# THE CORPORATE CENSUS

**ABSTRACT**. I present the first database of all entity formations in the United States, going back to the founding. All previous studies were based on tiny subsets of corporations, such as only large public corporations. Looking at the broader sample destabilizes core empirical assumptions in the field. For example, while Delaware is commonly thought to be the leader for incorporations, its law is not even in the top five. While Delaware is thought to have taken New Jersey's leading role in the early 20<sup>th</sup> century, New Jersey actually continues to beat Delaware until the mid-1980s. These findings are proof of concept applications, inviting other scholars to use the data to refine and test other hypotheses.

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## The Corporate Census

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# Introduction

The defining idea in American corporate law is that corporations may form anywhere they like, and they thereby adopt the law of that host jurisdiction. From this simple idea, many fascinating ideas may follow. States may compete vigorously to attract and maintain incorporations.<sup>1</sup> States want to secure incorporation fees,<sup>2</sup> generate lucrative work for the local bar,<sup>3</sup> or signal solicitude to local business interests.<sup>4</sup> This competition may be a race to the bottom, with states offering corporate laws that undermine antitrust laws, local employment, tort victims, or minority shareholder rights.<sup>5</sup> Or it may be a race to the top, the "genius" of American corporate law, as states strive to balance competing interests and deliver and efficient structure to enrich shareholders and, ultimately, all of us.<sup>6</sup> Or perhaps

<sup>4</sup> Henry N. Butler, *Corporate-Specific Anti-Takeover Statutes and the Market for* 

Corporate Charters, 1988 WIS. L. REV. 365 (1988); Roberta Romano, *The Future of Hostile Takeovers: Legislation and Public Opinion*, 57 U. CIN. L. REV. 457, 461 n.11 (1988); Lynn M. LoPucki, *Corporate Charter Competition*, 102 MINN. L. REV. 2101, 2104 (2018) (discussing business friendliness).

<sup>5</sup> Louis K. Liggett Co. v. Lee, 288 U.S. 517, 557–60 (1933) (J. Brandeis, dissenting) ("[In the competition for corporate charters, l]esser states, eager for the revenue derived from the traffic in charters, had removed safeguards from their own incorporation laws. . . . The race was one not of diligence but of laxity. . . . [T]he great industrial States yielded in order not to lose wholly the prospect of the revenue and the control incident to domestic incorporation."); *see also* Mark J. Roe, *Delaware's Competition*, 117 HARVARD L. REV. 588, 594–95 (2003) (summarizing the "race-to-the-bottom" theory); William L. Cary, *Federalism and Corporate Law: Reflections Upon Delaware*, 83 YALE L.J. 663, 665–66 (1974).

<sup>6</sup> See generally ROBERTA ROMANO, THE GENIUS OF AMERICAN CORPORATE LAW (1993); Roberta Romano, *Competition for Corporate Charters and the Lesson of Takeover Statutes*, 61 FORDHAM L. REV. 843, 843 (1993) ("competition among states for the business of corporate charters . . . is

<sup>&</sup>lt;sup>1</sup> See, e.g., Stephen J. Choi & Andrew T. Guzman, *Choice and Federal Intervention in Corporate Law*, 87 VA. L. REV. 961, 961 (2001) (arguing that states compete for corporate charters). The vigor of this competition has been debated. *See* Lucian Arye Bebchuk & Assaf Hamdani, Essay, *Vigorous Race or Leisurely Walk: Reconsidering the Competition over Corporate Charters*, 112 YALE L.J. 553 (2002); Marcel Kahan & Ehud Kamar, *The Myth of State Competition in Corporate Law*, 55 STANFORD L. REV. 679 (2002).

<sup>&</sup>lt;sup>2</sup> See William L. Cary, Federalism and Corporate Law: Reflections Upon Delaware, 83 YALE L.J. 663, 669 (1974) ("For revenue reasons, 'creating a favorable climate [for corporations]' is declared to the public policy of [Delaware]".). ROBERTA ROMANO, THE GENIUS OFAMERICAN CORPORATE LAW 15–16 (1993); John C. Coffee, Jr., *The Future as History: The Prospects for Global Convergence in Corporate Governance and Its Implications*, 93 NW. U. L. REV. 641, 650 (1999); Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 841–42 (1995).

<sup>&</sup>lt;sup>3</sup> Jonathan R. Macey & Geoffrey P. Miller, *Toward an Interest-Group Theory of Delaware Corporate Law*, 65 TEX. L. REV. 469, 493–94 (1987); cf. Robert Daines, *The Incorporation Choices of IPO Firms*, 77 N.Y.U. L. Rev. 1559 (2002) (finding a law firm effect in state law selection).

the race is orthogonal to quality and efficiency: it is a race to deregulation (for better or worse)<sup>7</sup> or perhaps it is just gravitational pull of network effects.<sup>8</sup>

Implicit in these debates is an assumption about how corporations respond to state laws. Basically, we assume that states that offer a good package of laws will attract more entities. More concretely, we acknowledge that Delaware has won the race for incorporations;<sup>9</sup> the main questions are why, whether it can keep the lead, and whether it would be good for Delaware to maintain its leadership? The centrality of Delaware, and debates over its meaning, justify many downstream decisions about what we research and teach.

The problem with this presentation is that we don't actually know much about where firms incorporate.<sup>10</sup> That ignorance, too, is a function of the same corporate federalism. Each state charters entities, and each state retains the records of which entities have opted in. These state-by-state records are fragmented and idiosyncratic. So it is not easy to check whether Delaware leads, nor when that lead was secured (and, thus, what might have contributed to the lead).

This ignorance may be surprising to those who confidently assert empirical claims about incorporation patterns. After all, there are plenty of studies that discuss entity formation patterns. But these studies are fundamentally limited. Most studies of incorporations focus exclusively on large, publicly traded corporations.<sup>11</sup> Yet such firms make up far less than 1% of corporations. It is strange to evaluate competition for charters while ignoring 99.99% of charters, yet we have done so.

the genius of American corporate law"); Ralph K. Winter, *Private Goals and Competition Among State Legal Systems*, 6 HARV. J.L. & PUB. POL'Y 127, 128–29 (1982); Ralph K. Winter, *State Law, Shareholder Protection, and the Theory of the Corporation*, 6 J. LEG. STUD. 251 (1977); *see generally* FRANK EASTERBROOK & DANIEL FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW (1991).

<sup>&</sup>lt;sup>7</sup> Lynn M. LoPucki, *Corporate Charter Competition*, 102 MINN. L. REV. 2101 (2018); *cf.* Bernard S. Black, *Is Corporate Law Trivial?: A Political and Economic Analysis*, 84 NW. U. L. REV. 542 (1990).

<sup>&</sup>lt;sup>8</sup> Sarath Sanga, *Network Effects in Corporate Governance*, 63 J.L. & ECON. 1 (2020); Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 841–51 (1995).

<sup>&</sup>lt;sup>9</sup> Michael Barzuga, *Nevada v. Delaware: The New Market for Corporate Law* 1 (July 2024) (European Corporate Governance Institute Law Working Paper No. 761/2024), https://ssrn.com/abstract=4746878 ("For decades and decades, Delaware has been the undisputed leader in the market for corporate law").

<sup>&</sup>lt;sup>10</sup> Lucian Arye Bebchuk & Assaf Hamdani, Essay, *Vigorous Race or Leisurely Walk: Reconsidering the Competition over Corporate Charters*, 112 YALE L.J. 553, 564 (2002) ("surprisingly little effort has been taken to examine the actual patterns of incorporations").

<sup>&</sup>lt;sup>11</sup> Lynn M. LoPucki, *Corporate Charter Competition*, 102 MINN. L. REV. 2101, 2104 (2018) (asserting that "nearly all of the empirical . . . have been confined to" the "public-company context"). *See*, *e.g.*, Ofer Eldar & Lorenzo Magnolfi, *Regulatory Competition and the Market for Corporate Law*, 12 AM. ECON. J. MICROECONOMICS 60 (2020).

Other studies look beyond public companies,<sup>12</sup> but they can only see a subset or private companies – perhaps the ones that file tax returns or are prominent enough to warrant attention by some investigatory publication.<sup>13</sup> But we have no idea how many entities may be omitted by error or exemption. Nor do those methods purport to count the many subsidiaries within a corporate group.<sup>14</sup> Other studies look to all of a state's private company formation within a given entity type, but just a handful of states, and not a random sample, among those most forthcoming with their data.<sup>15</sup>

We have had no comprehensive survey of incorporation decisions until now. This Article presents data on substantially all entity formation decisions, including of alternative entities such as LLCs, for all US states, going back to the founding of the nation. It constitutes a nearly comprehensive corporate census. This database includes more than 100 million entity formations. It granularly describes the popularity of states and entity types across time, in response to various shocks, and as leading indicators of other changes. Building this database is a contribution, which should lead other scholars to follow on with their own research into the nature of corporate federalism.

This Article also contains proofs of concept, mining the data for numerous insights that confirm, question, or complicate the received history of American corporate law. To preview just a few findings:

- Delaware law is only the fifth or sixth most popular body of corporate law. A teacher who stresses Delaware law in their teaching prepares their students for large, public company work, but ignores the laws applicable to the great mass of corporate practice. This problem is even worse when one remembers that LLCs are now the dominant business form for private businesses, and for which Delaware occupies an even smaller share. A teacher who wishes to arm their students for practice may wish to consider a major shift of emphasis toward the Model Business Corporation Act, which now governs five times as many corporations as Delaware, and the Uniform Limited Liability Partnership Act, which now governs almost ten times more LLCs than Delaware's LLC Act.
- Delaware did not swoop in to steal New Jersey's chartering business in the early 20<sup>th</sup> century. To the contrary, New Jersey continued to grow faster than Delaware and out-competed it for charters until the mid-1980s.

<sup>&</sup>lt;sup>12</sup> See Christopher Grandy, New Jersey Corporate Chartermongering, 1875–1929, 49 J. ECON. HISTORY 677, 688–89 (1989) (counting manufacturing firms, not entities).

<sup>&</sup>lt;sup>13</sup> Bruce H. Kobayashi & Larry E. Ribstein, *Delaware for Small Fry: Jurisdictional Competition for Limited Liability Companies*, 2011 ILLINOIS L. REV. 91 (2011); Jens Dammann & Matthias Schündeln, *Where Are Limited Liability Companies Formed? An Empirical Analysis*, 55 J. LAW & ECON. 741 (2012).

<sup>&</sup>lt;sup>14</sup> The use of subsidiaries within a group is, of course, of interest to many corporate scholars. *E.g.*, Mariana Pargendler, *The New Corporate Law of Corporate Groups*, 14 HARV. BUS. L. REV.
339 (2024); Richard Squire, *Shareholder Opportunism in a World of Risky Debt*, 123 HARV. L.
REV. 1151 (2010).

<sup>&</sup>lt;sup>15</sup> For example, Molk studies private LLC formation. Peter Molk, *Delaware's Dominance and the Future of Organizational Law*, 55 GEORGIA L. REV. 1111 (2021). He compares Delaware to only nine states, because other states did not provide him with suitable data. *Id.* at 1159.

- Delaware's dominance is threatened less by Nevada and Texas than by Florida and California, which have grown their chartering operations rapidly.
- Delaware's dominance in public company incorporations may come at the expense of its dominance in private company incorporations. There is a divergence in Delaware's attractiveness. Some choices that please public companies may alienate private companies. This is obviously relevant to Delaware's recent decision to empower controlling shareholders.<sup>16</sup> These changes could succeed in protecting Delaware's most lucrative and visible firms, while driving away firms more dependent upon of minority shareholder protection.

These observation are not exhaustive. There is far more within this Article. But the point is to whet the appetite as to what is before the reader, and what future scholars might discover.

On their own, these findings seem to be of enduring and immediate significance. Closer attention to incorporation realities does not contest Delaware's dominance, so much as contextualize it. The story of corporate law has been the rise of super brands catering to particular niches. Most small businesses will prefer a Uniform Act LLC. Those who require greater flexibly will opt for a Delaware LLC. Most corporations will prefer a Model Business Corporation Act corporation (usually from their own state). Those that plan to go public will opt for a Delaware corporation. The competition is no longer one of Delaware versus New Jersey or Delaware versus New York. It is Delaware against uniform and model acts, where Delaware wins all and only the "power users" who have intense needs from entity law.

These findings matter as Delaware considers the most significant changes to its law in sixty years. Rapid legislative changes are a response to concern that entities may rapidly leave Delaware, due to controversial judicial decisions. This is a story about rapid reform in the face of fragility. And that story may be informed by a revised understanding of Delaware's rise. A natural inference from the Corporate Census it is harder to gain or lose momentum than one might think. States like New Jersey can make a misstep and still recover. States like Delaware can make a bid for leadership that only pays of slowly. That suggests that current reform debates in Delaware can proceed more cautiously. Delaware's position is not so fragile that rapid reform is necessary.<sup>17</sup>

The plan for the article is as follows: Part I describes current scholarly thinking on corporate federalism. How do states compete for charters? Who wins that competition? How should that competition affect our research, teaching, and normative judgments? Part II describes the data developed for this project. Part III begins to demonstrate possible uses of the data, by telling a different story about Delaware's rise and fall, relative to other states. Part IV discusses the corporation's rise and fall, relative to other entities. Part V looks across states to the uniform and model entity laws, to evaluate their influence and popularity. A brief conclusion then follows.

<sup>&</sup>lt;sup>16</sup> SB 21; 313. *See also* Jonathan Macey, *How to Make Delaware Safe for Incorporation*, WALL ST. J. (Feb. 24, 2025), <u>https://www.wsj.com/opinion/how-to-make-delaware-safe-for-incorporation-business-corporations-policy-law-46b2c03b</u> (discussing possible effects of SB 21

and Concurrent Resolution 17). <sup>17</sup> On the other hand, rapid reform that proves unwise may be more easily repaired than critics fear.

# I. Corporate Federalism

American business entity law is characterized by diversity, freedom, and competition.<sup>18</sup> *Diversity* arises from the multiplicity of states. Corporations and most other business entities require a state charter in order to exist and operate. Each state issues its own charters, and the federal government does not generally issue charters. The internal affairs doctrine is a rule of law that stipulates that most entity law questions are governed by the state of formation.<sup>19</sup> The internal affairs doctrine is accepted in full or in part by all American courts.<sup>20</sup> With dozens of states issuing their own charters, each of which offers its own body of law, American entity law is a diverse menagerie. While there may be such a thing as French corporate law, there is no such thing as American corporate law. There is, instead, Delaware corporate law, California corporate law, and dozens more.

This diversity yields *freedom*. The choice of where to obtain a charter is a choice of what entity law to accept. However, there is no obligation that the charter be granted by the state in which a business operates. A business entity may lawfully operate in a state so long as the entity has a charter somewhere.<sup>21</sup> Chartering with a faraway state is easy. The task is simple enough to perform without a lawyer, and it is usually cheap. Selecting a state has important consequences for the entity formed, and the incorporators are free to plan with those consequences in mind.

*Competition* is one possible consequence of this freedom. States may expect that the content of their entity laws may influence which and how many entities seek out the charter. They may alter the content of their laws to accommodate the references of those who incorporate and maintain entities. States may accommodate entities for a variety of reasons. They may wish to maintain or grow the revenue associated with issuing charters.<sup>22</sup> They may

<sup>22</sup> Romano.

<sup>&</sup>lt;sup>18</sup> *Cf.* Lynn M. LoPucki, *Corporate Charter Competition*, 102 MINN. L. REV. 2101, 2104 (2018) (defining the three components of charter competition).

<sup>&</sup>lt;sup>19</sup> Edgar v. MITE Corp., 457 U.S. 624, 645 (1982) ("The internal affairs doctrine is a conflict of laws principle which recognizes that only one State should have the authority to regulate a corporation's internal affairs—matters peculiar to the relationships among or between the corporation and its current officers, directors, and shareholders.").

<sup>&</sup>lt;sup>20</sup> CA and NY only partially accept it. *See* CAL. CORP. CODE § 2116; Keith Paul Bishop, *California's Narrow Codification of the Internal Affairs Doctrine*, JD SUPRA (June 29, 2023), https://www.jdsupra.com/legalnews/california-s-narrow-codification-of-the-7037524.

<sup>&</sup>lt;sup>21</sup> Paul v. Virginia, 75 U.S. 168, 182 (1868) (holding that a chartered entity may operate in any state). Sanga argues against any special credit to *Paul v. Virginia*. Sarath Sanga, *The Origins of the Market for Corporate Law*, 24 AM. L. & ECON. REV. 369, 379–84 (2022), <u>https://doi.org/10.1093/aler/ahac002</u>. If the entity is chartered elsewhere, it may be required to register as a foreign corporation in the local jurisdiction. *E.g.*, CAL. CORP. CODE § 2105(a) ("A foreign corporation shall not transact intrastate business without having first obtained . . . a certificate of qualification", which requires filing a form with the Secretary of State describing the corporation and consenting to service of process). This registration is unnecessary if the entity is chartered domestically.

wish to provide lucrative lawyering opportunities for politically significant lawyers within the state.<sup>23</sup> Or the state may wish to merely signal its friendliness to certain sorts of business interests.<sup>24</sup>

The result is some form of strategic interaction. States offer a diversity of laws. Incorporators are free to pick whichever law they like best. States know about this freedom and may tailor their laws to keep and grow some clientele.<sup>25</sup>

The forgoing description of American corporate federalism arises almost deductively from first principles, but much remains contingent and contested. How to states compete and how should we feel about it? This Part restates what is known and believed about the market for charters in the United States. It does so both as to descriptive matters and also normative interpretation of the forgoing affairs. Wherever possible, I seek to indicate the evidentiary basis for the claims offered.

### A. Empirical Corporative Federalism

How does the system of corporate federalism react to the possibility of competition? The central narrative concerns Delaware's triumph. This Section describes what the economic history and empirical literature currently understands about chartering conduct among the states.

The pre-history begins in the 19th century. For much of that period, states could and did discriminate against out-of-state corporations,<sup>26</sup> encouraging local incorporations. Individual state laws tended to impose extensive regulatory constraints. For example, most state laws prohibited corporate mergers and vertical integration of conglomerates.

Subsequent legal change permitted duly chartered corporations to operate in any other state, without differential treatment. New Jersey amended its entity laws in the late 1880s and 1890s to permit activity (such as mergers) barred by the law of other states. Grandy reports that New Jersey was directly motivated by the goal of obtaining fees from out-of-state incorporations.<sup>27</sup> He also presents evidence that this first competitive bid was successful. He shows that New Jersey did indeed increase both the absolute amount of corporate charter fees as well as the portion of the budget paid by such fees.<sup>28</sup> Grandy lacks comprehensive data about incorporation patterns, but he does show that many large mergers placed the surviving entity in New Jersey and that half of the firms contemporaneously called "industrial trusts" were incorporated there.<sup>29</sup>

Progressive Era reformers later persuaded New Jersey to compete less vigorously for charters. From 1913 to 1917, New Jersey corporate law contained new and extensive

<sup>&</sup>lt;sup>23</sup> Macey & Miller *supra* note 3.

<sup>&</sup>lt;sup>24</sup> LoPucki, *supra* note 4.

<sup>&</sup>lt;sup>25</sup> The desire to keep charters is defensive competition. Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J. L. ECON. & ORG. 225, 236 (1985).

<sup>&</sup>lt;sup>26</sup> Bank of Augusta v. Earle, 38 U.S. 519, 520 (1839).

<sup>&</sup>lt;sup>27</sup> Christopher Grandy, *New Jersey Corporate Chartermongering 1875-1929*, 49 J. ECON. HIST. 677, 679–84 (1989).

 $<sup>^{28}</sup>$  *Id.* at 682.

<sup>&</sup>lt;sup>29</sup> *Id.* at 679 (citing JOHN MOODY, THE TRUTH ABOUT TRUSTS 453–69 (1904)).

restrictions on corporate conduct, such as mergers and price discrimination.<sup>30</sup> In 1917, New Jersey repealed these short-lived rules, but this era is nevertheless thought to mark a period of decline for New Jersey and the rise of Delaware.

Still, it is not clear what evidence documents a fall by New Jersey or a rise of Delaware. Grandy reports a "drastic" drop in franchise tax revenue for the four years New Jersey attempted progressive corporate law, though he does not actually report the how much of a drop there was. He reports that New Jersey subsequently earned "less than 20% of the state budget" from corporation fees, as evidence that New Jersey had lost its "place as the mecca of corporations."<sup>31</sup> It is strange to mark that level as the end of New Jersey. Romano reports that Delaware made only 15.8% of its revenue from incorporations during the period in which Grandy was writing.<sup>32</sup>

Using other evidence, two other scholars argue that New Jersey began to fall prior to 1913. Yablon argues that New Jersey's relative share of incorporations declined as early as 1899, as other states copied its laws and competed on fees.<sup>33</sup>Although Yablon places the decline earlier, he still agrees that New Jersey's "relational contract with big business was shattered irrevocably in 1913."<sup>34</sup> Yablon's sole source is a 1948 book that attempts to compile state legislative records entity formations within eight states. <sup>35</sup> Sanga agrees, using two additional data sources.<sup>36</sup> He draws from two publications that, together, describe the chartering decisions of 21,000 railroad and mining companies.

Sanga's subsequent work focuses just on publicly traded companies in the middle of the 20th century. He finds a rapid increase in Delaware's prominence in 1986, attributable to Delaware's authorization of exculpation of directors from liability for breaches of the duty of care. Other articles likewise assert Delaware's success in the late 20th century. Delaware becomes home to 2/3 of the S&P 500. Among public corporations that incorporate out of

 $<sup>^{30}</sup>$  These laws were supported by Governor and then president Woodrow Wilson. *Id.* at 687.  $^{31}$  *Id.* at 689.

<sup>&</sup>lt;sup>32</sup> Roberta Romano, *The State Competition Debate in Corporate Law*, 8 CARDOZO L. REV. 709, 710 (1986).

<sup>&</sup>lt;sup>33</sup> Charles M. Yablon, *The Historical Race Competition for Corporate Charters and the rise and Decline of New Jersey: 1880-1910*, 32 J. CORP. L. 323, 354 (2007).

 $<sup>^{34}</sup>$  *Id.* at 328. Yablon's account is nuanced in differentiating charter competition by business size. He notes that New Jersey did not dominate the market for mid-level companies. *Id.* at 329–30.

<sup>&</sup>lt;sup>35</sup> GEORGE HEBERTON EVANS, JR., BUSINESS INCORPORATIONS IN THE UNITED STATES, 1800–1943 (1948).

<sup>&</sup>lt;sup>36</sup> Sarath Sanga, Origins of the Market for Corporate Law, 24 AM. L. & ECON. REV. 369, 373 (2022).

state, Delaware won the charter about 85% of the time.<sup>37</sup> Other studies likewise seek to establish Delaware's importance for firms at IPO<sup>38</sup> or for large private companies.<sup>39</sup>

Let us assume, as the literature does, that New Jersey stumbled and Delaware took its place. Why was Delaware in particular successful in competing for incorporation rather than someone else? Explanations begin with the product offered. Delaware's law is widely thought to be extensive, predictable,<sup>40</sup> flexible,<sup>41</sup> well-balanced among the relevant constituents,<sup>42</sup> buttressed by powerful network effects,<sup>43</sup> and an able judiciary.<sup>44</sup>

One important theory argues that small states can compete most vigorously and credibly for entity charters, because small states cannot afford to lose their franchise revenues. A large state with diversified governmental revenues can afford to alienate corporate patrons and so it may do so. <sup>45</sup> Delaware is indeed a small state, and it has indeed come to rely on charters for its robust government programs and low taxes for locals. Another theory emphasizes institutional stability in the face of political risks.<sup>46</sup> Although Delaware is dominated by a single political party, it prevents partisan capture of its corporate law by insulating the corporate law courts and lawmakers from partisan pressure.

