review of Financial Studies 549–80.
- Kerr, William R., and Ramana Nanda. 2009. "Democratizing Entry: Banking Deregulations, Financing Constraints, and Entrepreneurship," 94 Journal of Financial Economics 124–49.
- La Porta, Rafael, Florencio Lopez-de Silanes, Andrei Shleifer, and Robert W. Vishny. 1997. "Legal Determinants of External Finance," 52 Journal of Finance 1131–50. ISSN 00221082, 15406261. http://www.jstor.org/stable/2329518.
- La Porta, Rafael, Florencio Lopez-de Silanes, Andrei Shleifer, and Robert W. Vishny. 1998. "Law and Finance," 106 Journal of Political Economy 1113–55.
- Laffont, Jean-Jacques, and Jean Tirole. 1991. "The Politics of Government Decision-Making: A Theory of Regulatory Capture," 106 Quarterly Journal of Economics 1089–127.
- Lanahan, Lauren, and Maryann P. Feldman. 2018. "Approximating Exogenous Variation in R&D: Evidence from the Kentucky and North Carolina SBIR State Match Programs," 100 Review of Economics and Statistics 740–52.
- Landes, David S., Joel Mokyr, and William J. Baumol. 2012. The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times. Princeton University Press.
- Lerner, Josh, and Antoinette Schoar. 2005. "Does Legal Enforcement Affect Financial Transactions? The Contractual Channel in Private Equity," 120 Quarterly Journal of Economics 223–46.
- Levine, Ross, Chen Lin, and Lai Wei. 2017. "Insider Trading and Innovation," 60 Journal of Law and Economics 749–800.
- MacRae, Duncan. 1954. "The Role of the State Legislator in Massachusetts," 19 American Sociological Review 185–94. ISSN 00031224. http://www.jstor.org/stable/2088400.
- McLean, R. David, Tianyu Zhang, and Mengxin Zhao. 2012. "Why Does the Law Matter? Investor Protection and Its Effects on Investment, Finance, and Growth," 67 Journal of Finance 313–50.
- Romano, Roberta. 1985. "Law as a Product: Some Pieces of the Incorporation Puzzle," 1 Journal of Law, Economics, & Organization 225–83.
- Romano, Roberta. 1993. The Genius of American Corporate Law. American Enterprise Institute.
- Siegel, Stanley. 1970. "The Proposed Michigan Business Corporation Act," 4 University of Michigan Journal of Law Reform 161–79.
- Squire, Peverill. 2007. "Measuring State Legislative Professionalism: The Squire Index Revisited," 7 State Politics & Policy Quarterly 211–27.

- Weir, Margaret, and Isaac William Martin. 2012. "State Tax Revolt Data Set, 1960-1992." Inter-university Consortium for Political and Social Research [distributor]. https://www.icpsr.umich.edu/web/ICPSR/ studies/34273.
- Wellhausen, Rachel L. 2017. "Sovereignty, Law, and Finance: Evidence from American Indian Reservations," 12 Quarterly Journal of Political Science 405–36.
- Williamson, Oliver E. 1975. "Markets and Hierarchies: Analysis and Antitrust Implications: A Study in the Economics of Internal Organization." University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.