

State Competition for Corporate Headquarters and Corporate Law: An Empirical Analysis

Jens Dammann

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**STATE COMPETITION FOR CORPORATE HEADQUARTERS
AND CORPORATE LAW: AN EMPIRICAL ANALYSIS**

JENS DAMMANN*

ABSTRACT

Unlike reincorporation decisions, domestic relocations of corporate headquarters have not yet received any attention in the corporate law literature. This lack of interest is unsurprising. Under the so-called “internal affairs doctrine,” a corporation’s internal affairs are governed by the state of incorporation, meaning that the location of a firm’s headquarters is irrelevant to corporate law.

However, this traditional approach has begun to change. In 2018, California became the first state to adopt a gender quota for corporate boards. Importantly, the scope of application of this statute is determined by the location of a corporation’s principal executive offices rather than by its state of incorporation. Several other states are now considering similar legislation.

For corporate law theory and policy, this deviation from the internal affairs rule is nothing less than the potential beginning of a tectonic shift. To the extent that the state of the headquarters governs a corporation’s internal affairs, it is the relocation of a firm’s headquarters rather than a firm’s reincorporation that leads to a change in the applicable corporate law. The result is an entirely new dimension of state competition in corporate law; charter competition will likely remain the dominant factor, but states’ attempts to lure corporate headquarters may now also shape corporate law.

This Article lays the groundwork for a discussion of this new and more complex type of state competition by providing a detailed empirical analysis of firms’ relocation choices. Relying on a dataset spanning twenty-five years (1994–2018), I show that headquarters relocations from one state to another are by no means uncommon. I also present evidence that the legal environment appears to be driving relocation choices at least to some extent. These findings suggest that state competition for corporate headquarters may well begin to have an impact on state corporate law.

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INTRODUCTION

In 2018, California became the first U.S. state to mandate a gender quota for the boards of publicly traded corporations.¹ California law now requires publicly-traded corporations with principal offices located in California to have a minimum number of female directors.² This reform rightly attracted

1. See CAL. CORP. CODE § 301.3 (West 2020). This provision was added to the California Code by S.B. 826 and took effect on January 1, 2019. See S.B. 826, 2018 Leg., Reg. Sess. (Cal. 2018). By the end of 2019, publicly traded corporations whose principal offices are located in California were required to have at least one female director. CAL. CORP. CODE § 301.3(a)–(b) (West 2020).

2. The exact number of female directors required depends on the size of the board. Boards with six or more directors must have at least three female directors, boards with five directors must have at least two female directors, and boards with four or fewer directors must have at least one female director. CAL. CORP. CODE § 301.3(b) (West 2020).

substantial attention in both the media³ and the corporate law literature.⁴ The statute's enactment not only highlighted the dramatic underrepresentation of women on corporate boards⁵ but also opened a new battleground in the fight for gender equality by enlisting corporate governance as an instrument to help women shatter the glass ceiling in corporate management.⁶

California's gender quota statute is also remarkable for an entirely different reason. Rather than focusing on a corporation's place of incorporation, it covers publicly-traded corporations that have "principal executive offices" located in California, regardless of where they are incorporated.⁷ While this may seem like a minor technical detail, California's decision to tie its gender quota to a firm's principal executive offices rather than its place of incorporation amounts to a fundamental break from one of U.S. corporate law's most hallowed principles, the so-called internal affairs rule.⁸

3. *E.g.*, Alejandro Lazo, *U.S. News: Gov. Brown Signs a Batch of Laws*, WALL ST. J., Oct. 2, 2018, at A3; Andrew Ross Sorkin, *Diversify the Boardroom, Just Not Like California*, N.Y. TIMES, Oct. 2, 2018, at B1.

4. *See, e.g.*, Douglas M. Branson, *Gender Diversity, Diversity Fatigue, and Shifting the Focus*, 87 GEO. WASH. L. REV. 1061, 1076–77 (2019) (listing gender quotas as one of several measures advocated by those who seek more gender diversity in corporate boardrooms); Joan MacLeod Heminway, *Me, Too and #MeToo: Women in Congress and the Boardroom*, 87 GEO. WASH. L. REV. 1079, 1087 (2019) (viewing California's gender quota in the context of the #metoo movement); Darren Rosenblum & Yaron Nili, *Board Diversity by Term Limits?*, 71 ALA. L. REV. 211, 214–15 (2019) (summarizing the new California statute in the context of their analysis of term limits for corporate directors as a way to increase board diversity); Darren Rosenblum, *California Dreaming?*, 99 B.U. L. REV. 1435, 1439 (2019) (arguing that "despite its many flaws, the quota may succeed in curbing male over-representation on corporate boards"); Cindy A. Schipani & Terry Morehead Dworkin, *The Need for Mentors in Promoting Gender Diverse Leadership in the #MeToo Era*, 87 GEO. WASH. L. REV. 1272, 1297 (2019) (discussing the California gender quota in the broader context of promoting diverse leadership); Ben Taylor, Note, *Why California Senate Bill 826 and Gender Quotas Are Unconstitutional: Shareholder Activism as a Better Path to Gender Equality in the Boardroom*, 18 FLA. ST. U. BUS. REV. 117 (2019) (arguing that the California quota statute violates the U.S. Constitution).