Recently, scholars have documented real and potential shifts in incorporation patterns. One literature plots the rise of entities other than the general business corporation. For example, Peter Molk documents the incorporation patterns of non-profit corporations. He finds that Delaware outperforms all other states on a relative basis, but that New York and California win on a gross basis (with New York's performance doing well even adjusting for population).<sup>47</sup> While some scholars assert that "Delaware enjoys similar dominance with

<sup>&</sup>lt;sup>37</sup> Lucian Bebchuk & Alma Cohen, *Firms' Decisions Where to Incorporate*, 46 J.L. & ECON. 383 (2003)

<sup>&</sup>lt;sup>38</sup> See Stephen M. Bainbridge, *DExit Drivers: Is Delaware's Dominance Threatened?* 15 (UCLA L. & Econ. Rsch. Paper No. 24-04, 2024), https:// ssrn.com/abstract\_id=4909689; Anat Alon-Beck, *Incorporating Unicorns: An Empirical Analysis*, \_\_\_\_ HOUSTON L. REV. \_\_\_ (forthcoming); Dael A. Norwood, *The Data Does Not Support the Narrative*, DAEL A. NORWOOD (Feb. 23, 2025), https://daelnorwood.com/2025/02/23/the-data-does-not-support-the-narrative.

<sup>&</sup>lt;sup>39</sup> Anderson looks at 20,000 financing filings to determine that 94.3% of private companies are located in Delaware or their home state. Robert Anderson IV, *The Delaware Trap: An Empirical Analysis of Incorporation Decisions*, 91 S. CAL. L. REV. 657, 674 (2018)

<sup>&</sup>lt;sup>40</sup> Melvin Aron Eisenberg, The Structure of Corporation Law, 89 Colum. L. Rev. 1461, 1508 (1989) (acknowledging the predictability of Delaware law).

<sup>&</sup>lt;sup>41</sup> Manti Holdings, LLC v. Authentix Acquisition Co., Inc., 261 A.3d 1199, 1217 (Del. 2021).

<sup>&</sup>lt;sup>42</sup> Jill E. Fisch, *The Peculiar Role of the Delaware Courts in the Competition for Corporate Charters*, 68 U. CINCINNATI L. REV. 1061 (1999).

 <sup>&</sup>lt;sup>43</sup> See Sarath Sanga, Network Effects in Corporate Governance, 63 J.L. & ECON. 1 (2020).
 <sup>44</sup> Fisch supra note 42.

<sup>&</sup>lt;sup>45</sup> Roberta Romano, *Law as Product: Some Pieces of the Incorporation Puzzle*, 1 J.L. ECON. & ORGANIZATION 225, 235 (1985); Oliver Williamson, *Credible Commitments: Using Hostages to Support Exchange*, 73 AM. ECON. REV. 519 (1983).

<sup>&</sup>lt;sup>46</sup> Ofer Eldar & Gabriel Rauterberg, *Is Corporate Law Nonpartisan*?, 2023 WIS. L. REV. 177 (2023).

<sup>&</sup>lt;sup>47</sup> Peter Molk, Where Nonprofits Incorporate and Why It Matters, 108 IOWA L. REV. 1781 (2023).

respect to alternative entities,"<sup>48</sup> Molk presents evidence for Delaware's relative weakness in chartering the fast-growing segment of limited liability companies (LLCs).<sup>49</sup>

The other major shift under examination is the degree to which Delaware may lose its leading role to other states, particularly among the largest public corporations. The possibility that Delaware may lose its position (as New Jersey once did) has generated different hypotheses over time. A decade or so ago, scholars asked whether jurisdictions like Nevada might lure corporations by promising their *managers* greater protection and latitude. Studies find Nevada a major site for public company formations.<sup>50</sup>

More recently, the focus has been on solicitude not to managers but to controlling shareholders. Such shareholders suffered defeats in a series of recent Delaware judicial decisions.<sup>51</sup> They also endured critical or derisive language.<sup>52</sup> A number of large companies, such as Tesla and TripAdvisor, made a point of moving their legal home to Nevada or Texas. Scholars have accordingly looked for evidence whether such a trend exists. Steve Bainbridge recently examined the reincorporation decisions of all publicly traded formerly chartered in Delaware between 2012 and 2024.<sup>53</sup>

Studies of Delaware's rise, dominance, and fall draw on different forms of evidence, to draw different sorts of conclusions. Most studies look just at large public companies and then make claims about Delaware's role in chartering such companies. What of companies that are not public? Some studies do look at them separately and conclude that Delaware is significant, but far from dominant.<sup>54</sup> Firms that go public often pick Delaware, but only once

<sup>&</sup>lt;sup>48</sup> Mohsen Manesh, *Contractual Freedom Under Delaware Alternative Entity Law: Evidence from Publicly Traded LPs and LLCs*, 37 J. CORP. L. 555, 559–74 (2012).

<sup>&</sup>lt;sup>49</sup> Peter Molk, *Delaware's Dominance and the Future of Organizational Law*, 55 GA. L. REV. 1111, 1156–68 (2021).

<sup>&</sup>lt;sup>50</sup> E.g., Robert Anderson IV, *The Delaware Trap: An Empirical Analysis of Incorporation Decisions*, 91 S. CAL. L. REV. 657, 674 (2018); Michel Barzuza, *Market Segmentation: The Rise of Nevada as a Liability Free Jurisdiction*, 98 VA. L. REV. 935 (2012).

<sup>&</sup>lt;sup>51</sup> West Palm Beach Firefighters' Pension Fund v. Moelis & Company, 311 A.3d 809 (Del. Ch. 2024); Tornetta v. Musk, 326 A.3d 1203 (Del. Ch. 2024).

<sup>&</sup>lt;sup>52</sup> For a discussion, see Jonathan R. Macey, *Delaware Law Mid-Century: Far From Perfect but Probably Not Leaving for Las Vegas* (Jan. 30, 2025) (Yale Law & Economics Research Paper), https://ssrn.com/abstract=5043887.

<sup>&</sup>lt;sup>53</sup> Stephen M. Bainbridge, *DExit Drivers: Is Delaware's Dominance Threatened?* (2024) (UCLA School of Law, Law-Econ Research Paper No. 24-04), <u>https://ssrn.com/abstract=4909689</u>. Bainbridge also looks at Delaware's overall incorporation rate, counting non-public firms. *Id.* at 14. He observes a dip in 2022, which he considers to be possibly the result of general economic downturn. *Id.* at 15. He does not compare Delaware's dip to other states, nor Delaware's prospects in other entity types. His more granular examinations of 67 individual reincorporation decisions (2012-2024) are limited to public companies. *Id.* at 18. He found that 49 selected Nevada and six went to Texas. *Id.* at 20.

<sup>&</sup>lt;sup>54</sup> Brian Broughman, Jesse M. Fried & Darian Ibrahim, *Delaware Law as Lingua Franca: Theory and Evidence*, 57 J.L. & ECON 865 (2014); *but see* Anat Alon-Beck, *Incorporating Unicorns: An Empirical Analysis*, \_\_\_\_\_ HOUSTON L. REV. \_\_, 28–29 (forthcoming),

they have decided not to remain locally incorporated.<sup>55</sup> Most notably, private companies are thought to incorporate where they are headquartered.<sup>56</sup> The consensus seems to be that there is little competition for the charters of small, privately-held firms.<sup>57</sup>

## B. Normative Corporative Federalism

### 1. What to think about corporate federalism

Two normative ideas are reflected in the literature on corporate federalism. One is the efficiency and legitimacy of our corporate federal system. To what degree is it a good thing that states compete for corporate charters and that Delaware does so well? Much of this debate is associated with the language of "racing."<sup>58</sup>

Louis Brandies coined the phrase "race to the bottom" in his skeptical 1914 book, Other People's Money and How the Bankers Use It. Brandies argued that states would offer charters that unduly undermined shareholder protections, labor rights, and other public interests. States fail to protect vital interests because the victims of lax corporate regulation live in other states. Brandies's critical view was later revived by William Cary.<sup>59</sup> Critics often emphasize that corporate managers largely decide where to incorporate, and so states may cater to them rather than small investors.

Scholars of this critical vein tend to celebrate federal interventions into business entity law. Some scholars focus on patching the deficiencies in state law by imposing a strong federal overlay. Others prefer partial or total takeover of the chartering enterprise by the

<sup>56</sup> See Ian Ayres, Judging Close Corporations in the Age of Statutes, 70 WASH. U.L.Q. 365, 374 (1992) ("Strong structural forces tie a small business' incorporation to the state where it conducts most of its business."); Eric Kades, *Freezing the Company Charter*, 79 N.C. L. REV. 111, 150 (2000) ("There is little if any state competition for the charters of small, privately-held firms, because they usually operate in only one state and the costs of incorporating elsewhere exceed the benefits.").

<sup>57</sup> Id.

https://ssrn.com/abstract\_id=4921135 (finding that 97% of 220 unicorns were incorporated in Delaware by the time of IPO).

<sup>&</sup>lt;sup>55</sup> Brian Broughman, Jesse M. Fried & Darian Ibrahim, *Delaware Law As Lingua Franca: Theory and Evidence*, 57 J.L. & ECON. 865, 866 (2014) (arguing that "incorporation decisions are bimodal: public and private firms typically choose between home-state and Delaware incorporation"); Robert Daines, *The Incorporation Choices of IPO Firms*, 77 N.Y.U. L. REV. 1559 (2002) (asserting that chartering firms make a binary choice between Delaware and their home states).

<sup>&</sup>lt;sup>58</sup> The intensity of the race – how vigorously states compete for charters – has been contested. Lucian Arye Bebchuk & Assaf Hamdani, *Vigorous Race or Leisurely Walk: Reconsidering the Competition over Corporate Charters*, 112 YALE L.J. 553, 574–76 (2002); Marcel Kahan & Ehud Kamar, *The Myth of State Competition in Corporate Law*, 55 STAN. L. REV. 679, 682 (2002). But vigor alters only the stakes, rather than the direction, of normative evaluation.

<sup>&</sup>lt;sup>59</sup> William L. Cary, *Federalism and Corporate Law: Reflections Upon Delaware*, 83 YALE L.J. 663 (1974) (arguing that state competition results in a race to the bottom); *see also* Lucian Arye Bebchuk, *Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law*, 105 HARV. L. REV. 1435, 1441 (1992).

federal government.<sup>60</sup> Both interventions respond to the race to the bottom by allowing less room to race.

Other scholars have praised corporate federalism as a sort of race to the top.<sup>61</sup> Ralph Winter argued that states have little reason to legalize managerial excesses, since doing so would come at the expense of shareholders.<sup>62</sup> Rational shareholders would avoid corporations with pirate charters, raising the cost of capital for such firms incorporated in states that issue them.<sup>63</sup> Instead, states would balance competing interest groups to craft laws that are broadly attractive to managers and shareholders alike. Subsequent scholars, most notably Roberta Romano, sought and found evidence that stock prices rise when firms reincorporate to Delaware – an indication that shareholders don't think Delaware is racing to pillage them.<sup>64</sup>

Some scholars advance racing theories that do not straightforwardly predict "top" or "bottom" outcomes. Some scholars have argued that the race may race to the bottom in their treatment of some corporate creditors, precisely because they race to the top for other constituencies.<sup>65</sup> Others have argued that we observe a race from regulation to contractility, which is normatively ambiguous.<sup>66</sup>

<sup>&</sup>lt;sup>60</sup> Scholar-senator Elizabeth Warren is most strongly associated with this notion. *See* Elizabeth Warren, *Companies Shouldn't be Accountable Only to Shareholders*, WALL ST. J. (Aug. 14, 2018), https://www.wsj.com/articles/companies-shouldnt-be-accountable-only-to-shareholders-

<sup>1534287687 (</sup>promoting and explaining her Accountable Capitalism Act bill, which would have required that corporations with more than \$1 billion in annual revenue obtain federal corporate charters).

<sup>&</sup>lt;sup>61</sup> Importantly, there may not be a single "top." Just as the market for cars does not lead to a single "best" kind of car – instead, there may be a race to make the best electric van for some customers and the best hotrod for others – so too, the race to the top may lead some states to accommodate different needs than others. Thus Delaware comes to prevail in public corporations, Maryland for REITs, Massachusetts for mutual funds, and most states just focus on the needs of local entrepreneurs. What makes this a race to the top is the assumption that states tend to efficiently weigh the interests of the various stakeholders.

<sup>&</sup>lt;sup>62</sup> Ralph K. Winter, *State Law, Shareholder Protection, and the Theory of the Corporation*, 6 J. LEGAL STUD. 251 (1977) (arguing that state competition results in a race to the top). *See also* Daniel R. Fischel, *The "Race to the Bottom" Revisited: Reflections on Recent Developments in Delaware's Corporation Law*, 76 NW. U. L. REV. 913, 915 (1982).

<sup>&</sup>lt;sup>63</sup> Henry N. Butler & Larry E. Ribstein, *Opting Out of Fiduciary Duties: A Response to the Anti-Contractarians*, 65 WASH. L. REV. 1, 69 (1990) ("Cary argued that states compete for incorporation business by offering terms that appeal to corporate managers."); *see also* Lucian Arye Bebchuk, *Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law*, 105 HARV. L. REV. 1435, 1459 (1992) ("Delaware's choice of corporate law rules will be determined primarily by its desire to ensure that its rules are attractive to those making explicit or implicit reincorporation decisions.").

<sup>&</sup>lt;sup>64</sup> Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J.L. ECON. & ORG. 225, 280–81 (1985) (adducing evidence that state competition results in a race to the top).

<sup>&</sup>lt;sup>65</sup> E.g., Andrew Verstein, Incorporating Responsibility, 41 YALE J. REG. 717 (2024).

<sup>&</sup>lt;sup>66</sup> E.g., Lynn M. LoPucki, Corporate Charter Competition, 102 MINN. L. REV. 2101, 2107 (2019).

### 2. What to think about

The debate about racing is a debate, in which partisans disagree strongly and clearly. But there is another plane of normative commitment, where factions are less well defined. That is the debate about what is worthy of our attention. Latent in the discussion of corporate federalism is that corporate formations – particularly of public corporations – ought to be central to what law professors teach and study.

A principal interest in publicly traded corporations is visible in what we study. Nearly all of the forgoing empirical and normative research centers its attention on the largest publicly traded corporations. Likewise, nearly all textbooks on business associations law draw on cases concerning exchange-listed Delaware corporations.

But of course, there are a great many corporations that are not publicly traded. There are a great many entities that are not corporations. And there are a great many entities (corporate or not, public or not) formed outside of Delaware. These entities get less attention, which reflects a tacit normative judgment about the importance of attending to them.

To be sure, there are scholars who have studied entities other than Delaware public corporations. And there are teaching materials keyed to them as well. But the material is sparce and there is hardly a robust debate about the proper focus of scholarly and pedagogical attention. Most scholars see little need to justify their focus.

To be sure, there are also good reasons to study large publicly traded corporations, particularly those incorporated in Delaware. They are large businesses. The corporations in the S&P 500 employ tens of thousands of people each.

Yet public companies have always been few in number. There are perhaps 4300 U.S.headquartered public companies, down from 7300 in 1996.<sup>67</sup> Accordingly, of the 33 million businesses in the US, more than 99.99% of which are not part of a publicly traded business.<sup>68</sup> Publicly traded firms employ about 28.3 million people, compared to 96.7 million private company employees. Thus, 77.4% of employs work in the vast sea of private companies.<sup>69</sup> While many private businesses are small, a great many are large enough to be economically

<sup>&</sup>lt;sup>67</sup> Nicole Goodkind, *The Stock Market is Shrinking and Jamie Dimon is Worried*, CNN (Apr. 9, 2024), https://edition.cnn.com/2024/04/09/investing/premarket-stocks-trading/index.html.

<sup>&</sup>lt;sup>68</sup> Hal Weitzman, *Is the US Economy 'Going Dark'*?, CHICAGO BOOTH REVIEW (May 30, 2023), https://www.chicagobooth.edu/review/is-us-economy-going-dark.

<sup>&</sup>lt;sup>69</sup> DISTRIBUTION OF PRIVATE AND PUBLIC COMPANY EMPLOYMENT ACROSS THE UNITED STATES, EY (2021), <u>https://s-corp.org/wp-content/uploads/2021/09/S-Corp-Association-Slide-deck-Public-Employment-Analysis.pdf</u>.

significant. <sup>70</sup> They may contribute more to research than their public equivalents.<sup>71</sup> Private companies account for about half of aggregate sales and profits from US businesses.<sup>72</sup>

Those data about the economic significance of privately held businesses have been available for years, though they do not seem to be front-of-mind in the debate on corporate federalism. More importantly, other data about entities has not been available. We have not explored just how many private entities there are, nor where they form, nor what type they are. Lacking this knowledge, we are unable to update our research and teaching priorities. And perhaps we have lacked this knowledge because our priorities were not sufficiently focused on those entities. Our failure to notice is in part circular: because smaller private entities were deemed unimportant, little research was directed to examining them – research that could have discovered their importance. Regardless, data is now available, and it may update our priorities accordingly.

# II. Data

This project is foremost about presenting entity formation data. We are focused on the number of entities of a given type, formed in a given jurisdiction, in a given year. This Part describes the process by which that dataset was constructed.

## A. The First Searches

This project began with a labor-intensive, five-year search for state entity formation data. For each state, my research assistants and I sought materials on entity formation.

<sup>&</sup>lt;sup>70</sup> U.S. CHAMBER OF COMMERCE, LARGE PRIVATE COMPANIES IMPACT REPORT 2024 (2024), <u>https://www.uschamber.com/assets/documents/Large-Private-Companies-Impact-Report.pdf</u> [http://archive.today/OPAyg].

<sup>&</sup>lt;sup>71</sup> John Asker, Joan Farre-Mensa & Alexander Ljungqvist, *Comparing the Investment Behavior of Public and Private Firms*, NATIONAL BUREAU OF ECONOMIC RESEARCH (2011), <u>https://www.nber.org/papers/w17394</u> (finding that private firms are 3.5 times more responsive to changes in investment opportunities than are public firms). *But see* Naomi Feldman et al., *Investment Differences Between Public and Private Firms: Evidence from U.S. Tax Returns*, 196 J. PUB. ECON. 1 (2021) (finding lower R&D expenditures are private firms).

<sup>&</sup>lt;sup>72</sup> Cole Campbell & Jacob Robbins, The Value of Private Business in the United States (unpublished manuscript) (Oct. 27, 2023), <u>https://ssrn.com/abstract=4635369</u>. There is also ample discussion of the trendline *Compare* Mark J. Roe & Charles C.Y. Wang, *Half the Firms, Double the Profits: Public Firms' Transformation, 1996–2022* (Journal of Law, Finance, and Accounting, Forthcoming, European Corporate Governance Institute – Law Working Paper No. 771, 2024), <u>https://ssrn.com/abstract=4372070</u> (arguing that public firms have maintained a relatively constant share of the economy) *to* Frederik P. Schlingemann & René M. Stulz, *Have Exchange-listed Firms Become Less Important for the Economy?*, 143 J. FIN. ECON. 927 (2022) (Finding that public firms contribute less to the economy and employment than in the 1970s).

States differ greatly on their openness to research. Delaware, for example readily publishes aggregate statistics,<sup>73</sup> but it charges prohibitive sums to obtain individual corporate filings. Delaware was unwilling to provide any educational discount nor provide the materials for free pursuant to the state's freedom of information act statute. Nor do Delaware's recent annual aggregates make it practical to find incorporation records from much earlier in the period.

Other states were more forthcoming. Some states provide searchable databases that can be used to locate filings,<sup>74</sup> though most of these states try to prevent large scale data scraping.<sup>75</sup> These databases sometimes omit whole categories of entities, or important subsets within an entity category.<sup>76</sup> Others conflated important categories in ways that could lead to overcounting.<sup>77</sup> Many states did not have any public way to examine entity formations.<sup>78</sup>

Where no web search was sufficient, we contacted state official to request help. Some states provided incorporation materials for free,<sup>79</sup> sometimes with surprising granularity. Vermont provided us with pdfs of the hand-written corporate filings. Some states were willing to help for a fee, but their prices were much lower than Delaware, and so we bought information from them. Some states appeared willing to help, but faced difficulties

<sup>&</sup>lt;sup>73</sup> DELAWARE DIVISION OF CORPORATIONS, 2019 ANNUAL REPORT STATISTICS (2019), <u>https://corpfiles.delaware.gov/Annual-Reports/Division-of-Corporations-2019-Annual-</u>

<sup>&</sup>lt;u>Report.pdf</u>; DELAWARE DIVISION OF CORPORATIONS, ANNUAL REPORT STATISTICS (2018), <u>https://corpfiles.delaware.gov/Annual-Reports/Division-of-Corporations-2018-Annual-</u>

<sup>&</sup>lt;u>Report.pdf</u>. Other states are similar. *E.g.*, ALASKA DIVISION OF CORPORATIONS, BUSINESS AND PROFESSIONAL LICENSING, ANNUAL REPORT FISCAL YEAR 2020: CORPORATIONS (2020), https://www.commerce.alaska.gov/web/portals/5/pub/CORP\_Stat\_Overview.pdf.

<sup>&</sup>lt;sup>74</sup> *Quarterly Data*, FLORIDA DEPARTMENT OF STATE: DIVISION OF CORPORATIONS, <u>https://dos.myflorida.com/sunbiz/other-services/data-downloads/quarterly-data</u> (last visited Feb. 22, 2025).

<sup>&</sup>lt;sup>75</sup> Connecticut Businesses Starts and Stops, CONNECTICUT DATA COLLABORATIVE, <u>http://ctbusiness.ctdata.org/#/starts-and-stops</u> (last visited Feb. 22, 2025).

<sup>&</sup>lt;sup>76</sup> *Quarterly Business & Economic Indicators Report*, COLORADO SECRETARY OF STATE, <u>https://www.sos.state.co.us/pubs/business/quarterlyReports/index.html</u> (last visited Feb. 22, 2025) (no way to search for the number of limited partnerships); *State of Hawaii Data Book*, STATE OF HAWAII, <u>https://dbedt.hawaii.gov/economic/databook</u> (last visited Feb. 22, 2025) (omitting non-profit corporations).

<sup>&</sup>lt;sup>77</sup> Search Business Registration, NORTH CAROLINA SECRETARY OF STATE, https://www.sosnc.gov/online\_services/search/by\_title/search\_Business\_Registration\_changes

<sup>(</sup>last visited Feb. 22, 2025) (apparently including foreign corporations alongside domestic corporations).

<sup>&</sup>lt;sup>78</sup> Texas, for example, appears to have no website suitable for this sort of search; instead, Texas has a "Franchise Tax Account Status Search" page, which provides very limited data. *Franchise Tax Account Status Search*, TEXAS COMPTROLLER OF PUBLIC ACCOUNTS, <u>https://mycpa.cpa.state.tx.us/coa</u> (last visited Feb. 22, 2025).

<sup>&</sup>lt;sup>79</sup> E.g. Iowa. Cite to email correspondence.

in their ability to deliver. Missouri, for example, simply lacked records of its own incorporation practices apart from a narrow band of years.<sup>80</sup>

Ultimately, we were able to find trustworthy statistics for most states, but not all. Perhaps further work would have rendered this initial strategy successful, but a second approach eventually presented itself as more fruitful. We describe it in the second section.

This first approach was not a total waste, however. First, in some cases, as with Vermont, this retail collection strategy yielded unexpected fruit in the form of raw filings; perhaps these handwritten artifacts will be of interest someday. Second, trying to conquer the challenges of state-by-state collection helped us to better appreciate the complexity and opacity that have hindered prior studies. And most importantly, these initial results provide a check on the subsequent approach. Insofar as two research methods yielded similar answers, they help to corroborate one another as being plausible.

### B. OpenCorporates

Our second research strategy was to obtain data from OpenCorporates. Founded in December of 2010, OpenCorporates is a commercial enterprise that obtains incorporation data and sells it with customers.<sup>81</sup> OpenCorporates buys or scrapes incorporation data, sometimes lobbying to push jurisdictions toward greater openness,<sup>82</sup> sometimes litigating.<sup>83</sup> It licenses its information about 143 jurisdictions including, as of 2022, all 50 U.S states.<sup>84</sup>

It is in 2022 that I contacted them and arranged permission for a bulk download of all of their data. Although OpenCorporates is a commercial enterprise, it is a certified B Corporation,<sup>85</sup> a public benefit entity with an avowed public purpose that includes supporting academic research. As far as I can tell, this Article is the first one to use OpenCorporates data, but OpenCorporates has indicated their willingness to support other researchers.

<sup>&</sup>lt;sup>80</sup> For-Profit Business Creation Filings, 1994 – 2013, MISSOURI BUSINESS FILINGS, <u>https://www.sos.mo.gov/CMSImages/Business/20YearNewBusinessFilings.pdf</u>

<sup>[</sup>https://web.archive.org/web/20210115060923/https://www.sos.mo.gov/CMSImages/Business/2 0YearNewBusinessFilings.pdf] (records only available from 1994-2013).

<sup>&</sup>lt;sup>81</sup> Purpose, OPENCORPORATES, <u>https://opencorporates.com/purpose</u> (last visited Feb. 18, 2025).

<sup>&</sup>lt;sup>82</sup> New Jurisdiction: Illinois (2,800,000 Companies), OPENCORPORATES BLOG (Nov. 16, 2022), https://blog.opencorporates.com/2022/11/16/new-jurisdiction-illinois-2800000-companies

<sup>(&</sup>quot;[W]e're proud Illinois took the progressive step last year to make its company information available as open data, legislating to overturn what were previously restrictive terms and conditions about its use. Along the way, we helped those crafting the bill to maximise the positive impact of the open company data.").

<sup>&</sup>lt;sup>83</sup> OpenCorporates Wins Quebec Court Battle, OPENCORPORATES BLOG (Sept. 23, 2019), <u>https://blog.opencorporates.com/2019/09/23/opencorporates-wins-quebec-court-battle</u>.

<sup>&</sup>lt;sup>84</sup> OpenCorporates Unifies Official Company Data from All 50 US States, OPENCORPORATES BLOG (Dec. 13, 2022), https://blog.opencorporates.com/2022/12/13/press-release-opencorporates-unifies-official-company-data-from-all-50-us-states.

<sup>&</sup>lt;sup>85</sup> Jackson Torchia, *OpenCorporates "Walks the Walk" with B Corp Certification*, OPENCORPORATES BLOG (Oct. 24, 2023), https://blog.opencorporates.com/2023/10/24/opencorporates-b-corp-certification.

The OpenCorporates data is impressive. When we downloaded data for 50 US states and the District of Columbia, we received 102 million filings representing some 90 million entities. These entries contain all the information a state obtained with the filing. For a corporate formation, this would include the date of formation of course, but also much more – often including the entity's officers and registered address. The database includes filings going back to the founding of the earliest American incorporations in the late 18<sup>th</sup> century. Moreover, the data are of high quality after 1900. As we will describe, our audits show extremely high levels of verifiability in the data.

Despite the quality and depth of this data, it is not immediately useful for most scholarly purposes. For one thing, the data includes a variety of types of filings. It includes entity formations, but also UCC security interest filings and statements of authority. More importantly, even a database of entity formations alone faces the problem of commensuration.

States compile data in different ways. In some states, a corporation is a "corporation." In others, a corporation is a "general corporation" or a "corporation, profit." And states also differ substantively in what the codings mean. In Delaware, non-profit corporations are, legally, a subcategory of corporation. In many other states, they get their own statute. It requires substantial legal knowledge to know how the different categories ought to be compared.

Accordingly, our task was to clean the data, classify entities by type and subtype, remove "foreign" entities, and to then transform the data into a more readily usable panel data with one observation per jurisdiction per year.

As with any data-intensive project, we started by working through the raw data files. We built lists of all company types, statuses, and home jurisdictions present in the records. Based on the lists and comparing against examples in the data, we established which different values for a given variable should be treated as being identical and which should not. Many of these involved small typos/inconsistencies in the raw records and were easily corrected. We did not "correct" values in the raw data, but rather kept the original variables intact and added new ones with equivalent, standardized values.

We also had to contend with a small number of instances of identical values not holding identical meaning. For instance, "DE" can represent Delaware or it can represent Germany. In cases like this, we checked values of other variables to see if there was clear evidence that the entity was based in Delaware or in Germany. Foreign entities and ones whose home jurisdiction could not be established were removed from the data. Records for domestic entities relevant to the project were maintained.

Part of the work was to organize it into a legible format by building a tractable codebook. We first reviewed the entries for indicia that a given entry is an entity formation filing rather than some other filing, such as a UCC filing. We then looked for indications that a filing pertained to the registration of a foreign corporation. Although both types of filings could be useful to analyze, both were irrelevant to the present project.

Among the remaining entries, representing the formation of entities, we faced an initial presentation of many apparent entity types. Some states had just a few: Illinois only four. Some had many: West Virginia codes for 143 different entity types. Needless to say, there was not self-evident way to relate West Virginia's entities to the Illinois entities, let

alone the entities for all 48 of the other states. There are literally thousands of entity types in the United States and it takes an expert in business law to decide which are different names for the same thing and which are truly different entities. Most people are familiar with partnership, limited partnership, limited liability company, and corporation. But how about a Fish Marketing Cooperative<sup>86</sup> – is that one of the forgoing or a new entity type? Probably, the answer is that it is a sort of corporation, albeit one with a peculiar ownership restriction.<sup>87</sup> But there may be purposes for which it is best considered as sui generis. There is no single, uncontestable coding scheme, but one is required if state-by-state trends are to be compared.

In addition to plausibly genuine differences in entity type, we also encountered plausibly erroneous entity types. For example, we found some Texas entities coded "31." We conducted legal research (including contacting states, such as Texas, for clarification) to determine whenever possible the veracity of such entity characterizations.<sup>88</sup>

We produced a codebook of plausible entity types we noted 7 entity types (e.g. Corporation, LLC), plus a category for "unknown". Those types then gave way to 43 subtypes (e.g. non-stock corporation, tribal LLC). We went by hand through all entity codings in the filings to determine which of these subtypes was most applicable.

We enhanced our codebook by training an algorithm to look for signs that a given entity properly belonged to a given entity type. For example, we instructed the algorithm that any entity with the word "Incorporated" in its name could not be a partnership. We then compared the algorithmic assignment of the entries with the one arising out of my manually assigned codebook. They were substantially in accord, but we examined divergent instances to iteratively improve the algorithm and then the manual codebook. In the end, we were able to construct a viable characterization for each entity formation in the dataset, where some entity types are subcategories of other types (e.g. both "general partnership" and "limited liability partnership" are nested within "partnership.")

The issues that we detected in the above processes were ones that we could address with our coding system, as we were able to implement fixes in a general manner that would apply to all entities with similar values. While we automated the data processing in Python, it was important that we run a set of manual checks to evaluate the quality of the raw records collected from OpenCorporates as well as the accuracy of our coding scheme. These did not allow us to fix all remaining problems, but did give us the ability to estimate the rate at which problems were likely to be present in the data.

To this end, we assigned three law student research assistants to check a random sample of entities. The research assistants knew that the project involved records of incorporation, but were not informed as to the hypotheses, as we did not want that knowledge to potentially bias their work. The RAs used databases and web searches to identify any record of an entity other than the one contained within OpenCorporates' records. They looked for (1) is the entity still active, (2) does the location listed as the entity's

<sup>&</sup>lt;sup>86</sup> See the Fish Marketing Act, CAL. CORP. CODE §§ 13200–13356.

<sup>&</sup>lt;sup>87</sup> HENRY HANSMANN, THE OWNERSHIP OF ENTERPRISE (1996).

<sup>&</sup>lt;sup>88</sup> Thursday, July 18, 2024 4:55 PM email sent. Reply on Mon, Jul 22, 2024 at 12:02 PM confirms that "31" is not an entity type.

home jurisdiction appear to be correct, (3) does our automated classification of the entity's type seem appropriate? They also flagged for us whether they were unable to find any record of the entity other than the record collected by OpenCorporates.

We started with a pilot version of the manual checks so as to estimate how many checks could be completed within RA time constraints, to work out any problems with the reporting system, and to make sure that all three RAs were following the same checking process. After evaluating results from the pilot, we began the full version.

In a single run of the process, an RA was given 102 randomly selected entities, two from each jurisdiction (50 US States, plus DC). The three RAs each completed three rounds of checks with independent random samples, yielding a total sample of 918 randomly selected entities. To evaluate intercoder reliability, each run for a given RA included an additional 20 entities drawn from another RA's list.

At the end of the main round of checks and knowing that results from Delaware were likely to be of particular importance to the project, each RA was given an additional random sample of 60 entities drawn only from Delaware. These 180 total supplemental checks were kept separate from the original 918 observations.

Of the 918 checks run on randomly selected entities across all jurisdictions, 725 listings were found to be fully correct, 117 needed at least one edit, and the existence of the remaining 76 could not be verified via any source other than the official state record obtained by OpenCorporates. The results breakdown is depicted in Table 1.

Table 1					
Edit Needed	Frequency	Percent			
None	725	78.98			
Status only	39	4.25			
(Sub)type only	54	5.88			
Jurisdiction only	16	1.74			
Status and type	3	0.33			
(Sub)type and jurisdiction	3	0.33			
Status and jurisdiction	2	0.22			
All three	0	0.00			
Unfindable	76	8.28			

Of the cases where an RA felt that an entity fit better in a type/subtype other than the one assigned by our code, 34 were instances where the main type was correct and only the subtype needed to be changed. This means that the RAs agreed with the exact classification 93% of the time and with the general classification 97% of the time. These figures rise to 94% and 98% respectively, after accounting for the merge of M5 and C2 categories.

As for the 76 entities that could not be found by the research assistants, there are several possible explanations. They may be shell corporations, small businesses that have not established a web presence, or ventures that never made it off the ground long enough to leave a trail. While 86% of entities in the overall sample were incorporated 2001 or later, the data does contain records of entities that may have run their entire course well before the internet era.

Moving to consideration of the Delaware-only additional sample, the starkest result is the higher rate at which entities were unfindable by the RAs. Delaware entities were nearly four times more likely to be unfindable. We should also note that the RAs were somewhat more likely to note an incorrect value for jurisdiction or an inappropriate type coding in Delaware than in the general sample. However, the same explanations as above apply and we would note the popularity of DE among shell corporations that have no need for a public-facing web presence.

Table 2					
Edit Needed	Frequency	Percent			
None	79	43.89			
Status only	10	5.56			
(Sub)type only	17	9.44			
Jurisdiction only	10	5.56			
Status and type	0	0.00			
(Sub)type and jurisdiction	1	0.56			
Status and jurisdiction	3	1.67			
All three	1	0.56			
Unfindable	59	32.78			

## C. Limits on Data

Given the sheer magnitude of the data gathered by OpenCorporates, the differences in document format across jurisdictions (and within them over time), and the potential for both human and machine error to enter the data at any stage of the filing/record-keeping/retrieval processes, it is understandable that OpenCorporates' records are not perfect. It would be logistically impossible for a human or even large team of humans to manually check and correct every record. That said, we do need to explain a few difficulties that we encountered.

### 1. Dissolution

The literature tends to study entity formations, and our data is well-suited to that. We can ask, as others have, "who forms the most entities" or "how has entity formation changed over time." However, our data cannot decisively address entity terminations, and thus we cannot as certainly discuss net formations as we can discuss gross formations. We cannot decisively say which state has the most active entities in a given moment, nor how the stock of entities has changed over time. It is possible, consistent with our data, that a state increases its share of incorporations while simultaneously increasing its share of terminations. If so, that state would appear to be winning the incorporation game, when in fact fewer corporations are subject to its law than ever. This stock-versus-flow issue is the most important for historical leaders like California, New Jersey, and Delaware. Having had a large number of entities, one might still have lots of entities even if net incorporations dropped to zero.

In the raw data, dissolution dates are often missing. It is common for entities to be marked as having dissolved, but for the record to not include a day, month, or even year when it dissolved. This would make it tough for a researcher to study whether particular events, laws, or macroeconomic patterns caused an increase or decrease in the rate of dissolution. Related to this, jurisdictions tend to be very good at entering incorporation dates for new entities, but much less diligent in marking those that have dissolved or otherwise gone dark. Even ignoring "when" an entity dissolved, it is not always clear if an entity has dissolved or not. In the course of the RAs' manual checks, it was relatively common to find an entity listed as active that was actually inactive. There are also many entities with zero web presence, rendering them unfindable and thus not easily classified as active/inactive. The rate at which active/inactive status is missing or incorrect is not constant across jurisdictions. One possible explanation for an entity seeming to disappear is that it has merged with another entity or converted to a different type. Some jurisdictions mark these behaviors while others do not.

We have some ability to address this. The data does include some entries that bear on termination. There are statements of termination filed. Some filings include an assertion that an entity is currently inactive. Those put a floor on the number of entities winking out. But entities can become inactive even if the dataset does not include that fact. That is in part because the most common way to become inactive is to fail to pay franchise taxes. Such failure does not produce an affirmative filing. We audited a few hundred companies and found several that appear to be defunct, despite their entities being listed as active. This accords with the intuition that we may be undercounting the disappearance of entities.

Still, this problem is not greater than all others in the literature have faced. Hence the focus on incorporations rather than active corporations currently in service. Our claims run in parallel to the scholars with whom we are in dialogue. Perhaps more comfortingly, our audit does not show great swings in the longevity of entities that immediately suggest wide differences between net and gross incorporations.

### 2. Data Errors

It is common to find typographical errors in entity names, types, and other variables. These sorts of things are typical in massive datasets, especially ones that extract and standardize records from dozens of sources that have their own content, formatting, and propensity for errors. Some records before the range of this panel dataset are more than a century old and have likely been converted from one format to another several times. We have built our code/process to account for as many of these issues as we could identify.

Some problems remain. In the raw data, we found roughly 2000 total entities spread across many jurisdictions that were marked in the original data as being LLCs incorporated before 1977. LLCs did not exist before 1977. We investigated and found that many of them were instances where the state record OpenCorporates collected did not contain an incorporation date and so may have been assigned to a date like 01/01/1900 as a placeholder. Others appeared (but could not be confirmed to be) cases where the entity incorporated before 1977 as some other type, but then converted to an LLC at a later point in time.

The OpenCorporates data is, plainly, spotty in its early years. For example, between 1900 and 1910, OpenCorporates reports far fewer formations than does a source derived from primary materials Yablon.<sup>89</sup>

	NJ	DE	NY	ME
OpenCorporates	360.1	46.3	283.3	44.9
Yablon	1974.0	792.7	5662.0	935.7
Relative size of				
Yablon sample	5.7	18.3	18.9	21.7

#### Figure 1: Annual Incorporations

Assuming Yablon's sample to be accurate, it's clear that the early years of OpenCorporates is spottier for all states. Worse still, some states are spottier than others. So conclusions from earlier in the sample are less trustworthy. However, caution tends to preserve the claims of this Article.<sup>90</sup>

# III. The Rise and Fall of Delaware

The literature on corporate federalism identifies three moments as important to Delaware's centrality to corporate formations. First, there is an origin story, of how Delaware usurped New Jersey's dominance in the early twentieth century. Second, Delaware is thought to solidify its lead in the 1980s. It does so by carefully balancing the interests of managers and shareholders with a series of balancing acts. The most notable adjustment is thought to be the adoption of a statutory provision permitting the exculpation of directors against liability for breaches of the duty of care. Third, a contemporary debate now thrills at the possibility that Delaware may be in decline. In particular, a series of judicial decisions (and legislative responses) rebalancing the rights of controlling shareholders raises the specter of DExit – the departure of high-profile firms to Nevada and Texas. This Part evaluates and complicates the story of Delaware's rise and fall.

The existing literature records Delaware's trajectory on the basis of the evidence then available, most notably the formation of publicly traded companies. That is an important subset of companies, so the "rise of Delaware corporate law" story can be important even if it is only proven for public companies. And the existing literature acknowledges that Delaware's dominance in public companies does not mean that it incorporates a majority of

<sup>&</sup>lt;sup>89</sup> Charles M. Yablon, *The Historical Race Competition for Corporate Charters and the Rise and Decline of New Jersey: 1880-1910*, 32 J. CORP. L. 323, 377 (2007).

<sup>&</sup>lt;sup>90</sup> The data is still consistent with Delaware trailing New Jersey for all relevant periods. Yablon gives shows New Jersey with more incorporations than Delaware by a wider gross margin than OpenCorporates

those companies. Furthermore some able scholars have looked beyond public companies.<sup>91</sup>

Even with all those caveats, it is common to think that the literature tells a story of Delaware's rise and potential fall as a site of incorporation generally, not just the tiny subset public incorporations. Until now we have lacked the data to know if the majority of corporation follow the broad incorporation trends of public corporations. But the Corporate Census makes this possible. When we use the broader set of incorporation data, we find an interestingly different story. We examine the three periods – Delaware's birth, its ascent, and its possible decline, below. All three are more complicated than the literature has presented and, in some cases, the literature is simply wrong.

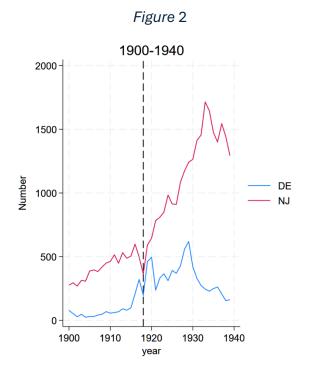
## A. The Early Years: Delaware Against New Jersey?

The conventional story is that New Jersey dominated the market from incorporations from 1875 until 1913, at which time Delaware took its mantle. More recently Professor Sanga shows that Delaware's ascent began prior to 1913, suggesting Delaware's rise turned on forces other than New Jersey's stumble. He explains, "New Jersey's share of corporate charters reached its maximum in 1903 and then began a secular decline."<sup>92</sup> Sanga also agrees with the literature that NJ's prompt attempt in 1917 to reverse course and recover its share of incorporations failed. It was "too little, too late."

The corporate census offers a more complex story. Delaware indeed saw a spike in incorporations in the early 20<sup>th</sup> century, just as NJ declined. But New Jersey seems to have fully recovered as a result of its 1917 reversal. It was not too little too late, nor was there secular decline. Indeed, there is only a brief moment for which New Jersey decline to nearly Delaware's level. But it never falls below Delaware's level. And after that brief moment, New Jersey takes off to a much greater lead than ever before! In other words, New Jersey's reversal of course was not too little or too late.

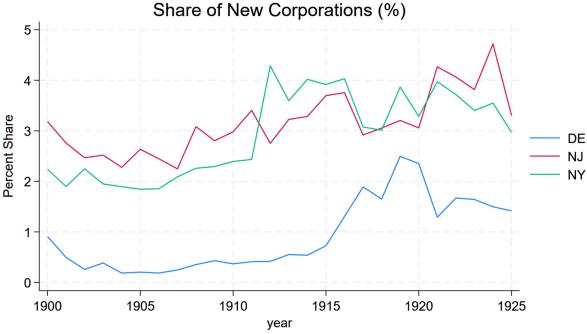
<sup>&</sup>lt;sup>91</sup> E.g., Sarath Sanga, *The Origins of the Market for Corporate Law*, 24 AM. L. & ECON. REV. 369, 385–88 (2022).

<sup>&</sup>lt;sup>92</sup> Sarath Sanga, *The Origins of the Market for Corporate Law*, 24 AM. L. & ECON. REV. 369, 391 (2022).



Insofar as other states did enjoy a brief rise as a result of New Jersey's 1913 stumble, it was not Delaware that best seized the opportunity. New York essentially doubled its share of the market for corporations, becoming a state, even as Delaware bided its time.<sup>93</sup>

<sup>&</sup>lt;sup>93</sup> California also substantially increased its share of incorporations during this period. Other leading states (Pennsylvania, Ohio) roughly maintained their positions, rather than growing, during this period.



Note: Replicate Sanga (2001) Figure 1a, share among all jurisdictions in year

The corporate census tells a different story than the conventional wisdom. Can it be trusted? It is worth noting that the OpenCorporates data underlying the corporate census is much weaker in the early years of the 20th century. There are many sources of data loss, such that the quantity of corporations in the database surely understands the true incorporation rate in all states. And among corporate filings, our audits find a much higher rate of erroneous or blank entries in this period. These problems should give us less confidence in the early years, especially prior to 1945. But these trends are clearly visible even in the middle parts of the twentieth century, where OpenCorporates is more clearly dependable. While it is possible that New Jersey fell below Delaware in the early period, no broad data source indicates it. And it would still have recovered its relative position by midcentury, when OpenCorporates becomes more fully dependable.

If the prevailing story of Delaware's 1913 ascent is false, when did New Jersey actually lose its crown to Delaware? Much later, as we shall see.

### B. The Middle Period: Delaware's Dominance?

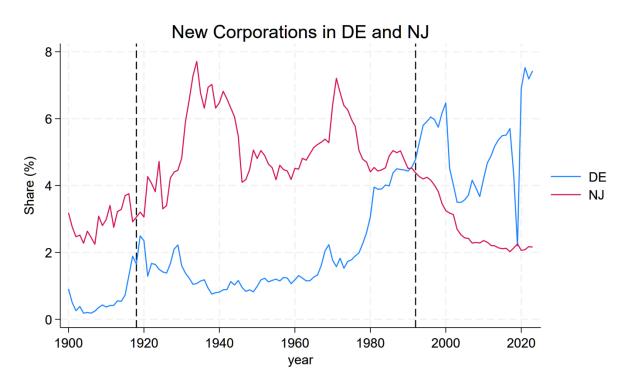
The prevailing story identifies Delaware's growth beginning in 1913,<sup>94</sup> but supercharged after the 1986 statutory change permitting exculpation of directors.<sup>95</sup> Sanga observes a sharp uptick in Delaware's popularity, from about one third of publicly traded companies in

<sup>&</sup>lt;sup>94</sup> See Frederick Tung, Before Competition: Origins of the Internal Affairs Doctrine, 32 J. Corp. L. 33, 42 n.32 (2006) ("New Jersey lost its dominant position to Delaware when it voluntarily bowed out of the 'charter-mongering game in 1913.").

<sup>&</sup>lt;sup>95</sup> Sarath Sanga, Network Effects in Corporate Governance, 63 J.L. & ECON. 1 (2020).

the preceding decades, to an upward trend toward three-quarters of public companies. Sanga explains this jump by reference to two forces. First, Delaware adopted a statutory provision in 1986, permitting the exculpation of directors from liability for breaches of the duty of care. This proved popular. Second, Delaware's new dominance compounded itself through network effects.

We have seen that the early 20<sup>th</sup> century story lacks a firm basis in the census. Interestingly, the census lends greater credence to the latter claim about 102(b)(7). Delaware did indeed jumpstart its market dominance in and after 1986. But the achievement is even bigger than Sanga realizes. The Corporate Census marks that moment as the first in which Delaware overtook New Jersey.



#### Figure 4

Despite confirming and amplifying the literature's focus on the late 1980s as central to Delaware's dominance, the Corporate Census does not fully accord with the received wisdom.

While the Corporate Census confirms the literature's focus on 1986 as a pivotal year, it does so only a manner that demands further revision. It is conventional to think that Delaware's dominance was secure after 1986 (at least until the recent threat of DExit). Network effects and other forces cause Delaware's dominance to solidify and grow after 1986.

While that may be true for large public corporations, that brief triumph also foreshadows the beginning of the *end* of Delaware's dominance for corporations more generally. Overall, Delaware's share of incorporations are in substantial decline for most of

the post 1986-period. The following figure shows Delaware's share of public companies (CRSP) and corporations, generally (OpenCorporates). Figure 5

**Delaware's Share of Corporations** 80 60 40 20 0 1930 1950 1970 1990 2010 Year **OpenCorporates** CRSP

Share (%)

It seems that events in the late 1980s appealed to incorporators of all types, but what followed was a divergence between Delaware's might in public and private companies. Delaware comes to dominate public company incorporations, while its share of private corporate formations begins to stagnate and then decline.

In some sense, this is unsurprising. Small companies pay lower franchise fees. Delaware has calibrated its growth to maximize its share of high-fee payers.<sup>96</sup> It may also follow naturally from economies of specialization. The institutions supportive of public companies may not equally support private companies. It may pay to just focus on one thing and do it right. For example, big companies may value prompt decisions by business experts. They may need that credibility to assuage concerns of dispersed shareholders. Small private companies may not value prompt information from litigation, since the litigants already know a great deal about the company's situation. They just need a resolution of the issues. Large companies also occupy wide enough geographic regions that few regional issues will dominate; the matters will be of general business nature, so a generalist business judge may know the relevant business environment better than many individual litigants. Insofar as

<sup>&</sup>lt;sup>96</sup> See Marcel Kahan & Ehud Kamar, Price Discrimination in the Market for Corporate Law, 86 CORNELL L. REV. 1205 (2001).

company specific-information is pertinent, it is already public as a result of the securities disclosure regime. The relevant issues for small private may be more thoroughly related to local knowledge, where the business operates.

Interestingly, the substantive law itself may also be an institution that does not scale well. Consider Delaware Supreme Court's 1993 decision to eliminate the cause of action for oppression in a closely held corporation.<sup>97</sup> The court expressly reasoned that the corporate form should have the same rules, regardless of whether the corporation is big and public or small and close. Fine. But oppression doctrines are widely considered valuable for close corporations. By deciding that all Delaware law should be the same, and having already decided to focus on large public companies, Delaware arguably made itself less attractive to private companies. And the subsequent outflows are consistent with that, though of course further research is required to test such hypotheses.

### C. The End of Delaware: Nevada and Texas?

Of course, the forgoing comments likewise matter for the DExit debate. Is Delaware now in decline? This question became urgent with *Tornetta v. Musk*, a case upsetting the pay package of Tesla's founder and influential shareholder, Elon Musk.<sup>98</sup> Next came Vice Chancellor Laster's *Moelis* opinion constraining the power of shareholder agreements.<sup>99</sup> This opinion was disfavored by some influential law firms and their clients as potentially undermining accepted market practices. The Counsel of the Corporate Law Section of Delaware bar association promptly proposed overturning *Moelis* by statute, which the legislature promptly did.<sup>100</sup> The legislature appears ready to act again.<sup>101</sup> These opinions and legislative responses have been controversial, and on both sides of the controversy is a worry that firms may flee Delaware if it takes the wrong step in this pivotal moment. Can the Corporate Census tell us whether the judiciary was triggering a flight from Delaware or, instead, whether the legislative backlash threatens to cause what it hopes to prevent?

The current version of the Corporate Census can supply suggestive evidence, because its data ends in April of 2024. Many of the key events in this sequence post-date this version of the data, so the equilibrium is not clear. Future versions of the Census – indeed, as published in subsequent versions of this Article – will include the longer time horizon and therefore ad more the discussion. But the *Moelis* opinion did fall on February 23, 2024, giving us at least a glimpse of what might have occurred at first. Figure 6 shows week-by-week incorporation numbers for Delaware, with a line indicating *Moelis*.

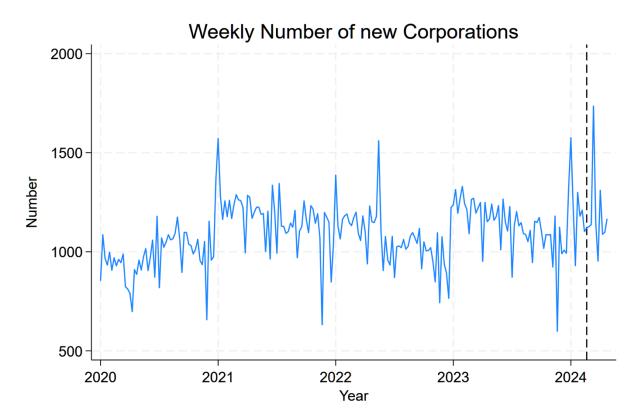
<sup>&</sup>lt;sup>97</sup> Nixon v. Blackwell, 626 A.2d 1366 (Del. Sup. 1993).

<sup>&</sup>lt;sup>98</sup> 310 A.3d 430 (2024).

<sup>&</sup>lt;sup>99</sup> West Palm Beach Firefighters' Pension Fund v. Moelis & Co., 311 A.3d 809 (2024).

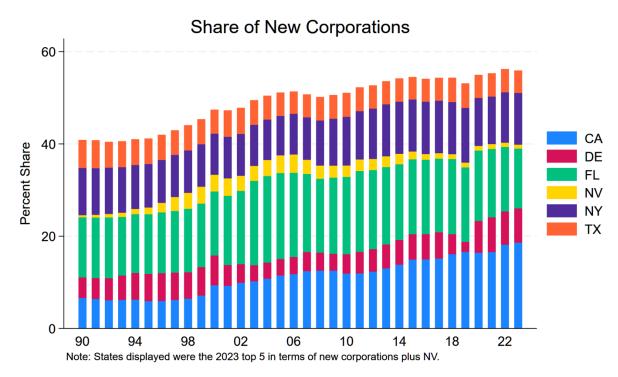
<sup>&</sup>lt;sup>100</sup> SB 313.

<sup>&</sup>lt;sup>101</sup> SB 21.

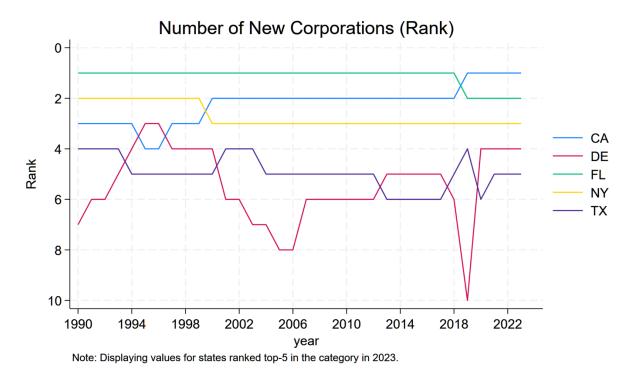


What do we see here? Not much. Week-by-week variation in corporate formations includes a lot of noise. Subject to that reality, the trend seems to be basically the same. Perhaps this means that *Moelis* was no big deal. Or perhaps it means that firms needed more than five weeks to update their domicile selection, such that chartering rates drop after this time period ends. Or perhaps everyone expected *Moelis* to be overturned, so there was no need to change pace. The overall picture of recent months will require even newer data. But we can say that five weeks of *Moelis* did not lead to an immediate and decisive change in Delaware's popularity. And what is decisive is that overall incorporation rates for the last four years have been essentially flat – no huge exodus immediately preceding *Moelis* either.

Still, we can conclude that there is at least one sense in which Delaware corporate law has been flat or declining for decades. It has been losing dominance in the market for new corporations for decades. And we can go further. It is common to fear Nevada and Texas may prevail if Delaware stumbles. And there is some possibility of that occurring. But the surprising winners are not the ones familiar to the corporate federalism debate. Figure 7 demonstrates that Delaware's 21st century weakness has coincided with substantial growth in California and Florida charters. To ask about Delaware's contemporary and future decline, one must ask who has recently gained prevalence, and who may continue to do so.



Most notably, Florida is the dark horse champion. Rarely do corporate law scholars discuss the rise of Florida as the leading jurisdiction for incorporations for almost all of the last 40 years.



Interestingly, California charters have been substantial and only grown (as a proportion of new corporations) in recent years, becoming the leading state for incorporation. This is deeply at odds with the prevailing mood.<sup>102</sup>

The typical assumption is that California law is deeply skeptical of commerce and, thus, unpopular as a chartering location. California courts turn contract disputes into soap operas, with their "soft" parol evidence rule and their refusal to enforce covenants not to compete.<sup>103</sup> Within corporate law, California's mandatory cumulative voting (and other mandatory rules) are thought to be undesirable to contractarian business people.<sup>104</sup> When California law arises in a Business Associations class, the main issue is often how California seeks to impose its law on entities despite their incorporating elsewhere.<sup>105</sup> Articles refer to California "the biggest loser"<sup>106</sup> in the market for corporate charters. Some studies find a

<sup>&</sup>lt;sup>102</sup> E.g., Lynn M. LoPucki, Corporate Charter Competition, 102 MINN. L. REV. 2101, 2115 (2018) (asserting that "tiny Delaware is the incorporation state for . . . nearly as many as . . . California.").
<sup>103</sup> Geoffrey P. Miller, Bargains Bicoastal: New Light on Contract Theory, 31 CARDOZO L. REV. 1475, 1482, 1507–08 (2010).

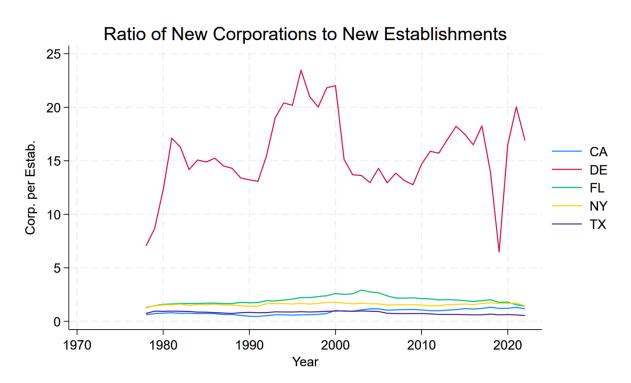
<sup>104</sup> 

<sup>&</sup>lt;sup>105</sup> This discussion concerns the pseudo-foreign corporation doctrine, CAL. CORP. CODE § 2115, and also the diversity mandates for boards headquartered in the state, CAL. CORP. CODE §§ 301.3, 301.4. The diversity mandates have since been ruled to be unconstitutional. *See* Crest v. Padilla, Case No. 19STCV27561, 2022 WL 1565613 (Cal. Super. Ct. May 13, 2022) (overruling § 301.4); Crest v. Padilla, Case No. STCV37513, 2022 WL 1073294 (Cal. Super. Ct. Apr. 1, 2022) (overruling § 301.3).

<sup>&</sup>lt;sup>106</sup> Lynn M. LoPucki, Corporate Charter Competition, 102 MINN. L. REV. 2101, 2112 (2018).

substantial number of California incorporations even among important and sophisticated firms, but the suggestion is that this is just a temporary phase before they transition to Delaware.<sup>107</sup> The implication is that California is like Hotel California – for those who are there, it's only because they cannot leave. Yet, California has recently grown from a strong player to the very top state for corporate formations.

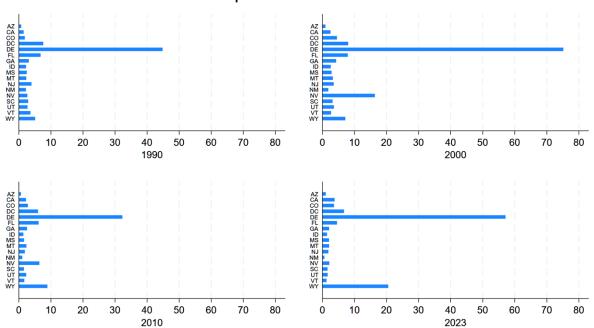
No doubt, some of the prominence of Florida and California reflects large and growing populations and economies. States are usually expected to capture the great majority of their locally headquartered corporations. Consistent with this intuition, Delaware leads in corporations per new business established within the state, showing that it provides charters to a great many businesses headquartered out-of-state.



#### Figure 9

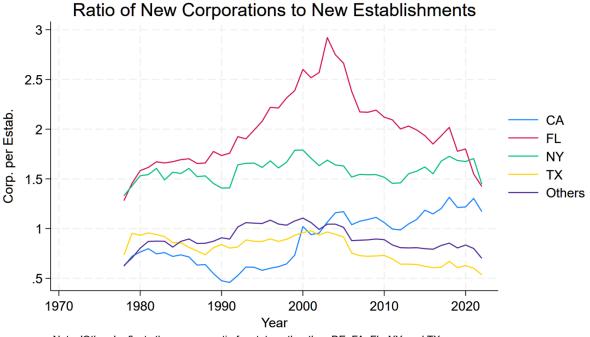
<sup>&</sup>lt;sup>107</sup> E.g., Mitchell A. Kane & Edward B. Rock, *Corporate Taxation and International Charter Competition*, 106 MICH. L. REV. 1229, 1282 (2008); *accord* Jens Dammann & Matthias Schündeln, *Where Are Limited Liability Companies Formed? An Empirical Analysis*, 55 J. LAW & ECON. 741 (2012).

### Delaware likewise leads in corporations per resident. *Figure* 10



Number of Corporations Per 1000 Residents

Still, Florida and California outperform their population, ranking among the leading states even on a population-adjusted basis. California has more than doubled its per-person rate of corporate formation during a period in which Delaware barely budged. Both outperform most states relative to business formation.



Note: 'Others' reflects the average ratio for states other than DE, FA, FL, NY, and TX.

California and Florida are large and growing states, for which corporate charters provide only a small percentage of the state's revenue. It is surprising that they should do so well in the charter race, given the hostage theory.<sup>108</sup> The hostage theory predicts that small states will compete most vigorously and credibly for entity charters, because small states cannot afford to lose their franchise revenues. A large state with diversified governmental revenues can afford to alienate corporate patrons and so it may do so. Yet somehow California and Florida have reassured incorporators enough that they continue to patronize those states. This is particularly surprising if one thinks, as with Grandy, that growing population should undermine a state's ability to serve as a hostage. Grandy explains that Delaware triumphed over New Jersey in part because New Jersey's population doubled over a thirty year period, making its dependence on charters increasingly dubious.<sup>109</sup> But Florida's

<sup>&</sup>lt;sup>108</sup> See Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J.L. ECON. & ORG. 225, 278 (1985) ("[A] rival state cannot simply offer corporations a lower price and instantaneously attract the marginal incorporation business because a switch increases operating costs, the cost of legal advice, and comes with no credible commitment of better service. For by starting from a low franchise tax revenue ratio, the competitor cannot offer itself as a hostage.") <sup>109</sup> Christopher Grandy, *New Jersey Corporate Chartermongering, 1875-1929*, 49 J. ECON. HISTORY 677, 689–91 (1989).

population has likewise doubled during the last thirty years (and California's population growth rate of 25% has still outpaced the nation as a whole).<sup>110</sup>

A second theory for the rise of Delaware emphasized its political stability. Although the state is "blue" its corporate law is produced apolitically. No such institutions exist in California and Florida. California corporate law is produced through the same institutions as the rest of the single-party state. And Florida has recently demonstrated a pronounced willingness for partisan government to intervene in business affairs.<sup>111</sup> Yet Florida's popularity remains ascendant.

However one considers the evidence on Florida and California, Nevada is plainly less numerically significant than its place in the discourse would suggest. To a great degree, Nevada's ascent is of symbolic significance: noteworthy firms reincorporate there to express public displeasure with Delaware. And scholars ponder what it would mean if a low-accountability jurisdiction were to overtake Delaware, but that possibility is more speculative than likely. Interestingly, concerns about Nevada's growth were once well-founded. Nevada enjoyed substantial growth in the early 2000s, but its competitive position has largely eroded. Figure *10* shows its rise and fall on a population-adjusted basis. **Error! Reference source not found.** just focuses on its share of corporate formations. Nevada has never been anywhere near the top five for incorporations.<sup>112</sup>

Texas, for all of its attention in luring Tesla to reincorporate, has seen small decreases in corporate formations since the late 1970s, as Figure 7 demonstrated.

This story about Delaware's rise and fall has focused on comparing one state (Delaware) to others (e.g. New Jersey, Nevada) for corporations. But states are not the only locations of entity law, nor are corporations the only entities. In a sense, Delaware's biggest competitor is itself. Delaware corporations are making room for Delaware LLCs. We turn now to alternative entities. Later, we look to Delaware's main competitor for formations generally: uniform and model laws.

<sup>&</sup>lt;sup>110</sup> California Population 1900-2024, MACROTRENDS, <u>https://www.macrotrends.net/global-metrics/states/california/population</u> (last visited Feb. 18, 2025); *Florida Population 1900-2024*, MACROTRENDS, <u>https://www.macrotrends.net/global-metrics/states/florida/population</u> (last visited Feb. 18, 20245; *U.S. Population Growth Rate 1950-2025*, MACROTRENDS, <u>https://www.macrotrends.net/global-metrics/countries/usa/united-states/population-growth-rate</u> (last visited Feb. 18, 2025).

<sup>&</sup>lt;sup>111</sup> Arian Campo-Flores, *Florida Gov. Ron DeSantis Signs Bill Restricting Teaching About Sexual Orientation*, WALL ST. J. (updated Mar. 28, 2022), <u>https://www.wsj.com/articles/florida-gov-ron-desantis-signs-bill-restricting-teaching-about-sexual-orientation-11648498840</u> (reporting on Florida's "Don't Say Gay" bill); Erich Schwartzel, *Disney CEO Tried to Avoid Politics, Now Finds Himself in Middle of Partisan Spat*, WALL ST. J. (updated Mar. 11, 2022), <u>https://www.wsj.com/articles/disney-to-pause-political-donations-in-florida-11647028301</u>

<sup>(</sup>reporting on Disney's pausing of political giving in Florida as a result of the "Don't Say Gay" bill, as well as the ensuing battle between the state and the corporation).

<sup>&</sup>lt;sup>112</sup> It is perhaps surprising that Nevada should perform so poorly on private corporations, relative to public ones, because scholars have long argued that its relative emphasis has been precisely on closely held firms that are unlikely to be public. *See* Marcel Kahan & Ehud Kamar, *The Myth of State Competition in Corporate Law*, 55 STANFORD L. REV. 679, 717 (2002).

# IV. The Rise and Fall of Corporations

The general business corporation has never been the only business entity type. Partnerships have existed in great number for centuries. Other entity types, such as limited partnerships and LLCs have become available in the twentieth century decades. It is common knowledge that the latter has become the entity of choice for new businesses, but we have had only limited insight into its rise. The Corporate Census now looks beyond corporations to describe trends in alternative entity formations.

# A. The Decline of the Delaware Corporation

# 1. The Rise of the Non-Corporate Entity

Non-corporate entity types, such as limited partnerships and LLCs have become more important in recent decades. The rise of alternative entities has come at the expense of the corporation. The peek number for overall new formations seems to have come and gone around 2008. After that point, corporations mostly declined.

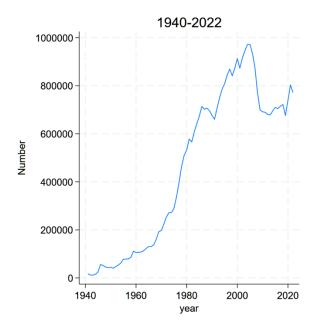
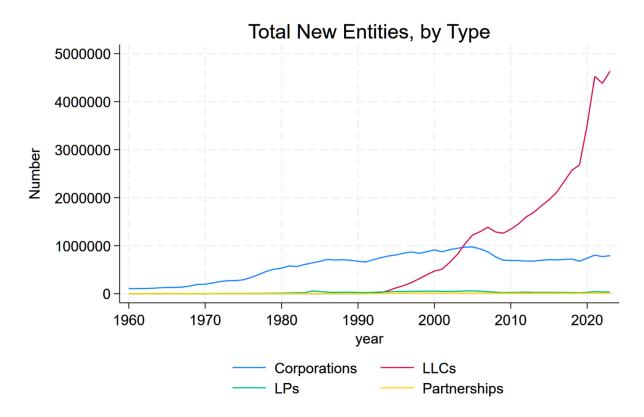


Figure 12: New Corporations (all states)

The decline in corporate formations does not reflect a general decline in entity formation. At the same time that incorporation declined, new entities chartered in increasing numbers. Figure *13* shows the rising number of non-corporate formations.

Figure 13

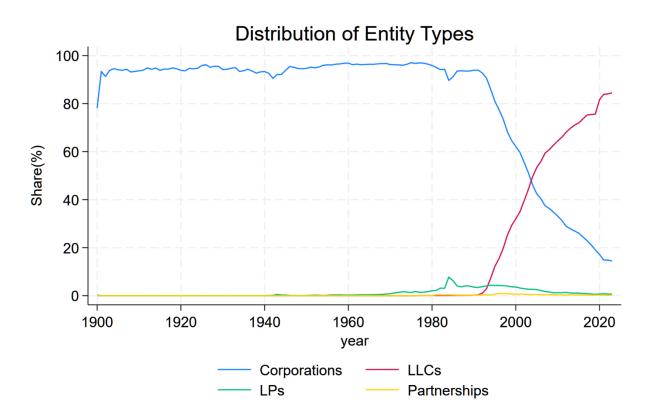


Limited partnerships have always been a niche product. The low level of general partnership chartering surely undercount the number of general partnerships, because general partnerships can form without a corporate filing.<sup>113</sup> Obviously, LLCs are the major change.

The result is that alternative entities - almost all LLCs - became the majority of formation at some point in the early 2000s. Figure *14* shows formation rates as a percentage of all formations. Again, the rate for partnerships must be taken with a grain of salt. The overall impression is that LLCs have only recently achieved the level of dominance occupied by corporations for most of the 20<sup>th</sup> century.

<sup>&</sup>lt;sup>113</sup> General partnerships may even be formed "whether or not the [partners] intend to form a partnership." CAL. CORP. CODE § 16202(a); *see* In re Marriage of Geraci, 144 Cal. App. 4th 1278, 1292 (2006) ("persons may unintentionally create a partnership where their actions and behavior demonstrate an intent to engage in business together").

Figure 14



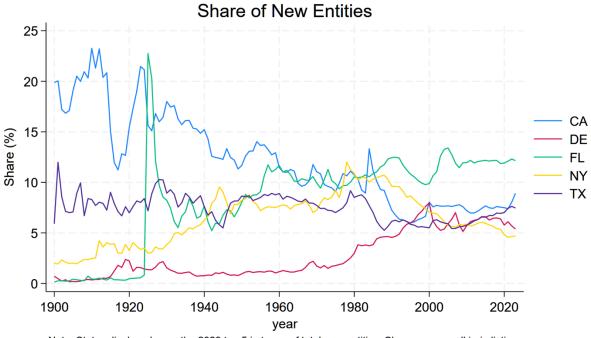
Most business associations textbooks were written at a time that most newly registered entities were corporations.<sup>114</sup> A pedagogical focus on corporations made sense at that time. Likewise, they were written at a time that Delaware was of large and rising importance in that market. Both facts have since changed.

## 2. Delaware's Place in Non-Corporate Formations

We have observed that Delaware's importance as a site of corporate formation required reexamination in light of Florida, Texas, California, and New York continuing to charter substantially. A similar story can be told about non-corporate entities. Delaware performs extremely well in entity formations when non-corporate entities are factored in, but it is not the leader in any period. Instead, Florida and California both grow and lead.

<sup>&</sup>lt;sup>114</sup> E.g., LARRY E. RIBSTEIN, BUSINESS ASSOCIATIONS (1st ed. 1983); WILLIAM A. KLEIN & J. MARK RAMSEYER, BUSINESS ASSOCIATIONS (1st ed. 1991); WILLIAM ALLEN & REINIER KRAAKMAN, COMMENTARIES AND CASES ON THE LAW OF BUSINESS ORGANIZATIONS (1st. ed. 2003).

Figure 15



Note: States displayed were the 2023 top 5 in terms of total new entities. Shares among all jurisdictions

Let us examine the growth of these different entitles.

# B. The Non-Corporate Entities

## 1. Limited Liability Company

The major driver of non-corporate formations is, of course, the LLC. Insofar as the literature has observed LLC formation states, it has found that most LLCs incorporate locally. Among those LLCs observed to incorporate out of state, 92% were observed to select in Delaware.<sup>115</sup> However this prior research considered only 20,000 moderately sized LLC, rather than a comprehensive set covering millions of smaller LLCs. The census complements this research by testing how the broader pool of LLCs forms.

Delaware does well in forming LLCs, but other states also perform strongly.<sup>116</sup> Professor Mohsen argues that Delaware is at a structural disadvantage in competing for LLC charters, because these new entities are highly contractable, limiting the expertise and body of precedent that Delaware can generate and market.<sup>117</sup>

<sup>&</sup>lt;sup>115</sup> Jens Dammann & Matthias Schündeln, *When are Limited Liability Companies Formed? An Empirical Analysis*, 55 J.L. & ECON. 741 (2012).

<sup>&</sup>lt;sup>116</sup> This accords with Mohsen Manesh, *Delaware and the Market for LLC Law: A Theory of Contractibility and Legal Indeterminacy*, 52 B.C. L. REV. 189, 192 (2011). <sup>117</sup> *Id*.

Figure 16

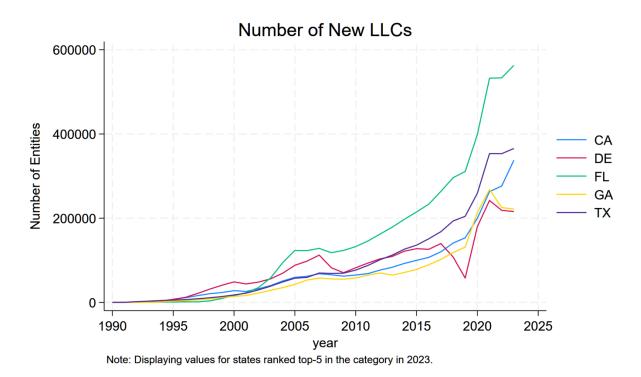
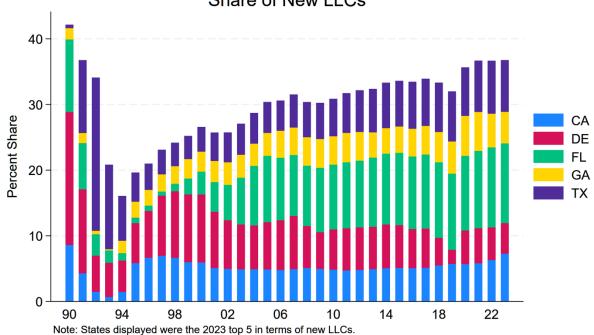


Figure 17



Share of New LLCs

The leadership of California, Delaware, Texas, and Florida should no longer be surprising. The large number of Georgia entities may strike some as unexpected. <sup>118</sup>

Wyoming is not a leading state for LLC formation, but it does well on a personadjusted basis, beating Delaware on that measure. It has half as many LLCs as Delaware, despite being half the size.

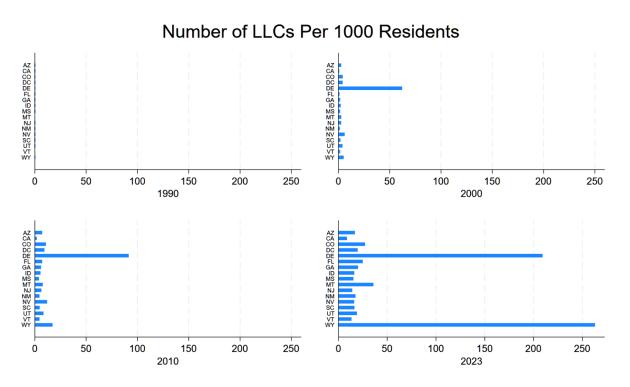


Figure 18

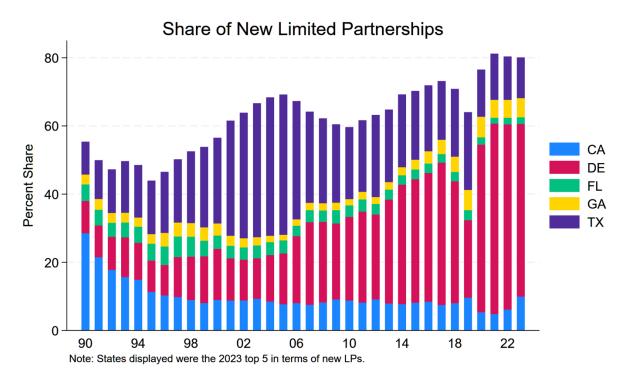
# This is of course, in part because Wyoming invented the LLC. There is some stickiness to early entity production. But it is not just early leads that explain Wyoming's impressive performance. Plainly, Wyoming lost its early lead to Delaware 20 years ago. Something has happened in the last 13 years for Wyoming to regain substantial LLC formations.

## 2. Limited Partnership

When we turn to the limited partnership, we may be unsurprised to see two states leading: Texas and Delaware. This may be because we associate Limited Partnerships with Oil & Gas (a Texas specialty) and financial and real estate firms (Delaware favorites).

<sup>&</sup>lt;sup>118</sup> See Marcel Kahan & Ehud Kamar, *The Myth of State Competition in Corporate Law*, 55 STANFORD L. REV. 679, 689 (2002) (studying state finance and finding that only Georgia would have a meaningful incentive to compete for charters with Delaware).

#### Figure 19



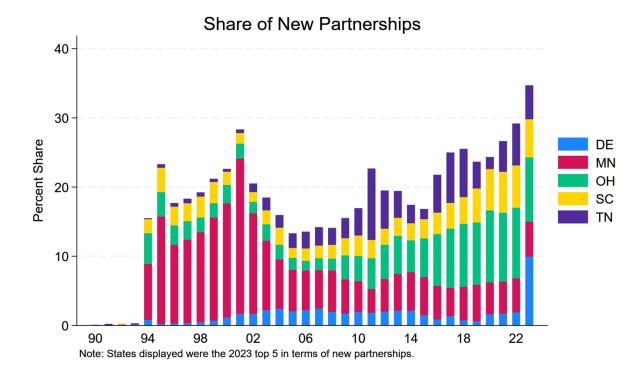
Still, the rise of Delaware relative to Texas may be suggestive of deeper trends. Have oil & gas declined in their importance as the energy economy shifts? Has that sector found greater comfort with the LLC? Or have formerly Texas-incorporated oil and gas businesses turned to Delaware? And why have Delaware's users grown more excited to use the limited partnership, rather than shifting over to LLCs?

## 3. Partnership

We can likewise track the relative prevalence of states in recognizing partnership formation. However, this enterprise is doubly fraught. First, partnerships may be formed without a state filing. Therefore, most partnerships are unlikely to be registered. Those in this dataset are the few partnerships that opted to register.

Partnerships typically register because doing so is a precondition for obtaining limited liability (becoming an LLP). Limited liability partnerships simply did not exist prior to 1992. So our figures on partnership formation are essentially zero prior to that point. Early on, the prevalence of particular states is partially a result of the order in which limited liability was authorized. Texas is not now a prominent partnership chartering state, but its early willingness to allow limited liability made it quite potent in the early 1990s, before most other states caught up.

#### Figure 20



# V. The Delaware Corporation's Main Competitor

Corporate federalism is often considered on a state-by-state basis. We ask which state is winning the race for incorporation. We envision individual states updating their law to please constituencies. But there are other planes of competition. Mark Roe famously argued that Delaware's dominance is not threatened by Nevada or Texas, but by the federal government.<sup>119</sup> This part likewise argues that no particular state constitutes Delaware's greatest threat. But that does not mean we must look to the federal government either.

Coalitional competition also exists. Many states can have the same law. Model acts have been drafted by NGOs and promulgated across multiple jurisdictions. These model acts are designed by different institutions, pursuant to different incentives, from the sui generis law of a given state. To the degree uniform or modal acts are popular, it changes the character of the marketplace for charters.

Considering uniform acts as a phenomenon, above and beyond the law of any given state, also gives us a different sense of what is popular and what is important. If a given state leads the market for charters, we might think it important to teach that state's law. We might want to research how that law operates. And we might also assume the best of that law – it

<sup>&</sup>lt;sup>119</sup> Mark J. Roe, *Delaware's Competition*, 117 HARV. L. REV. 588, 644 (2002); *see also* William J. Moon, *Delaware's New Competition*, 114 NW. U. L. REV. 1403 (2020); Omari Scott Simmons, *Delaware's Global Threat*, 41 J. CORP. L. 217 (2015).

must be good enough to attract lots of companies. States that lack incorporation are downgraded for teaching, research, and normative assessment.

But if laws are uniform, then it may be a mistake to evaluate law on a state-by-state basis. If many states use the same law, a law student may want to learn that law, because it permits her to understand the law of many entities. A change in that law may be consequential and worthy of study, as it ripples from state to state. And we may think that the right evaluation of the law is not a given state's incorporations, but instead the incorporations in set of all states subject to the law.

This Section groups states with similar laws to evaluate them as a set. When a state adopts a given model law, we score its incorporations as incorporations for that model law beginning in that year. When we do, we find surprising importance for model and uniform laws.

## A. MBCA

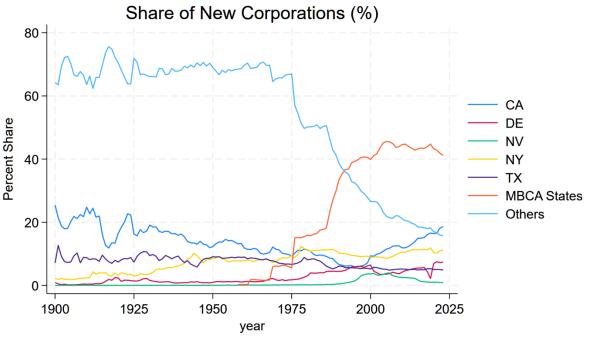
First, we can look to the Model Business Corporation Act.<sup>120</sup> This model law is promulgated by the Business Law Section of the American Bar Association. It was first published in 1950, but reached substantially its current form in 1984, which is also the year in which widespread adoption followed. It is now the law of most states,<sup>121</sup> but those states are usually thought to be marginal players in the market for charters, so little attention is given to the MBCA. Leading textbooks discuss this statute only sparingly. Likewise, it rarely scholarly mention in warrants articles.

The following figure shows the growth of the MBCA as a percentage of all corporations formed, compared to Delaware.

<sup>&</sup>lt;sup>120</sup> MODEL BUSINESS CORPORATION ACT, AMERICAN BAR ASSOCIATION (updated Apr. 5, 2024), <u>https://www.americanbar.org/content/dam/aba/administrative/business\_law/corplaws/mbca-</u>202404.pdf.

<sup>&</sup>lt;sup>121</sup> Model Business Corporation Act Resource Center, AMERICAN BAR ASSOCIATION, <u>https://www.americanbar.org/groups/business\_law/resources/model-business-corporation-act</u> (last visited Feb. 23, 2025).

Figure 21



Note: States move from 'Others' to MBCA starting in adoption year.

Several facts are significant here. First, the MBCA, considered as a single body of law, is the largest body of American corporate law. It covers nearly half of all American corporations, and vastly more than the law of Delaware. It has grown almost continuously, and it grew faster than Delaware law even during the periods in which Delaware is thought to have secured dominance. In many ways, the story of American corporate federalism is not about Delaware's dominance: it has been about the rise of super-brands. The MBCA rolled up most states' local corporate law. Delaware stands as a holdout, buoyed by niche customers willing to pay for a premium product. Likewise, a few other large states have substantial clienteles, perhaps mostly in state firms.

Seeing the MBCA's marvelous growth naturally provokes the question: did its share rise because more states adopted it, or because those that adopted it subsequently enjoyed superior growth in their chartering operations? This question may matter because it would help us better understand how firms feel about the MBCA. A corporation that selected a state because it had the MBCA is endorsing it. A state that retained its charter, after the state switched to the MBCA, may make no such endorsement.

To test this, we compare rates of incorporation before and after adoption for states that adopted the MBCA, relative to states that did not adopt. We find that the MBCA's rise is attributable both to new state adoption and also increasing popularity of those states after adoption.

(1)	(2)	(3)	(4)	(5)	(6)
first	second	third	fourth	fifth	sixth
num_corp	num_corp	num_corp	num_corp	num_corp	num_corp
-11,285*** (563.8)	187.5*** (72.61)				
	1.005***		1.004***		1.005***
	(0.00161)		(0.00156)		(0.00156)
		-9,465***	-70.49		
		(3,665)	(442.8)		
					-856.9***
					(289.3)
170.6	38.15	170.6	38.33	170.6	38.29
(1,423)	(177.1)	(1,468)	(177.2)	(1,468)	(177.1)
6,324	6,273	6,324	6,273	6,324	6,273
0.337	0.990	0.295	0.990	0.295	0.990
51	51	51	51	51	51
	num_corp -11,285*** (563.8) 170.6 (1,423) 6,324 0.337	first         second           num_corp         num_corp           -11,285***         187.5***           (563.8)         (72.61)           1.005***         (0.00161)           170.6         38.15           (1,423)         (177.1)           6,324         6,273           0.337         0.990           51         51	firstsecondthirdnum_corpnum_corpnum_corp $-11,285^{***}$ $187.5^{***}$ $(563.8)$ $(72.61)$ $1.005^{***}$ $(0.00161)$ $-9,465^{***}$ $(3,665)$ $170.6$ $38.15$ $(1,423)$ $(177.1)$ $(1,468)$ $6,324$ $6,273$ $6,324$ $6,273$ $0.337$ $0.990$ $51$ $51$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

 Table 3: Effect of MBCA Adoption on Number of New Corporations Per Year in Jurisdiction

Ordinary Least Squares regression with state and time fixed effects. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Unit of analysis is state-year.

This regression is simple in that it is does not take account of many state-specific factors, such as changes to population over time. It merely asks whether the adoption of the MBCA coincides with a change in the state's incorporation trend. Model one find that states that adopted the 1984 version of the MBCA saw substantially fewer incorporations in the following year, but it does not yet account for the preexisting trend. The second model takes account of the state's pre-adoption incorporations. It is consistent with the 1984 MBCA pushing the state's incorporation trajectory upward.

It makes sense to consider the effect of the 1984 version of the MBCA, since that was the defining version of the statute. The 2013 version represented essentially a cosmetic change, so is unsurprising that it had a little effect, as seen in models three and four. The 2016 version seems to negatively affect the trend line, as seen in model six, though that result is obviously based on a limited sample. Only five states have adopted the 2016 version, most within the last five years. Where the data is strongest, and where the MBCA's adoption was most consequential, it appears as though the MBCA increased the state's popularity with incorporators.

## **B.** Uniform Acts

We can ask similar questions about the uniform laws governing other entities. The Uniform Laws Commission promulgates uniform acts for LLCs, Limited Partnerships, and

partnerships. Each uniform act has changed over time, but scholars are most interested in the differences between the 1917 Uniform Partnership Act and the 1997 Revised Uniform Partnership Act.<sup>122</sup> We can evaluate the popularity of each of these four laws (UPA and RUPA considered individually, and the others evaluated singularly). As a threshold matter, we might be pessimistic about the prospects for the uniform acts. Ribstein argued that the political economy of their drafting rendered them structurally drawn toward inefficient rules.<sup>123</sup> And some empirical scholarship has found that medium-sized LLCs are less likely to form under the ULLCA.<sup>124</sup> However, our findings are far more optimistic about the uniform acts.

## 1. Limited Liability Company

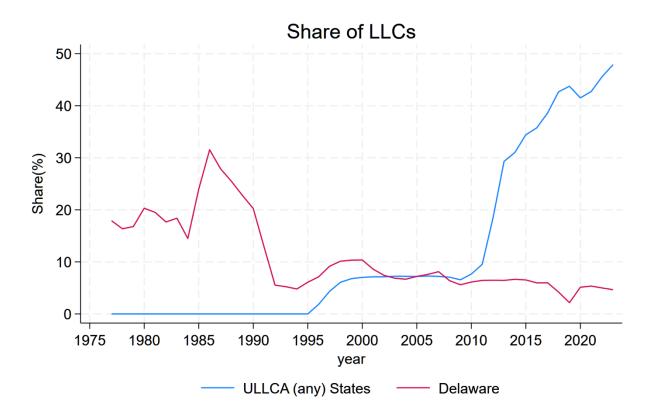
First let us consider LLCs. Delaware shows a moderate rise in its number of LLCs over time, but the explosive growth of LLCs is located outside of Delaware law. The Uniform LLC Act now governs the great majority of LLCs. A teacher who wished to familiarize students with LLC law would have been unsure how to proceed in 2009, but now the popularity of the Uniform Act is clear. Nearly half of all LLCs are governed by the ULLCA.

<sup>&</sup>lt;sup>122</sup> E.g., Clay B. Wortham, *Revised Uniform Partnership Act: Anomalies of a Simplified, Modernized Partnership Law*, 92 KY. L.J. 1083 (2004); Larry E. Ribstein, *The Revised Uniform Partnership Act: Not Ready for Prime Time*, 49 BUS. LAW. 45 (1993).

<sup>&</sup>lt;sup>123</sup> Larry E. Ribstein & Bruce H. Kobayashi, *An Economic Analysis of Uniform State Laws*, 25 J. LEGAL STUD. 131, 132 (1996)

<sup>&</sup>lt;sup>124</sup> Jens Dammann & Matthias Schündeln, When are Limited Liability Companies Formed? An Empirical Analysis, 55 J.L. & ECON. 741 (2012). They work from 1 Bureau van Dijk, ICARUS: Company Analysis and Reports the U.S. and Instant for Canada (http://www.bvdinfo.com/Products/Company-Information/National/Icarus.aspx). Dammann excludes LLCs with fewer than 20 employees. And, of course, there is no assurance that ICARUS is comprehensive.





Some amount of the increased importance of the ULLCA is merely the result of increased adoption of the statute, which is consistent with the prior literature's skepticism: states adopt the ULLCA even though it is not efficient or popular with incorporators. Moreover, we find that the 1996 version of the ULLCA really was not effective in driving new incorporations (though states with low LLC formations were more likely to adopt it, in a bid to get or keep formations). However, we find that the 2006 version of the ULLCA was popular with states that already had high levels of LLC formation and that it spurred increased formations.<sup>125</sup>

<sup>&</sup>lt;sup>125</sup> Dammann & Schündeln include data from 2006 and 2007, so they are not at fault for observing the effect of the new 2006 version, which did not enjoy widespread adoption until after their study. Jens Dammann & Matthias Schündeln, *When are Limited Liability Companies Formed? An Empirical Analysis*, 55 J.L. & ECON. 741, 753 (2012).

	(1)	(2)	(3)	(4)
	first	second	third	fourth
VARIABLES	num_llc	num_llc	num_llc	num_llc
ULLCA_1996	-22,611***	-3.053		
	(1,633)	(286.2)		
L.num llc		1.095***		1.094***
—		(0.00244)		(0.00241)
ULLCA 2006		· · · ·	8,337***	1,454***
—			(1,820)	(309.4)
Constant	3.69e-10	0	3.39e-10	6.64e-11
	(2,722)	(469.2)	(2,760)	(468.4)
Observations	6,324	6,273	6,324	6,273
R-squared	0.482	0.985	0.468	0.985
Number of state num	51	51	51	51

 Table 4: Effect of ULLCA Adoption on Number of New LLCs Per Year in Jurisdiction

Ordinary Least Squares regression with state and time fixed effects. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

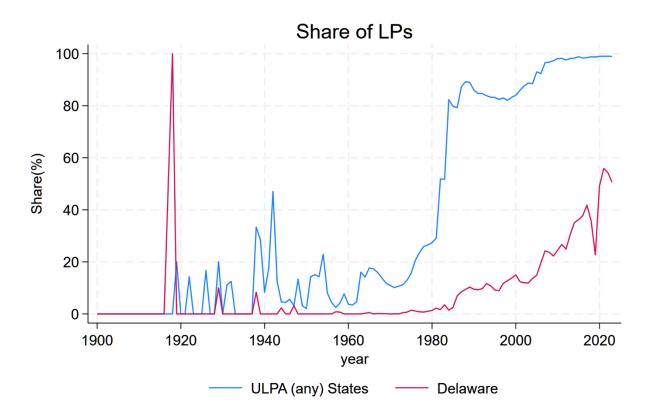
Table 4's third model shows that ULLCA adoption is followed by a large increase in LLC formations. That effect remains, albeit much smaller, once the prior trend in LLC formations is accounted for (model 4). The states that adopt the ULLCA were on an upward trend, but it becomes even steeper once the ULLCA is adopted.

As with the MBCA regression in Table 3, Table 4 is not the final word on the ULLCA. Whole papers have been devoted to evaluating the causal role of new adoption of entity legislation; this is only a preliminary look. But the look is intriguing. It appears that under the right conditions, ULLCA is not just popular with legislators but also with businesses. This suggests that the political economy arguments against the uniform acts may have been overstated. Whatever problems the ULLCA has are not sufficient to overcome the popularity that comes from network effects or other benefits accrued with time.

## 2. Limited Partnership

Next, let us consider the limited partnership. Here, the total exceeds 100% because Delaware is a major site of incorporation and it is also a Uniform Act adopter. We can see that essentially all limited partnerships are adopted under some version of the Uniform Limited Partnership Act. This is in part because Delaware has adopted ULPA, and Delaware performs extremely well on its own.





## 3. Partnership

Partnerships are also subject to uniform acts, and ample debate. Several important states retain the early 20<sup>th</sup> century version of the Uniform Partnership Act, while most other states have shifted to the modern Revised Uniform Partnership Act. Most scholars probably teach a bit of both laws, if only to contrast them. But it may be useful to ask how many partnerships are subject to either – and how many are subject to none at all. The next figure shows the answer.

#### Figure 24

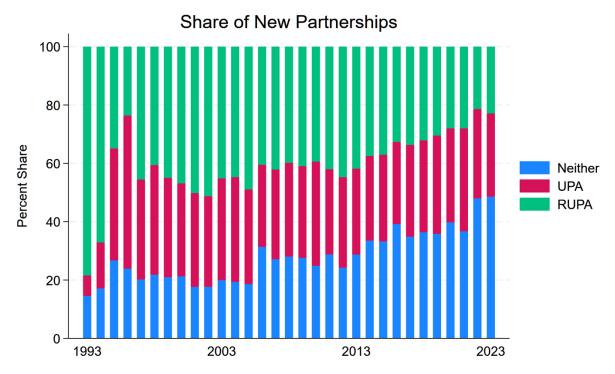


Figure 24 requires some significant interpretative caution. Partnerships can be formed without registration. It is only when a partnership registers – typically in order to secure limited liability – that an entity filing would exist and enter the entity database. Thus, this figure is mostly a demonstration of the popularity of a given law for LLPs rather than GPs. And general partnerships are probably more numerous than limited liability partnerships. This fact also explains why we've begun the figure in 1992. There was little reason to register a partnership in 1990, when limited liability partnerships were unavailable. The first state offered limited liability in only 1991,<sup>126</sup> followed soon by Delaware in 1993.<sup>127</sup> Early changes in the popularity of RUPA or UPA may be driven by the order in which states permitted limited liability.<sup>128</sup>

Another point of caution is that the versions of RUPA available in 1992 and 1993 were preliminary versions. RUPA as we know it arrived in 1994. <sup>129</sup>

<sup>&</sup>lt;sup>126</sup> Texas introduced limited liability partnerships with the passing of Texas House Bill 278. Robert W. Hamilton, *Registered Limited Liability Partnerships: Present at the Birth (Nearly)*, 66 U. COLO. L. REV. 1065, 1065 (1995); 1991 Tex. Gen. Laws ch. 901, § 84 (codified at Tex. Rev. Civ. Stat. Ann. art. 6132b, § 15).

<sup>&</sup>lt;sup>127</sup> 1993 Delaware Laws Ch. 42 (S.B. 161) (https://1.next.westlaw.com/Document/I78261F5BBBAE4D67822178706F8B628F/View/FullTe xt.html).

<sup>&</sup>lt;sup>128</sup> Delaware, for example, adopted RUPA in 1999.

<sup>&</sup>lt;sup>129</sup> J. Dennis Hynes, *Foreword*, 58 LAW & CONTEMPORARY PROBLEMS (1995) *an*https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=4270&context=lcp

Still, the results are interesting. RUPA and UPA are both significant, and together they dominate sui generis partnership laws. However, RUPA tends to decline in importance over time. This is a surprising trend, since several jurisdictions have moved from UPA to RUPA and none have gone the other way.<sup>130</sup> Presumably, partnership growth within UPA states such as NY has continued apace.

# C. Uniformity

Finally, we can look at the set of all uniform laws, relative to the set of all entities, to see whether uniform laws as a set are themselves popular. For any given entity, can we say what chance it is that it is formed *some* model or uniform law, rather than the sui generis law of some state or another?

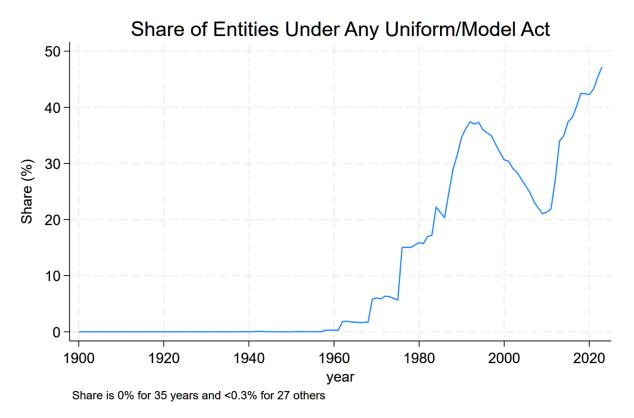
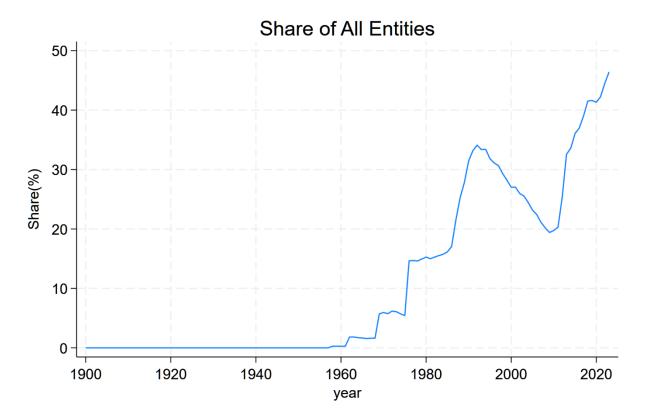


Figure 25

What we see is that almost half of all entities are governed by the MBCA or one of the uniform acts. Indeed, a student who learned just two laws – the MBCA and ULLCA would learn the law of almost the exact same percent of all business entities.

<sup>&</sup>lt;sup>130</sup> Alabama (2019), DC (2013), Idaho (2015), Rhode Island (2022), Utah (2011), Wisconsin (2016).





The ULLCA is also written to "harmonize" with the other uniform acts, such that the structure and prose is identical except where concrete differences in the law are meant to be emphasized. So someone who learned the MBCA and ULLCA would *almost* know the law of about half of all registered entities. Delaware LLC and corporate law are surely important subjects for study and practice. But Delaware's importance in some niches does not alter the fact that it is not nearly the most prominent area of law in most entity categories.

What we observe in the overall trend is the rise of megabrands in entity law. Most businesses prefer an LLC, and they select the law governing most LLCs. Some businesses prefer corporations, and they select the law governing nearly half of corporations. Some businesses have special goals for their business entity, and they select Delaware for their LLC or corporation (or sometimes limited partnership). We used to think of Delaware as the strong brand selected in competition against 50 competitors. Now we should think of Delaware as the strong dissenting option for those who opt out of the strong primary uniform or model default. Plainly, Texas, California, and New York also stand out with their sui generis laws and strong local networks.

Opting out makes sense when Delaware's niche product is valuable. For corporations, that includes robust law on M&A and fiduciary duties. For LLCs that is about contractual freedom (greater in Delaware than elsewhere).

This structure marks a stark change in corporate law patterns. As **Error! Reference source not found.** shows, the corporate law of 50 years ago was massively fragmented. 75% of corporations were formed under the idiosyncratic law of one smallish state or another.

Now, less then 20% of corporations fit that bill. As Figure *21* showed, 80% of corporations are formed under the MBCA, Delaware, or one of their three serious competitors

This transformation has not been fully appreciated, nor all of its implications acknowledged. For example, substantial controversy surrounded the American Law Institute's decision to promulgate a Restatement of Corporate Governance.<sup>131</sup> Restatements often contribute when many different approaches exist and overlap in myriad American jurisdictions. For example, the Restatement of Contracts arguably contributed so much because dozens of American states had developed their own common law, using different and ambiguous terminology, coming to decisions that weren't just different – they were confusing. That was probably the state of American corporate governance in 1975. It was likewise the shape of things in the early 1980s when the American Law Institute began to work on the Restatement of Corporate Governance (later reconceived as a Principles). It is not the state of American corporate law today.

This change in circumstances does not fully address the appropriateness of a Restatement of Corporate Governance. The project may be wise or unwise for other reasons entirely. But it is possible that partisans clash in part because of their sense of how much diversity there is to organize and restate. Until now, that sense was only tacit. Now, we can ask fine how best to organize doctrinal consolidation in a world of finite multi-polarity.

# Conclusion

The defining feature of American corporate federalism is that entities may be formed in any state, and thereby select their governing law. It is easy to imagine downstream normative implications. Perhaps one state will dominate all entity formation, leading other states to question the democratic legitimacy of this system. Or perhaps all states will compete vigorously to provide whatever corporate managers want. Or perhaps entity formation is unresponsive to competition and entities just form wherever they do business.

The empirical reality was not self-evident, nor was it easy to check. State-by-state incorporation means state-by-state data recordation.

A generation of legal scholars picked at this question where the data was available. Most notably, scholars looked at incorporation patterns of large private and public companies. On this basis they concluded that most entities either incorporate where they do business or in Delaware. Most scholarly and pedagogical energy has therefore been directed to Delaware – and its public corporations in particular. But these firms always represented a tiny minority of entity formations, but by quantity and economic significance. The samples are also inherently biased in favor of certain kinds of firms. No shell company would ever appear in such data.

This Article exists to greatly expand our sightlines into those unobserved private companies. With some qualifications, it provides a comprehensive look at all entity formations. This data will be used by other scholars to explore the topics that interest them.

<sup>&</sup>lt;sup>131</sup> Stephen M. Bainbridge, *Do We Need A Restatement of Corporate Governance?*, 78 BUS. LAW. 439 (2023); Edward B. Rock, *The ALI's Restatement of Corporate Governance: A Reply to Professor Bainbridge*, 78 BUS. LAW. 451 (2023).

This Article deploys it to address some of the literature's pressing questions, as a proof of concept:

Delaware grew its charter mongering at New Jersey's expense while the latter state enacted progressive corporate laws, but Delaware's position shrank again when New Jersey returned to its old enabling laws. It turns out that most incorporators were willing to forgive New Jersey, despite showing itself vulnerable to political instability and despite its growing access to non-corporate revenues. It would appear that corporations were not singly focused on political neutrality, nor did they require a willing hostage. This may be why states with less political neutrality and economic dependence on franchise fees – California, New York, Florida, and Texas – all remained above New Jersey and Delaware for essentially the entire century.

Delaware did overtake New Jersey, but only much later. In the 1980s, Delaware's enactment of 102(b)(7) led it to leap forward in all incorporations. But its success with public corporations was not matched in private corporations, which began to decline in the 1990s. Delaware lost ground to Florida and California, both for in state and cross-border businesses. Delaware *corporations* in particular lost ground to LLCs. Delaware itself netted some of those new LLCs, but Florida again seems to have galloped ahead. Nowhere in this competition does one find much interest in Nevada. Nor do preliminary examinations suggest that *Moelis* or prior opinions led to a great decline in Delaware's popularity. Later versions of the Corporate Census will better examine the causal impact of recent judicial and legislative changes.

Along the way, some states enacted the Model Business Corporation Act for corporations and the uniform acts for the non-corporate entities. The MBCA is now the plurality law for corporate formations, governing more corporations than the five largest states (considered singly) combined. That means that Delaware law is, in a sense, not in the top five for corporate charters. Likewise, about 95% of all LLCs are subject to the Uniform LLC Act. For both the ULLCA and MBCA, we can say that the adoption itself appears to increase post-adoption chartering. Incorporators like the uniform acts.

Do these findings constitute a surprise? It depends on what one thought before. My experience in talking about this paper is that my interlocutors will often assert that Delaware is the #1 state for incorporation; learn that this is, in some sense quite untrue; and then trim their sails to endorse some narrower proposition. It will turn out that *everyone knows* Delaware does not lead by charter count, but rather that it leads in the largest public company charters. My own sense is that most people have an ill-defined sense of entity formation patterns, including that Delaware is "the leader" and that they effortlessly update their definition of what that leadership must entail. In that sense, scholars are surprise-proof.

Do these findings require changes in scholarly attention and pedagogical focus? Again, it depends on what one thinks warrants attention. If one's students overwhelmingly litigate Delaware corporate law topics, including public company M&A, then it makes perfect sense to place Delaware fiduciary duty cases at the center of the course. If one is interested in the political implications of highly paid CEOs and controlling shareholders, it makes sense for one's research to focus on large public and private companies. However, a teacher might also want to prepare students to form entities and advise directors. The great majority of entities are LLCs formed outside of Delaware. The great plurality are non-Delaware boards. A teacher who wanted to maximize the lawyerly knowledge of the typical law student would probably teach the ULLCA and MBCA, which together amount to about half of all entities. They would teach Delaware law too. Delaware cases are often clear and well-reasoned, which makes them pedagogically useful. They are a major source of persuasive authority in the MBCA states.<sup>132</sup> To teach the MBCA is in part to teach how it freerides on Delaware.

As for research questions, there is no doubt that large companies are interesting and important, particularly for some sectors. But more of the economy is located in small firms. And economic insignificance can also be a reason for study. Shell companies and companies within a holding company structure may lack assets, employees, or practical independence. They may lack a decent name. But they may also be the proper study of a business law professor. They are used in money laundering, asset securitization, securitization, judgment proofing, asset partitioning, fiduciary duty modification, and a variety of other strategic operations. Ideally, someone would take the study of these entities seriously.

Doing so might uncover a hidden secret in the operation of the field of business associations. Most law professors think of their work as downstream of the economic theory of the firm. That is, they think of businesses as organizations of people aligned to perform economic functions, and they think of entity law as a kind of skin into which that firm is

<sup>&</sup>lt;sup>132</sup> See, e.g., Georgia (MBCA state): F.D.I.C. ex rel. Community Bank & Tr. Cornelia, Ga. v. Miller, No. 2:12-CV-42-WCO, 2012 WL 9494095, at \*5 n.8 (N.D. Ga. Dec. 26, 2012) ("Georgia courts have looked to Delaware corporate law court decisions for guidance on matters of corporate governance and director and officer liability."); Arkansas (MBCA state): Weinberger v. Am. Composting, Inc., 4:11CV00848 JLH, 2012 WL 1190970, at \*5 (E.D. Ark. Apr. 9, 2012) (observing that "state courts often rely heavily upon Delaware law" when interpreting derivative suit statutes); cf. California (non-MBCA): Kanter v. Reed, 309 Cal. Rptr. 3d 375, 388 (Cal. App. 2d Dist. 2023) ("Having found that Delaware corporation law provides useful guidance to the issues presented here . . . . "); Russell Powell, Spirit of the Corporation, 45 SEATTLE U.L. REV. 241, 257 (2021) ("When I moved to the state of Washington, an MBCA jurisdiction, I was very surprised when a prominent corporate litigator explained to me that some rules for derivative suits in Washington relied on Delaware case law rules even when they were in apparent tension with the local statute. Even if this assertion does not actually constitute a trumping of local law, it illuminates the nearly universal influence of and bias toward Delaware law."); Ann M. Scarlett, Imitation or Improvement? The Evolution of Shareholder Derivative Litigation in the United States, United Kingdom, Canada, and Australia, 28 ARIZ. J. INT'L & COMP. L. 569, 575 (2011) ("Because courts in MBCA states often look to Delaware case law when applying the MBCA's liability standards, the legal results tend not to differ between these states.").

placed. But the legal theory of the firm recognizes that legal entities and economic firms need not be coextensive. And the legal theory of the firm studies what these legal partitions achieve. Some of the most creative work in this field reimagines entity law as a law of creditors' rights, akin to mortgages and Article 9 security interests. One wouldn't see that by studying a few thousand large conglomerates. But one might see that by studying millions of entities born to hold a single asset and then expire. To decide whether tiny LLCs are peripheral or central is to decide what the field is about. That is a normative interpretation, rather than a factual matter. To perform a census is to see the social construction of the domain enumerated.

		All Entiti	es	Corporati	ons	LLCs	
State	Years	Total	Share	Total	Share	Total	Share
AK	1900-1909	126	0.087	126	0.094	0	
AK	1910-1919	140	0.085	140	0.090	0	
AK	1920-1929	117	0.047	117	0.049	0	
AK	1930-1939	138	0.058	138	0.061	0	
AK	1940-1949	223	0.071	214	0.072	0	
AK	1950-1959	728	0.103	715	0.105	0	
AK	1960-1969	1,163	0.086	1,137	0.087	0	
AK	1970-1979	3,271	0.098	2,781	0.086	12	1.025
AK	1980-1989	7,285	0.106	6,636	0.103	60	0.707
AK	1990-1999	20,237	0.207	16,916	0.216	2,669	0.200
AK	2000-2009	44,742	0.228	19,032	0.215	24,492	0.246
AK	2010-2019	69,041	0.253	17,681	0.254	48,321	0.247
AK	2020-pres.	40,649	0.199	6,790	0.218	32,587	0.191
AL	1900-1909	4,491	3.101	4,491	3.355	0	
AL	1910-1919	5,878	3.572	5,877	3.785	0	
AL	1920-1929	7,609	3.051	7,609	3.209	0	
AL	1930-1939	4,542	1.901	4,542	2.024	0	
AL	1940-1949	5,816	1.839	5,815	1.952	0	
AL	1950-1959	11,658	1.645	11,652	1.712	0	
AL	1960-1969	23,901	1.763	23,858	1.823	0	
AL	1970-1979	43,368	1.301	42,568	1.322	8	0.683
AL	1980-1989	67,276	0.979	65,712	1.024	61	0.718
AL	1990-1999	106,079	1.085	85,203	1.090	18,022	1.354
AL	2000-2009	190,411	0.972	75,165	0.848	112,903	1.136
AL	2010-2019	217,918	0.799	41,711	0.599	174,315	0.891
AL	2020-pres.	193,325	0.948	18,696	0.601	173,049	1.015
AR	1900-1909	48	0.033	47	0.035	0	
AR	1910-1919	56	0.034	56	0.036	0	
AR	1920-1929	109	0.044	99	0.042	0	
AR	1930-1939	160	0.067	112	0.050	0	
AR	1940-1949	393	0.124	325	0.109	0	
AR	1950-1959	1,230	0.174	1,171	0.172	0	
AR	1960-1969	5,308	0.391	5,272	0.403	0	
AR	1970-1979	15,647	0.469	15,138	0.470	5	0.427
AR	1980-1989	46,007	0.669	42,606	0.664	2	0.024

# Appendix

AR         2000-2009         132,567         0.677         65,542         0.739         64,133         0.645           AR         2010-2019         159,540         0.585         37,756         0.542         119,961         0.613           AR         2020-pres.         132,579         0.650         15,012         0.483         117,061         0.686           AZ         1900-1909         154         0.106         49         0.037         0            AZ         1910-1919         58         0.035         27         0.017         0            AZ         1920-1929         98         0.039         46         0.019         0            AZ         1930-1939         212         0.089         125         0.056         0            AZ         1940-1949         445         0.141         246         0.083         0            AZ         1950-1959         2,440         0.344         985         0.145         0            AZ         1970-1979         27,714         0.831         6,693         0.208         5         0.427           AZ         190-1909	AR	1990-1999	73,902	0.756	62,740	0.803	9,051	0.680
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CA   1980-1989   690 307   10 043   598 911   9 331   1226   14 437	CA	1980-1989	690,307	10.043	598,911	9.331	1,226	14.437
CA 1990-1999 625,632 6.399 493,461 6.314 80,305 6.032								
CA         2000-2009         1,506,405         7.693         971,715         10.961         495,067         4.982			· · · · ·		,		,	
CA         2010-2019         2,012,760         7.377         980,970         14.089         1,007,526         5.148					· · · · ·			
CA         2020-pres.         1,629,015         7.987         542,210         17.442         1,077,158         6.316					,			
CO         1900-1909         294         0.203         214         0.160         0					· · · · · · · · · · · · · · · · · · ·			
CO 1910-1919 324 0.197 181 0.117 0								
CO 1920-1929 532 0.213 295 0.124 0								
CO 1930-1939 401 0.168 289 0.129 0								
CO 1940-1949 775 0.245 648 0.218 0								
CO 1950-1959 1,991 0.281 1,795 0.264 0								
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CO 1970-1979 13,219 0.396 12,977 0.403 35 2.989								2.989
CO 1980-1989 43,868 0.638 36,805 0.573 342 4.027					· · · · ·			
CO 1990-1999 201,140 2.057 126,980 1.625 60,975 4.580								
CO 2000-2009 584,766 2.986 195,060 2.200 372,653 3.750								
CO 2010-2019 900,556 3.301 144,442 2.074 744,433 3.803								
CO 2020-pres. 610,492 2.993 73,467 2.363 532,908 3.125								
CT 1900-1909 668 0.461 399 0.298 0								

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CT         1970-1979         55,921         1.677         53,536         1.662         4         0.342           CT         1980-1989         110,549         1.608         104,037         1.621         65         0.765           CT         1990-1999         140,077         1.433         79,438         1.016         54,848         4.120           CT         2000-2009         273,143         1.395         53,052         0.598         214,370         2.157           CT         2010-2019         297,453         1.090         45,602         0.655         248,622         1.270           CT         2020-pres.         199,359         0.977         23,354         0.751         174,295         1.022           DC         1900-1909         4,436         3.063         4,413         3.296         0            DC         1930-1939         3,517         1.472         3,503         1.561         0            DC         1940-1949         3,785         1.97         3,553         1.193         0            DC         1940-1949         3,785         0.986         30,788         0.956         1.31         1.110 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>								
CT         1980-1989         110,549         1.608         104,037         1.621         65         0.765           CT         1990-1999         140,077         1.433         79,438         1.016         54,848         4.120           CT         2000-2009         273,143         1.395         53,052         0.598         214,370         2.157           CT         2010-2019         297,453         1.000         45,602         0.655         248,622         1.270           CT         2020-pres.         199,359         0.977         23,354         0.751         174,295         1.022           DC         1910-1919         1,710         1.039         1,709         1.101         0            DC         1920-1929         2,638         1.058         2,635         1.111         0            DC         1930-1939         3,517         1.472         3,503         1.561         0            DC         1950-1959         13,407         1.892         13,241         1.946         0            DC         1960-1969         19,350         1.427         18,843         1.440         0								
CT         1990-1999         140,077         1.433         79,438         1.016         54,848         4.120           CT         2000-2009         273,143         1.395         53,052         0.598         214,370         2.157           CT         2010-2019         297,453         1.090         45,602         0.655         248,622         1.270           DC         1900-1909         4,436         3.063         4,413         3.296         0            DC         1910-1919         1,710         1.039         1,709         1.101         0            DC         1930-1939         3,517         1.472         3,503         1.561         0            DC         1930-1939         3,517         1.472         3,503         1.561         0            DC         1940-1949         3,785         1.197         3,553         1.193         0            DC         1940-1949         3,785         1.197         3,553         1.193         0            DC         1940-1949         3,785         0.986         30,788         0.956         13         1.110           DC								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			· · · · · · · · · · · · · · · · · · ·					
CT         2010-2019         297,453         1.090         45,602         0.655         248,622         1.270           CT         2020-pres.         199,359         0.977         23,354         0.751         174,295         1.022           DC         1900-1909         4,436         3.063         4,413         3.296         0            DC         1910-1919         1,710         1.039         1,709         1.101         0            DC         1910-1919         3,517         1.472         3,503         1.561         0            DC         1940-1949         3,785         1.197         3,553         1.193         0            DC         1950-1959         13,407         1.892         13,241         1.946         0            DC         1950-1959         13,407         1.892         13,241         1.946         0            DC         1950-1959         13,243         1.946         0          1.005         1.447         18,843         1.440         0            DC         1950-1959         52,835         0.769         47,903         0.746 <td></td> <td></td> <td>,</td> <td></td> <td></td> <td></td> <td></td> <td></td>			,					
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DC         1960-1969         19,350         1.427         18,843         1.440         0            DC         1970-1979         32,885         0.986         30,788         0.956         13         1.110           DC         1980-1989         52,835         0.769         47,903         0.746         81         0.954           DC         1990-1999         50,656         0.518         43,468         0.556         5,196         0.390           DC         2000-2009         84,232         0.430         40,343         0.455         41,970         0.422           DC         2010-2019         117,230         0.430         38,684         0.556         76,771         0.392           DC         2020-pres.         69,679         0.342         17,373         0.559         51,487         0.392           DE         1900-1909         453         0.313         4452         0.338         0            DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            D		1940-1949	3,785		3,553		0	
DC         1970-1979         32,885         0.986         30,788         0.956         13         1.110           DC         1980-1989         52,835         0.769         47,903         0.746         81         0.954           DC         1990-1999         50,656         0.518         43,468         0.556         5,196         0.390           DC         2000-2009         84,232         0.430         38,684         0.556         76,771         0.392           DC         2010-2019         117,230         0.430         38,684         0.556         76,771         0.392           DC         2020-pres.         69,679         0.342         17,373         0.559         51,487         0.302           DE         1900-1909         453         0.313         452         0.338         0            DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,760         0.873         2,726         0.915         0            DE		1950-1959						
DC         1980-1989         52,835         0.769         47,903         0.746         81         0.954           DC         1990-1999         50,656         0.518         43,468         0.556         5,196         0.390           DC         2000-2009         84,232         0.430         38,684         0.556         76,771         0.392           DC         2010-2019         117,230         0.430         38,684         0.556         76,771         0.392           DC         2020-pres.         69,679         0.342         17,373         0.559         51,487         0.302           DE         1900-1909         453         0.313         452         0.338         0            DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,570         1.076         2,573         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE	DC	1960-1969	19,350		18,843	1.440	0	
DC         1990-1999         50,656         0.518         43,468         0.556         5,196         0.390           DC         2000-2009         84,232         0.430         40,343         0.455         41,970         0.422           DC         2010-2019         117,230         0.430         38,684         0.556         76,771         0.392           DC         2020-pres.         69,679         0.342         17,373         0.559         51,487         0.302           DE         1900-1909         453         0.313         452         0.338         0            DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,570         1.076         2,537         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE	DC	1970-1979	32,885	0.986	30,788	0.956	13	1.110
DC         2000-2009         84,232         0.430         40,343         0.455         41,970         0.422           DC         2010-2019         117,230         0.430         38,684         0.556         76,771         0.392           DC         2020-pres.         69,679         0.342         17,373         0.559         51,487         0.302           DE         1900-1909         453         0.313         452         0.338         0            DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,570         1.076         2,537         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1950-1959         7,976         1.126         7,890         1.160         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE	DC	1980-1989	52,835	0.769	47,903	0.746	81	0.954
DC         2010-2019         117,230         0.430         38,684         0.556         76,771         0.392           DC         2020-pres.         69,679         0.342         17,373         0.559         51,487         0.302           DE         1900-1909         453         0.313         452         0.338         0            DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,570         1.076         2,537         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1950-1959         7,976         1.126         7,890         1.160         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE         1970-1979         64,603         1.937         63,733         1.979         199         16.994           DE         1980-	DC	1990-1999	50,656	0.518	43,468	0.556	5,196	0.390
DC         2020-pres.         69,679         0.342         17,373         0.559         51,487         0.302           DE         1900-1909         453         0.313         452         0.338         0            DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,570         1.076         2,537         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1950-1959         7,976         1.126         7,890         1.160         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE         1970-1979         <	DC	2000-2009	84,232	0.430	40,343	0.455	41,970	0.422
DE         1900-1909         453         0.313         452         0.338         0            DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,570         1.076         2,537         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1950-1959         7,976         1.126         7,890         1.160         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE         1970-1979         64,603         1.937         63,733         1.979         199         16.994           DE         1980-1989	DC	2010-2019	117,230	0.430	38,684	0.556	76,771	0.392
DE         1910-1919         1,654         1.005         1,644         1.059         0            DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,570         1.076         2,537         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1950-1959         7,976         1.126         7,890         1.160         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE         1970-1979         64,603         1.937         63,733         1.979         199         16.994           DE         1980-1989         279,031         4.060         263,108         4.099         1,956         23.033           DE         1990-1999         600,176         6.139         432,176         5.530         118,561         8.905           DE         2000-2009         1,181,467         6.034         364,043         4.106         717,732         7.223           <	DC	2020-pres.	69,679	0.342	17,373	0.559	51,487	0.302
DE         1920-1929         4,154         1.666         4,111         1.734         0            DE         1930-1939         2,570         1.076         2,537         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1950-1959         7,976         1.126         7,890         1.160         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE         1970-1979         64,603         1.937         63,733         1.979         199         16.994           DE         1980-1989         279,031         4.060         263,108         4.099         1,956         23.033           DE         1990-1999         600,176         6.139         432,176         5.530         118,561         8.905           DE         2000-2009         1,181,467         6.034         364,043         4.106         717,732         7.223           DE         2010-2019         1,731,357         6.346         331,801         4.765         1,069,506         5.464	DE	1900-1909	453	0.313	452	0.338	0	
DE         1930-1939         2,570         1.076         2,537         1.130         0            DE         1940-1949         2,760         0.873         2,726         0.915         0            DE         1950-1959         7,976         1.126         7,890         1.160         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE         1970-1979         64,603         1.937         63,733         1.979         199         16.994           DE         1980-1989         279,031         4.060         263,108         4.099         1,956         23.033           DE         1990-1999         600,176         6.139         432,176         5.530         118,561         8.905           DE         2000-2009         1,181,467         6.034         364,043         4.106         717,732         7.223           DE         2010-2019         1,731,357         6.346         331,801         4.765         1,069,506         5.464           DE         2020-pres.         1,170,281         5.738         225,976         7.269         856,711         5.023	DE	1910-1919	1,654	1.005	1,644	1.059	0	
DE1940-19492,7600.8732,7260.9150DE1950-19597,9761.1267,8901.1600DE1960-196920,1611.48719,9041.5210DE1970-197964,6031.93763,7331.97919916.994DE1980-1989279,0314.060263,1084.0991,95623.033DE1990-1999600,1766.139432,1765.530118,5618.905DE2000-20091,181,4676.034364,0434.106717,7327.223DE2010-20191,731,3576.346331,8014.7651,069,5065.464DE2020-pres.1,170,2815.738225,9767.269856,7115.023FL1900-19094880.3374870.3640FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	DE	1920-1929	4,154	1.666	4,111	1.734	0	
DE         1950-1959         7,976         1.126         7,890         1.160         0            DE         1960-1969         20,161         1.487         19,904         1.521         0            DE         1970-1979         64,603         1.937         63,733         1.979         199         16.994           DE         1980-1989         279,031         4.060         263,108         4.099         1,956         23.033           DE         1990-1999         600,176         6.139         432,176         5.530         118,561         8.905           DE         2000-2009         1,181,467         6.034         364,043         4.106         717,732         7.223           DE         2010-2019         1,731,357         6.346         331,801         4.765         1,069,506         5.464           DE         2020-pres.         1,170,281         5.738         225,976         7.269         856,711         5.023           FL         1900-1909         488         0.337         487         0.364         0            FL         1910-1919         668         0.406         668         0.430         0 <td>DE</td> <td>1930-1939</td> <td>2,570</td> <td>1.076</td> <td>2,537</td> <td>1.130</td> <td>0</td> <td></td>	DE	1930-1939	2,570	1.076	2,537	1.130	0	
DE1960-196920,1611.48719,9041.5210DE1970-197964,6031.93763,7331.97919916.994DE1980-1989279,0314.060263,1084.0991,95623.033DE1990-1999600,1766.139432,1765.530118,5618.905DE2000-20091,181,4676.034364,0434.106717,7327.223DE2010-20191,731,3576.346331,8014.7651,069,5065.464DE2020-pres.1,170,2815.738225,9767.269856,7115.023FL1900-19094880.3374870.3640FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	DE	1940-1949	2,760	0.873	2,726	0.915	0	
DE1970-197964,6031.93763,7331.97919916.994DE1980-1989279,0314.060263,1084.0991,95623.033DE1990-1999600,1766.139432,1765.530118,5618.905DE2000-20091,181,4676.034364,0434.106717,7327.223DE2010-20191,731,3576.346331,8014.7651,069,5065.464DE2020-pres.1,170,2815.738225,9767.269856,7115.023FL1900-19094880.3374870.3640FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	DE	1950-1959	7,976	1.126	7,890	1.160	0	
DE1980-1989279,0314.060263,1084.0991,95623.033DE1990-1999600,1766.139432,1765.530118,5618.905DE2000-20091,181,4676.034364,0434.106717,7327.223DE2010-20191,731,3576.346331,8014.7651,069,5065.464DE2020-pres.1,170,2815.738225,9767.269856,7115.023FL1900-19094880.3374870.3640FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	DE	1960-1969	20,161	1.487	19,904	1.521	0	
DE1990-1999600,1766.139432,1765.530118,5618.905DE2000-20091,181,4676.034364,0434.106717,7327.223DE2010-20191,731,3576.346331,8014.7651,069,5065.464DE2020-pres.1,170,2815.738225,9767.269856,7115.023FL1900-19094880.3374870.3640FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	DE	1970-1979	64,603	1.937	63,733	1.979	199	16.994
DE2000-20091,181,4676.034364,0434.106717,7327.223DE2010-20191,731,3576.346331,8014.7651,069,5065.464DE2020-pres.1,170,2815.738225,9767.269856,7115.023FL1900-19094880.3374870.3640FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	DE	1980-1989	279,031	4.060	263,108	4.099	1,956	23.033
DE2010-20191,731,3576.346331,8014.7651,069,5065.464DE2020-pres.1,170,2815.738225,9767.269856,7115.023FL1900-19094880.3374870.3640FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	DE	1990-1999	600,176	6.139	432,176	5.530	118,561	8.905
DE         2020-pres.         1,170,281         5.738         225,976         7.269         856,711         5.023           FL         1900-1909         488         0.337         487         0.364         0            FL         1910-1919         668         0.406         668         0.430         0            FL         1920-1929         21,298         8.541         21,298         8.983         0            FL         1930-1939         16,834         7.047         16,833         7.499         0            FL         1940-1949         21,668         6.852         21,537         7.230         0	DE	2000-2009	1,181,467	6.034	364,043	4.106	717,732	7.223
DE2020-pres.1,170,2815.738225,9767.269856,7115.023FL1900-19094880.3374870.3640FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	DE	2010-2019		6.346	331,801	4.765		5.464
FL         1900-1909         488         0.337         487         0.364         0            FL         1910-1919         668         0.406         668         0.430         0            FL         1920-1929         21,298         8.541         21,298         8.983         0            FL         1930-1939         16,834         7.047         16,833         7.499         0            FL         1940-1949         21,668         6.852         21,537         7.230         0	DE	2020-pres.		5.738		7.269	856,711	5.023
FL1910-19196680.4066680.4300FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300	FL	1900-1909	488		487	0.364		
FL1920-192921,2988.54121,2988.9830FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300		1910-1919	668				0	
FL1930-193916,8347.04716,8337.4990FL1940-194921,6686.85221,5377.2300							0	
FL 1940-1949 21,668 6.852 21,537 7.230 0								
							0	
$\Gamma [1300-1309] - (0,109] 9.300 - (0,090] 10.575 - 0 $	FL	1950-1959	70,759	9.986	70,596	10.375	0	

FL	1960-1969	143,315	10.570	142,959	10.925	0	
FL FL	1900-1909	331,576	9.944	325,449	10.323	2	0.171
FL	1970-1979	761,242	11.075	744,246	11.595	168	1.978
FL FL	1980-1989	1,068,710	10.931	1,030,377	13.184	18,646	1.401
FL	2000-2009	2,355,536	12.029	1,495,483	16.868	843,246	8.486
FL FL	2000-2009	3,293,393	12.029	1,150,167	16.518	2,135,310	8.480 10.910
FL FL	2010-2019 2020-pres.	2,473,318	12.071	442,914	14.247	2,027,618	11.888
GA	1900-1909	2,473,318	0.191	207	0.155	2,027,018	11.000
GAGA	1900-1909	322	0.191	289	0.133	0	
GA	1910-1919	760	0.190	714	0.180	0	
GA	1920-1929		0.509		0.520		
		1,215		1,168		0	
GA	1940-1949	5,880	1.860	5,805	1.949	0	
GA	1950-1959	13,365	1.886	13,286	1.953	0	
GA	1960-1969	30,761	2.269	30,628	2.341	0	
GA	1970-1979	89,073	2.671	88,738	2.756	32	2.733
GA	1980-1989	171,238	2.491	168,508	2.625	195	2.296
GA	1990-1999	319,934	3.272	271,713	3.477	34,570	2.597
GA	2000-2009	727,572	3.716	334,878	3.777	381,600	3.840
GA	2010-2019	1,074,056	3.937	217,074	3.118	848,407	4.335
GA	2020-pres.	1,036,251	5.080	99,307	3.194	928,889	5.446
HI	1900-1909	35	0.024	35	0.026	0	
HI	1910-1919	60	0.036	59	0.038	0	
HI	1920-1929	86	0.034	82	0.035	0	
HI	1930-1939	94	0.039	90	0.040	0	
HI	1940-1949	270	0.085	245	0.082	0	
HI	1950-1959	951	0.134	871	0.128	0	
HI	1960-1969	2,886	0.213	2,701	0.206	0	
HI	1970-1979	9,665	0.290	8,435	0.262	0	0.000
HI	1980-1989	37,417	0.544	29,112	0.454	0	0.000
HI	1990-1999	54,570	0.558	39,451	0.505	3,452	0.259
HI	2000-2009	94,722	0.484	35,317	0.398	53,521	0.539
HI	2010-2019	128,084	0.469	26,516	0.381	97,540	0.498
HI	2020-pres.	82,365	0.404	9,830	0.316	70,874	0.416
IA	1900-1909	1,170	0.808	810	0.605	0	
IA	1910-1919	2,087	1.268	1,698	1.093	0	
IA	1920-1929	1,616	0.648	1,234	0.520	0	
IA	1930-1939	3,482	1.458	2,983	1.329	0	
IA	1940-1949	6,942	2.195	6,630	2.226	0	
IA	1950-1959	8,430	1.190	7,910	1.163	0	
IA	1960-1969	15,432	1.138	14,590	1.115	0	
IA	1970-1979	40,501	1.215	36,397	1.130	20	1.708
IA	1980-1989	64,567	0.939	50,684	0.790	124	1.460
IA	1990-1999	76,799	0.786	54,786	0.701	11,532	0.866
IA	2000-2009	126,655	0.647	51,863	0.585	65,067	0.655

IA	2010-2019	179,886	0.659	33,584	0.482	139,913	0.715
IA	2010-2017 2020-pres.	122,392	0.600	11,800	0.482	108,615	0.637
ID	1900-1909	3,797	2.622	3,775	2.820	0	0.057
ID	1910-1919	3,699	2.248	3,679	2.369	0	
ID	1920-1929	3,469	1.391	3,467	1.462	0	
ID	1920-1929	2,423	1.014	2,421	1.079	0	
ID	1940-1949	3,408	1.078	3,393	1.139	0	
ID	1950-1959	5,112	0.721	5,106	0.750	0	
ID	1960-1969	7,523	0.555	7,515	0.574	0	
ID	1970-1979	15,908	0.477	15,893	0.494	3	0.256
ID	1980-1989	22,109	0.322	20,855	0.325	14	0.165
ID	1990-1999	41,101	0.420	29,046	0.372	9,304	0.699
ID	2000-2009	110,293	0.563	36,292	0.409	69,402	0.698
ID	2010-2019	157,448	0.577	21,626	0.311	129,845	0.663
ID	2020-pres.	129,249	0.634	11,265	0.362	115,830	0.679
IL	1900-1909	668	0.461	668	0.499	0	
IL	1910-1919	1,010	0.614	1,010	0.650	0	
IL	1920-1929	1,711	0.686	1,711	0.722	0	
IL	1930-1939	2,298	0.962	2,298	1.024	0	
IL	1940-1949	5,515	1.744	5,515	1.851	0	
IL	1950-1959	11,263	1.589	11,263	1.655	0	
IL	1960-1969	22,476	1.658	22,476	1.718	0	
IL	1970-1979	59,281	1.778	59,281	1.841	0	0.000
IL	1980-1989	227,282	3.307	227,282	3.541	0	0.000
IL	1990-1999	407,021	4.163	377,848	4.835	29,173	2.191
IL	2000-2009	691,795	3.533	472,197	5.326	219,598	2.210
IL	2010-2019	831,934	3.049	411,244	5.906	420,690	2.149
IL	2020-pres.	619,194	3.036	146,381	4.709	472,813	2.772
IN	1900-1909	1,013	0.700	290	0.217	0	
IN	1910-1919	2,123	1.290	469	0.302	0	
IN	1920-1929	3,721	1.492	937	0.395	0	
IN	1930-1939	6,448	2.699	1,624	0.724	0	
IN	1940-1949	10,074	3.186	3,384	1.136	0	
IN	1950-1959	19,248	2.716	7,644	1.123	0	
IN	1960-1969	37,985	2.802	17,643	1.348	0	
IN	1970-1979	68,434	2.052	57,716	1.792	30	2.562
IN	1980-1989	105,506	1.535	104,352	1.626	174	2.049
IN	1990-1999	172,733	1.767	131,391	1.681	21,414	1.608
IN	2000-2009	293,816	1.500	124,086	1.400	150,617	1.516
IN	2010-2019	470,461	1.724	91,631	1.316	348,644	1.781
IN	2020-pres.	326,886	1.603	36,966	1.189	287,405	1.685
KS	1900-1909	6,472	4.469	5,597	4.181	0	
KS	1910-1919	6,114	3.716	5,484	3.532	0	
KS	1920-1929	6,422	2.575	5,944	2.507	0	

KS	1930-1939	4,381	1.834	4,139	1.844	0	
KS	1940-1949	5,301	1.676	5,134	1.724	0	
KS	1950-1959	11,733	1.656	11,384	1.673	0	
KS	1960-1969	20,254	1.494	19,823	1.515	0	
KS	1970-1979	41,110	1.233	38,443	1.194	16	1.366
KS	1980-1989	57,004	0.829	52,385	0.816	69	0.813
KS	1990-1999	68,629	0.702	51,488	0.659	13,031	0.979
KS	2000-2009	120,074	0.613	47,328	0.534	68,050	0.685
KS	2010-2019	168,206	0.617	28,499	0.409	136,626	0.698
KS	2020-pres.	113,479	0.556	10,572	0.340	96,847	0.568
KY	1900-1909	354	0.244	353	0.264	0	
KY	1910-1919	406	0.247	406	0.261	0	
KY	1920-1929	622	0.249	617	0.260	0	
KY	1930-1939	945	0.396	901	0.401	0	
KY	1940-1949	2,150	0.680	2,088	0.701	0	
KY	1950-1959	5,861	0.827	5,818	0.855	0	
KY	1960-1969	16,904	1.247	16,829	1.286	0	
KY	1970-1979	47,295	1.418	47,207	1.466	13	1.110
KY	1980-1989	75,088	1.092	74,209	1.156	57	0.671
KY	1990-1999	102,758	1.051	85,483	1.094	14,378	1.080
KY	2000-2009	184,868	0.944	64,222	0.724	117,663	1.184
KY	2010-2019	241,840	0.886	39,789	0.571	199,268	1.018
KY	2020-pres.	174,991	0.858	14,777	0.475	158,467	0.929
LA	1900-1909	3,400	2.348	3,226	2.410	0	
LA	1910-1919	5,320	3.233	5,157	3.321	0	
LA	1920-1929	10,763	4.316	10,612	4.476	0	
LA	1930-1939	8,833	3.698	8,719	3.884	0	
LA	1940-1949	8,693	2.749	8,593	2.885	0	
LA	1950-1959	19,623	2.769	19,525	2.870	0	
LA	1960-1969	38,983	2.875	38,735	2.960	0	
LA	1970-1979	78,363	2.350	78,049	2.424	91	7.771
LA	1980-1989	140,352	2.042	129,528	2.018	474	5.582
LA	1990-1999	152,106	1.556	115,882	1.483	31,571	2.371
LA	2000-2009	291,943	1.491	69,916	0.789	219,311	2.207
LA	2010-2019	401,146	1.470	44,209	0.635	354,301	1.810
LA	2020-pres.	268,847	1.318	16,890	0.543	250,017	1.466
MA	1900-1909	1,216	0.840	987	0.737	0	
MA	1910-1919	1,691	1.028	1,458	0.939	0	
MA	1920-1929	2,881	1.155	2,565	1.082	0	
MA	1930-1939	4,716	1.974	4,493	2.002	0	
MA	1940-1949	7,301	2.309	6,981	2.344	0	
MA	1950-1959	14,872	2.099	14,081	2.069	0	
MA	1960-1969	34,397	2.537	30,991	2.368	0	
MA	1970-1979	102,779	3.082	96,532	2.998	0	0.000

MA	1980-1989	167,535	2.437	155,899	2.429	0	0.000
MA	1990-1999	162,197	1.659	138,465	1.772	11,428	0.858
MA	2000-2009	232,435	1.187	123,914	1.398	98,000	0.986
MA	2010-2019	334,721	1.227	120,838	1.735	209,143	1.069
MA	2020-pres.	213,633	1.047	55,248	1.777	156,784	0.919
MD	1900-1909	238	0.164	233	0.174	0	
MD	1910-1919	375	0.228	373	0.240	0	
MD	1920-1929	699	0.280	699	0.295	0	
MD	1930-1939	865	0.362	865	0.385	0	
MD	1940-1949	2,120	0.670	2,119	0.711	0	
MD	1950-1959	5,506	0.777	5,506	0.809	0	
MD	1960-1969	11,256	0.830	11,256	0.860	0	
MD	1970-1979	42,332	1.270	42,328	1.314	0	0.000
MD	1980-1989	174,213	2.535	162,705	2.535	0	0.000
MD	1990-1999	215,929	2.209	172,114	2.202	32,999	2.479
MD	2000-2009	386,828	1.975	151,583	1.710	229,756	2.312
MD	2010-2019	504,774	1.850	96,271	1.383	402,782	2.058
MD	2020-pres.	354,228	1.737	35,299	1.135	317,641	1.862
ME	1900-1909	484	0.334	451	0.337	0	
ME	1910-1919	522	0.317	497	0.320	0	
ME	1920-1929	575	0.231	566	0.239	0	
ME	1930-1939	557	0.233	544	0.242	0	
ME	1940-1949	855	0.270	843	0.283	0	
ME	1950-1959	1,514	0.214	1,480	0.218	0	
ME	1960-1969	2,583	0.191	2,544	0.194	0	
ME	1970-1979	7,081	0.212	6,770	0.210	11	0.939
ME	1980-1989	24,559	0.357	23,438	0.365	43	0.506
ME	1990-1999	35,755	0.366	31,375	0.401	3,281	0.246
ME	2000-2009	62,200	0.318	29,858	0.337	31,196	0.314
ME	2010-2019	75,429	0.276	17,036	0.245	57,284	0.293
ME	2020-pres.	54,920	0.269	6,156	0.198	48,212	0.283
MI	1900-1909	743	0.513	736	0.550	0	
MI	1910-1919	867	0.527	865	0.557	0	
MI	1920-1929	1,537	0.616	1,532	0.646	0	
MI	1930-1939	2,227	0.932	2,221	0.989	0	
MI	1940-1949	5,707	1.805	5,666	1.902	0	
MI	1950-1959	12,940	1.826	12,859	1.890	0	
MI	1960-1969	33,370	2.461	32,919	2.516	0	
MI	1970-1979	112,904	3.386	109,127	3.389	43	3.672
MI	1980-1989	239,643	3.487	230,652	3.593	251	2.956
MI	1990-1999	346,168	3.541	272,325	3.484	67,231	5.050
MI	2000-2009	635,131	3.244	230,634	2.601	400,485	4.030
MI	2010-2019	794,566	2.912	141,290	2.029	650,313	3.323
MI	2020-pres.	573,736	2.813	48,201	1.551	523,905	3.072

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MN	1900-1909	7,605	5.252	7,419	5.542	0	
MN	1910-1919	9,568	5.815	9,325	6.005	0	
MN	1920-1929	9,375	3.760	8,635	3.642	0	
MN	1930-1939	8,061	3.374	7,070	3.150	0	
MN	1940-1949	11,219	3.548	10,121	3.398	0	
MN	1950-1959	20,268	2.860	19,674	2.891	0	
MN	1960-1969	34,208	2.523	33,990	2.597	0	
MN	1970-1979	67,060	2.011	66,794	2.074	0	0.000
MN	1980-1989	104,878	1.526	100,095	1.559	0	0.000
MN	1990-1999	156,577	1.601	130,037	1.664	14,465	1.086
MN	2000-2009	313,692	1.602	138,261	1.560	161,247	1.623
MN	2010-2019	410,579	1.505	81,112	1.165	322,512	1.648
MN	2020-pres.	259,316	1.271	31,852	1.025	224,367	1.316
MO	1900-1909	4,093	2.826	2,070	1.546	0	
MO	1910-1919	4,383	2.664	2,445	1.575	0	
MO	1920-1929	6,969	2.795	4,196	1.770	0	
MO	1930-1939	6,247	2.615	3,603	1.605	0	
MO	1940-1949	8,816	2.788	5,436	1.825	0	
MO	1950-1959	17,844	2.518	14,816	2.177	0	
MO	1960-1969	42,255	3.117	40,558	3.099	0	
MO	1970-1979	90,334	2.709	88,628	2.752	10	0.854
MO	1980-1989	141,493	2.059	135,996	2.119	88	1.036
MO	1990-1999	208,647	2.134	164,600	2.106	34,867	2.619
MO	2000-2009	392,888	2.006	134,967	1.522	247,089	2.487
MO	2010-2019	557,584	2.044	86,349	1.240	464,397	2.373
MO	2020-pres.	388,731	1.906	37,590	1.209	348,337	2.042
MS	1900-1909	4,253	2.937	4,250	3.175	0	
MS	1910-1919	3,059	1.859	3,048	1.963	0	
MS	1920-1929	4,458	1.788	4,409	1.860	0	
MS	1930-1939	4,646	1.945	4,391	1.956	0	
MS	1940-1949	6,013	1.902	5,712	1.918	0	
MS	1950-1959	11,188	1.579	11,112	1.633	0	
MS	1960-1969	22,547	1.663	22,452	1.716	0	
MS	1970-1979	41,062	1.231	40,957	1.272	10	0.854
MS	1980-1989	60,348	0.878	58,827	0.917	76	0.895
MS	1990-1999	92,456	0.946	77,833	0.996	10,885	0.818
MS	2000-2009	161,323	0.824	67,983	0.767	89,728	0.903
MS	2010-2019	229,890	0.843	47,160	0.677	179,502	0.917
MS	2020-pres.	222,338	1.090	22,371	0.720	197,798	1.160
MT	1900-1909	3,334	2.302	3,184	2.378	0	
MT	1910-1919	6,011	3.653	5,283	3.402	0	
MT	1920-1929	4,292	1.721	4,015	1.693	0	
MT	1930-1939	2,437	1.020	1,997	0.890	0	
MT	1940-1949	3,847	1.217	3,538	1.188	0	
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MT	1950-1959	5,205	0.735	5,056	0.743	0	
MT	1960-1969	6,786	0.501	6,679	0.510	0	
MT	1970-1979	14,587	0.437	14,000	0.435	0	0.000
MT	1980-1989	19,136	0.278	18,242	0.284	0	0.000
MT	1990-1999	34,355	0.351	25,666	0.328	5,997	0.450
MT	2000-2009	100,195	0.512	33,663	0.380	62,027	0.624
MT	2010-2019	138,233	0.507	22,833	0.328	111,495	0.570
MT	2020-pres.	135,342	0.664	9,145	0.294	124,759	0.731
NC	1900-1909	264	0.182	237	0.177	0	
NC	1910-1919	353	0.215	321	0.207	0	
NC	1920-1929	728	0.292	700	0.295	0	
NC	1930-1939	1,186	0.496	1,103	0.491	0	
NC	1940-1949	2,925	0.925	2,854	0.958	0	
NC	1950-1959	6,839	0.965	6,755	0.993	0	
NC	1960-1969	17,708	1.306	17,497	1.337	0	
NC	1970-1979	58,018	1.740	57,528	1.786	7	0.598
NC	1980-1989	131,129	1.908	128,059	1.995	31	0.365
NC	1990-1999	216,721	2.217	177,423	2.270	32,201	2.419
NC	2000-2009	455,628	2.327	225,171	2.540	225,946	2.274
NC	2010-2019	626,936	2.298	159,830	2.295	463,554	2.368
NC	2020-pres.	592,374	2.904	68,491	2.203	521,061	3.055
ND	1900-1909	1,084	0.749	1,033	0.772	0	
ND	1910-1919	1,119	0.680	992	0.639	0	
ND	1920-1929	679	0.272	614	0.259	0	
ND	1930-1939	524	0.219	360	0.160	0	
ND	1940-1949	948	0.300	757	0.254	0	
ND	1950-1959	1,568	0.221	1,429	0.210	0	
ND	1960-1969	2,260	0.167	2,144	0.164	0	
ND	1970-1979	4,996	0.150	4,841	0.150	0	0.000
ND	1980-1989	9,191	0.134	8,827	0.138	10	0.118
ND	1990-1999	15,783	0.161	11,610	0.149	1,590	0.119
ND	2000-2009	26,276	0.134	11,976	0.135	9,286	0.093
ND	2010-2019	55,402	0.203	10,689	0.154	39,698	0.203
ND	2020-pres.	27,182	0.133	2,669	0.086	22,857	0.134
NE	1900-1909	286	0.197	187	0.140	0	
NE	1910-1919	454	0.276	332	0.214	0	
NE	1920-1929	411	0.165	352	0.148	0	
NE	1930-1939	504	0.211	439	0.196	0	
NE	1940-1949	944	0.299	895	0.300	0	
NE	1950-1959	2,811	0.397	2,721	0.400	0	
NE	1960-1969	6,886	0.508	6,613	0.505	0	
NE	1970-1979	21,828	0.655	21,533	0.669	8	0.683
NE	1980-1989	34,912	0.508	33,011	0.514	37	0.436
NE	1990-1999	41,754	0.427	34,172	0.437	5,384	0.404

NE	2000 2000	(0.150	0.353	22.012	0.371	24 204	0.246
NE NE	2000-2009 2010-2019	69,150 102,868	0.333	32,913 20,109	0.371	34,394	0.346 0.418
NE		69,580		6,294	0.289	81,766 62,929	
NE NH	2020-pres. 1900-1909	1,271	0.341 0.878	1,214	0.202		0.369
	1900-1909		0.768			0	
NH NH	1910-1919	1,264 1,839	0.788	1,236 1,816	0.796 0.766	0	
	1920-1929		0.737				
NH NH	1930-1939	1,918 2,578	0.803	1,898 2,552	0.846 0.857	0	
NH	1940-1949	5,011	0.707	4,965	0.837	0	
NH	1950-1959	8,549	0.631	8,479	0.730	0	
NH	1900-1909	16,815	0.504	16,541	0.048	32	2.733
NH	1970-1979	33,539	0.304	32,639	0.509	197	2.733
NH	1980-1989	41,026	0.488	31,217	0.309	8,571	0.644
NH	2000-2009	80,624	0.420	19,167	0.399	60,488	0.609
NH	2010-2019	94,474	0.346	12,355	0.210	81,274	0.415
NH	2010-2019 2020-pres.	65,531	0.340	4,965	0.177	60,123	0.353
NJ	1900-1909	3,500	2.417	3,499	2.614	00,125	
NJ	1900-1909	5,006	3.042	5,002	3.221	0	
NJ	1920-1929	9,455	3.792	9,398	3.964	0	
NJ	1920-1929	14,725	6.164	14,648	6.526	0	
NJ	1940-1949	15,134	4.786	14,998	5.035	0	
NJ	1950-1959	30,738	4.338	30,662	4.506	0	
NJ	1960-1969	65,915	4.862	65,889	5.035	0	
NJ	1970-1979	183,585	5.506	183,557	5.700	1	0.085
NJ	1980-1989	312,581	4.548	303,710	4.732	5	0.059
NJ	1990-1999	388,164	3.970	323,011	4.133	56,684	4.258
NJ	2000-2009	671,987	3.432	235,962	2.662	428,722	4.314
NJ	2010-2019	894,968	3.280	152,044	2.184	736,344	3.762
NJ	2020-pres.	579,194	2.840	65,910	2.120	510,090	2.991
NM	1900-1909	3,067	2.118	1,161	0.867	0	
NM	1910-1919	1,670	1.015	1,335	0.860	0	
NM	1920-1929	1,676	0.672	1,453	0.613	0	
NM	1930-1939	1,463	0.612	1,290	0.575	0	
NM	1940-1949	2,105	0.666	1,869	0.627	0	
NM	1950-1959	6,040	0.852	5,763	0.847	0	
NM	1960-1969	10,079	0.743	9,889	0.756	0	
NM	1970-1979	22,544	0.676	22,358	0.694	4	0.342
NM	1980-1989	31,057	0.452	30,893	0.481	20	0.236
NM	1990-1999	45,742	0.468	35,304	0.452	9,007	0.677
NM	2000-2009	94,820	0.484	29,812	0.336	63,619	0.640
NM	2010-2019	137,208	0.503	17,363	0.249	119,058	0.608
NM	2020-pres.	119,018	0.584	5,342	0.172	113,646	0.666
NV	1900-1909	32	0.022	31	0.023	0	
NV	1910-1919	41	0.025	41	0.026	0	

NV	1920-1929	63	0.025	60	0.025	0	
NV	1930-1939	97	0.023	77	0.025	0	
NV	1940-1949	145	0.046	112	0.038	0	
NV	1950-1959	578	0.082	501	0.074	0	
NV	1960-1969	1,726	0.127	1,550	0.118	0	
NV	1970-1979	6,105	0.183	5,663	0.176	9	0.769
NV	1980-1989	19,597	0.285	16,893	0.263	71	0.836
NV	1990-1999	195,967	2.004	144,852	1.853	29,977	2.252
NV	2000-2009	619,598	3.164	301,892	3.405	287,579	2.894
NV	2010-2019	501,016	1.836	126,397	1.815	367,844	1.879
NV	2020-pres.	234,261	1.149	29,654	0.954	202,225	1.186
NY	1900-1909	3,075	2.123	2,745	2.050	0	
NY	1910-1919	5,695	3.461	5,402	3.479	0	
NY	1920-1929	8,498	3.408	8,130	3.429	0	
NY	1930-1939	11,928	4.993	11,530	5.137	0	
NY	1940-1949	24,432	7.726	24,045	8.072	0	
NY	1950-1959	54,876	7.744	54,431	8.000	0	
NY	1960-1969	103,748	7.652	103,411	7.902	0	
NY	1970-1979	317,637	9.526	317,310	9.853	0	0.000
NY	1980-1989	717,690	10.442	716,962	11.170	0	0.000
NY	1990-1999	828,378	8.473	747,264	9.561	65,395	4.912
NY	2000-2009	1,197,761	6.117	804,547	9.075	382,035	3.845
NY	2010-2019	1,562,684	5.728	777,138	11.161	779,332	3.982
NY	2020-pres.	952,748	4.671	332,885	10.708	618,183	3.625
OH	1900-1909	7,658	5.288	7,150	5.341	0	
OH	1910-1919	9,607	5.839	9,064	5.837	0	
OH	1920-1929	13,563	5.439	12,873	5.429	0	
OH	1930-1939	11,683	4.891	11,340	5.052	0	
OH	1940-1949	14,444	4.568	13,757	4.618	0	
OH	1950-1959	30,696	4.332	28,354	4.167	0	
OH	1960-1969	55,693	4.108	51,737	3.954	0	
OH	1970-1979	124,426	3.732	120,318	3.736	41	3.501
OH	1980-1989	187,569	2.729	183,241	2.855	286	3.368
OH	1990-1999	275,875	2.822	213,113	2.727	46,632	3.503
OH	2000-2009	498,406	2.545	153,451	1.731	334,133	3.363
OH	2010-2019	731,625	2.682	95,355	1.369	625,925	3.198
OH	2020-pres.	582,533	2.856	49,055	1.578	526,953	3.090
OK	1900-1909	12,862	8.882	11,487	8.580	0	
OK	1910-1919	15,420	9.372	14,982	9.648	0	
OK	1920-1929	12,424	4.982	11,840	4.994	0	
OK	1930-1939	8,995	3.765	8,711	3.881	0	
OK	1940-1949	6,288	1.989	6,070	2.038	0	
OK	1950-1959	14,588	2.059	14,162	2.081	0	
OK	1960-1969	28,681	2.115	28,083	2.146	0	

OK	1970-1979	60,215	1.806	56,685	1.760	5	0.427
OK	1980-1989	101,604	1.478	94,813	1.477	30	0.353
OK	1990-1999	112,437	1.150	88,594	1.134	20,055	1.506
OK	2000-2009	199,801	1.020	76,167	0.859	119,802	1.206
OK	2010-2019	312,472	1.145	51,218	0.736	257,675	1.316
OK	2020-pres.	229,050	1.123	19,030	0.612	207,948	1.219
OR	1900-1909	283	0.195	279	0.208	0	
OR	1910-1919	299	0.182	288	0.185	0	
OR	1920-1929	515	0.207	498	0.210	0	
OR	1930-1939	527	0.221	474	0.211	0	
OR	1940-1949	1,342	0.424	1,297	0.435	0	
OR	1950-1959	3,525	0.497	3,439	0.505	0	
OR	1960-1969	7,059	0.521	6,896	0.527	0	
OR	1970-1979	22,306	0.669	21,584	0.670	15	1.281
OR	1980-1989	71,681	1.043	69,398	1.081	97	1.142
OR	1990-1999	136,394	1.395	107,484	1.375	25,051	1.882
OR	2000-2009	279,274	1.426	100,716	1.136	175,526	1.766
OR	2010-2019	362,837	1.330	68,961	0.990	292,362	1.494
OR	2020-pres.	219,599	1.077	25,059	0.806	193,967	1.137
PA	1900-1909	15,603	10.775	15,413	11.513	0	
PA	1910-1919	17,369	10.556	17,111	11.019	0	
PA	1920-1929	26,334	10.561	25,540	10.772	0	
PA	1930-1939	22,049	9.230	21,484	9.572	0	
PA	1940-1949	25,869	8.181	25,021	8.400	0	
PA	1950-1959	49,679	7.011	47,849	7.032	0	
PA	1960-1969	81,000	5.974	79,319	6.061	0	
PA	1970-1979	135,308	4.058	130,712	4.059	41	3.501
PA	1980-1989	210,639	3.065	196,380	3.060	300	3.533
PA	1990-1999	243,793	2.494	216,578	2.771	9,830	0.738
PA	2000-2009	434,396	2.218	200,052	2.257	204,078	2.054
PA	2010-2019	658,661	2.414	126,822	1.821	488,226	2.494
PA	2020-pres.	491,616	2.410	56,360	1.813	431,680	2.531
RI	1900-1909	226	0.156	217	0.162	0	
RI	1910-1919	241	0.146	236	0.152	0	
RI	1920-1929	369	0.148	347	0.146	0	
RI	1930-1939	536	0.224	518	0.231	0	
RI	1940-1949	964	0.305	910	0.305	0	
RI	1950-1959	2,219	0.313	2,174	0.320	0	
RI	1960-1969	3,828	0.282	3,741	0.286	0	
RI	1970-1979	9,569	0.287	9,080	0.282	12	1.025
RI	1980-1989	31,814	0.463	30,686	0.478	71	0.836
RI	1990-1999	36,358	0.372	29,952	0.383	5,425	0.407
RI	2000-2009	56,776	0.290	24,896	0.281	30,760	0.310
RI	2010-2019	61,158	0.224	16,323	0.234	44,049	0.225

RI	2020-pres.	38,373	0.188	5,535	0.178	32,591	0.191
SC	1900-1909	262	0.181	260	0.194	0	
SC	1910-1919	196	0.119	194	0.125	0	
SC	1920-1929	425	0.170	421	0.178	0	
SC	1930-1939	702	0.294	694	0.309	0	
SC	1940-1949	1,533	0.485	1,524	0.512	0	
SC	1950-1959	3,409	0.481	3,391	0.498	0	
SC	1960-1969	7,874	0.581	7,801	0.596	0	
SC	1970-1979	24,222	0.726	22,926	0.712	42	3.587
SC	1980-1989	79,610	1.158	75,716	1.180	230	2.708
SC	1990-1999	135,026	1.381	109,753	1.404	19,337	1.452
SC	2000-2009	296,642	1.515	110,427	1.246	180,482	1.816
SC	2010-2019	409,927	1.502	69,813	1.003	335,272	1.713
SC	2020-pres.	372,401	1.826	31,388	1.010	337,021	1.976
SD	1900-1909	771	0.532	697	0.521	0	
SD	1910-1919	851	0.517	738	0.475	0	
SD	1920-1929	914	0.367	805	0.340	0	
SD	1930-1939	835	0.350	710	0.316	0	
SD	1940-1949	1,532	0.484	1,315	0.441	0	
SD	1950-1959	2,636	0.372	2,382	0.350	0	
SD	1960-1969	4,150	0.306	3,995	0.305	0	
SD	1970-1979	5,793	0.174	5,707	0.177	2	0.171
SD	1980-1989	11,688	0.170	11,417	0.178	8	0.094
SD	1990-1999	19,730	0.202	15,445	0.198	2,695	0.202
SD	2000-2009	35,625	0.182	15,501	0.175	17,712	0.178
SD	2010-2019	59,502	0.218	10,993	0.158	46,439	0.237
SD	2020-pres.	46,103	0.226	5,133	0.165	40,389	0.237
TN	1900-1909	388	0.268	382	0.285	0	
TN	1910-1919	468	0.284	461	0.297	0	
TN	1920-1929	1,116	0.448	1,109	0.468	0	
TN	1930-1939	1,896	0.794	1,889	0.842	0	
TN	1940-1949	3,114	0.985	3,099	1.040	0	
TN	1950-1959	6,964	0.983	6,942	1.020	0	
TN	1960-1969	15,848	1.169	15,790	1.207	0	
TN	1970-1979	55,307	1.659	55,188	1.714	41	3.501
TN	1980-1989	112,118	1.631	111,237	1.733	381	4.487
TN	1990-1999	157,714	1.613	117,925	1.509	31,091	2.335
TN	2000-2009	235,833	1.204	116,601	1.315	112,075	1.128
TN	2010-2019	331,268	1.214	103,663	1.489	221,132	1.130
TN	2020-pres.	285,209	1.398	51,992	1.672	230,209	1.350
TX	1900-1909	11,861	8.191	11,677	8.722	0	
ΤX	1910-1919	12,768	7.760	12,704	8.181	0	
TX	1920-1929	21,569	8.650	21,411	9.031	0	
TX	1930-1939	20,317	8.505	20,208	9.003	0	

TX	1940-1949	23,095	7.304	22,990	7.718	0	
TX	1940-1949	61,212	8.638	60,308	8.863	0	
TX	1960-1969	112,171	8.273	108,698	8.307	0	
TX	1970-1979	257,276	7.716	236,681	7.349	8	0.683
TX	1980-1989	484,269	7.046	443,132	6.904	57	0.671
TX	1990-1999	574,014	5.871	437,747	5.601	55,665	4.181
TX	2000-2009	1,132,916	5.786	463,399	5.227	481,639	4.847
TX	2010-2019	1,781,248	6.529	354,372	5.089	1,357,432	6.935
TX	2010 2019 2020-pres.	1,509,445	7.400	155,360	4.998	1,331,775	7.808
UT	1900-1909	707	0.488	270	0.202	0	
UT	1910-1919	409	0.249	314	0.202	0	
UT	1920-1929	442	0.177	377	0.159	0	
UT	1930-1939	470	0.197	400	0.178	0	
UT	1940-1949	848	0.268	750	0.252	0	
UT	1950-1959	1,951	0.275	1,854	0.272	0	
UT	1960-1969	4,415	0.326	4,171	0.319	0	
UT	1970-1979	22,262	0.668	18,788	0.583	111	9.479
UT	1980-1989	50,476	0.734	43,623	0.680	487	5.735
UT	1990-1999	111,748	1.143	64,041	0.819	40,099	3.012
UT	2000-2009	278,067	1.420	90,392	1.020	180,211	1.814
UT	2010-2019	417,695	1.531	59,041	0.848	351,368	1.795
UT	2020-pres.	260,474	1.277	23,472	0.755	233,392	1.368
VA	1900-1909	265	0.183	264	0.197	0	
VA	1910-1919	222	0.135	221	0.142	0	
VA	1920-1929	401	0.161	399	0.168	0	
VA	1930-1939	451	0.189	449	0.200	0	
VA	1940-1949	901	0.285	899	0.302	0	
VA	1950-1959	2,481	0.350	2,471	0.363	0	
VA	1960-1969	4,837	0.357	4,827	0.369	0	
VA	1970-1979	12,143	0.364	12,119	0.376	8	0.683
VA	1980-1989	27,710	0.403	26,752	0.417	101	1.189
VA	1990-1999	64,993	0.665	45,666	0.584	16,079	1.208
VA	2000-2009	221,395	1.131	75,045	0.846	143,441	1.444
VA	2010-2019	679,185	2.489	126,008	1.810	551,335	2.817
VA	2020-pres.	526,745	2.582	64,784	2.084	460,606	2.701
VT	1900-1909	177	0.122	176	0.131	0	
VT	1910-1919	154	0.094	154	0.099	0	
VT	1920-1929	192	0.077	192	0.081	0	
VT	1930-1939	180	0.075	180	0.080	0	
VT	1940-1949	317	0.100	317	0.106	0	
VT	1950-1959	791	0.112	791	0.116	0	
VT	1960-1969	1,938	0.143	1,937	0.148	0	
VT	1970-1979	5,541	0.166	5,540	0.172	0	0.000
VT	1980-1989	18,462	0.269	18,458	0.288	0	0.000

VT	1990-1999	20.776	0.212	10 (5)	0.239	1 0 / 0	0.139
V I VT	2000-2009	20,776	0.212	18,652 14,297	0.239	1,848 21,931	0.139
VT	2010-2019	37,443 49,766	0.191	8,599	0.101	39,648	0.221
V I VT	2010-2019 2020-pres.	49,700 35,759	0.182	3,369	0.123	39,048	0.203
		,		· · · · ·		· · · · · ·	0.180
WA	1900-1909 1910-1919	428	0.296	388	0.290	0	
WA	1910-1919	386 522	0.235	341 446	0.220	0	
WA WA	1920-1929	782	0.209 0.327		0.188 0.226	0	
WA WA	1930-1939	1,403	0.327	508 1,158	0.228	0	
WA WA	1940-1949	3,139	0.444	2,729	0.389	0	
WA	1950-1959	5,840	0.443	5,415	0.401	0	
WA	1900-1909	16,802	0.431	15,943	0.414	24	2.050
WA	1970-1979	42,701	0.621	38,100	0.493	109	1.284
WA	1980-1989	155,515	1.591	113,978	1.458	32,418	2.435
WA	2000-2009	394,022	2.012	157,129	1.772	227,822	2.293
WA	2010-2019	546,718	2.002	112,097	1.610	430,154	2.198
WA	2010 2019 2020-pres.	354,148	1.736	36,975	1.189	313,878	1.840
WI	1900-1909	722	0.499	447	0.334	0	
WI	1910-1919	885	0.538	665	0.428	0	
WI	1920-1929	1,421	0.550	1,221	0.515	0	
WI	1930-1939	2,134	0.893	1,417	0.631	0	
WI	1940-1949	3,604	1.140	2,834	0.951	0	
WI	1950-1959	8,889	1.254	8,411	1.236	0	
WI	1960-1969	21,135	1.559	20,701	1.582	0	
WI	1970-1979	54,644	1.639	54,127	1.681	36	3.074
WI	1980-1989	80,697	1.174	77,501	1.207	214	2.520
WI	1990-1999	133,213	1.363	92,910	1.189	33,396	2.508
WI	2000-2009	298,364	1.524	67,903	0.766	218,431	2.198
WI	2010-2019	374,117	1.371	45,747	0.657	323,355	1.652
WI	2020-pres.	246,595	1.209	19,430	0.625	226,489	1.328
WV	1900-1909	1,680	1.160	1,679	1.254	0	
WV	1910-1919	2,183	1.327	2,182	1.405	0	
WV	1920-1929	4,550	1.825	4,546	1.917	0	
WV	1930-1939	5,617	2.351	5,606	2.498	0	
WV	1940-1949	7,815	2.471	7,793	2.616	0	
WV	1950-1959	10,175	1.436	10,166	1.494	0	
WV	1960-1969	13,776	1.016	13,741	1.050	0	
WV	1970-1979	27,337	0.820	24,112	0.749	11	0.939
WV	1980-1989	38,313	0.557	31,200	0.486	49	0.577
WV	1990-1999	47,410	0.485	28,649	0.367	5,858	0.440
WV	2000-2009	84,240	0.430	17,795	0.201	37,389	0.376
WV	2010-2019	114,172	0.418	13,175	0.189	59,484	0.304
WV	2020-pres.	58,214	0.285	4,676	0.150	41,096	0.241
WY	1900-1909	104	0.072	104	0.078	0	

WY	1910-1919	142	0.086	142	0.091	0	
WY	1920-1929	145	0.058	145	0.061	0	
WY	1930-1939	217	0.091	215	0.096	0	
WY	1940-1949	399	0.126	397	0.133	0	
WY	1950-1959	1,202	0.170	1,196	0.176	0	
WY	1960-1969	2,720	0.201	2,710	0.207	0	
WY	1970-1979	10,065	0.302	9,453	0.294	24	2.050
WY	1980-1989	24,351	0.354	22,851	0.356	147	1.731
WY	1990-1999	45,502	0.465	32,236	0.412	12,056	0.906
WY	2000-2009	105,699	0.540	46,952	0.530	56,453	0.568
WY	2010-2019	280,142	1.027	62,412	0.896	211,229	1.079
WY	2020-pres.	436,687	2.141	42,323	1.361	390,889	2.292
TOTAL	1900-1909	144,813	100.00	133,877	100.00	0	
TOTAL	1910-1919	164,540	100.00	155,284	100.00	0	
TOTAL	1920-1929	249,358	100.00	237,096	100.00	0	
TOTAL	1930-1939	238,884	100.00	224,458	100.00	0	
TOTAL	1940-1949	316,214	100.00	297,874	100.00	0	
TOTAL	1950-1959	708,615	100.00	680,417	100.00	0	
TOTAL	1960-1969	1,355,839	100.00	1,308,588	100.00	0	
TOTAL	1970-1979	3,334,450	100.00	3,220,388	100.00	1,171	100.00
TOTAL	1980-1989	6,873,397	100.00	6,418,607	100.00	8,492	100.00
TOTAL	1990-1999	9,777,044	100.00	7,815,441	100.00	1,331,344	100.00
TOTAL	2000-2009	19,581,400	100.00	8,865,551	100.00	9,936,845	100.00
TOTAL	2010-2019	27,283,678	100.00	6,962,905	100.00	19,572,748	100.00
TOTAL	2020-pres.	20,396,774	100.00	3,108,732	100.00	17,055,623	100.00