5. *Cf., e.g.*, ALL. FOR BD. DIVERSITY & DELOITTE, MISSING PIECES REPORT: THE 2018 BOARD DIVERSITY CENSUS OF WOMEN AND MINORITIES ON FORTUNE 500 BOARDS 17 (2019), https://www.catalyst.org/wp-content/uploads/2019/01/missing_pieces_report_01152019_final.pdf (reporting that as of 2018, women accounted for 22.5 percent of corporate directors at Fortune 500 companies); Jens Dammann, *Place Aux Dames: The Ideological Divide Between U.S. and European Gender Discrimination Laws*, 45 CORNELL INT'L L.J. 25, 71 (2012) (noting that as of 2010, only about sixteen percent of corporate directors at Fortune 500 companies were women).

6. This is true, at least, with respect to the United States. While California was the first U.S. state to adopt a gender quota for corporate boards, various European countries had already taken this step. *See, e.g., id.* at 71–73 (describing gender quota legislation in Belgium, France, Norway, and Spain).

7. CAL. CORP. CODE § 301.3(b) (West 2020).

8. There is widespread agreement that the internal affairs rule is of fundamental importance to U.S. corporate law. *See, e.g.*, Vincent S.J. Buccola, *Opportunism and Internal Affairs*, 93 TUL. L. REV. 339, 340 (2018) (asserting that "[t]he internal affairs doctrine is the foundation on which modern corporate law is built"). On the fact that California's board quota represents a partial

Under the internal affairs rule, it is the law of the state of incorporation that governs a corporation's internal affairs.⁹ As a result, entrepreneurs are free to choose the corporate law they prefer by incorporating in the state of their choice.¹⁰ Should they later want to change their choice, they can easily reincorporate.¹¹ This freedom of choice is at the heart of what is known as the market for corporate charters.¹² States can compete for corporate charters by making their corporate law attractive to corporations.¹³ To the extent that they succeed, states gain additional revenue by way of the fees that corporations pay for the privilege of being incorporated in the particular state.¹⁴

Of course, many questions involving the charter market remain highly controversial. For example, do states compete for corporate charters by making their law more shareholder-friendly, as many scholars believe,¹⁵ or do they seek to attract firms by pandering to managers?¹⁶ Does regulatory competition benefit shareholders, or would shareholders be better off if the U.S. Congress intervened and federalized substantial parts of corporate

departure from the internal affairs doctrine see Jill E. Fisch & Steven Davidoff Solomon, *Centros, California's 'Women on Boards' Statute and the Scope of Regulatory Competition*, 20 EUR. BUS. ORG. L. REV. 493 (2019).

9. *Edgar v. MITE Corp.*, 457 U.S. 624, 645 (1982).

10. Jens C. Dammann, *Freedom of Choice in European Corporate Law*, 29 YALE J. INT'L L. 477, 478, 487 (2004).

11. *Id.* at 478. Corporate law offers two different ways of reincorporating from one state to another. The traditional way is to form a subsidiary corporation in the desired state of incorporation and then merge the old corporation into the subsidiary. However, many states now allow foreign corporations to become domestic corporations by filing a certificate of conversion. *E.g.*, DEL. CODE ANN. tit. 8, § 265 (West 2020).

12. *See, e.g.*, John F. Coyle, *Rethinking the Commercial Law Treaty*, 45 GA. L. REV. 343, 392 (2011) (pointing out that the internal affairs doctrine has made the market for corporate charters possible).

13. Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J.L. ECON. & ORG. 225, 235–65 (1985) [hereinafter Romano, *Product*].

14. *Id.*

15. Roberta Romano, *Competition for Corporate Charters and the Lesson of Takeover Statutes*, 61 FORDHAM L. REV. 843, 847 (1993) (concluding that existence of the charter market benefits investors “on balance”); Roberta Romano, *A Guide to Takeovers: Theory, Evidence, and Regulation*, 9 YALE J. ON REG. 119, 177–79 (1992) (stressing the charter market’s potential to benefit stockholders); Roberta Romano, *The Need for Competition in International Securities Regulation*, 2 THEORETICAL INQUIRIES L. 387, 389 (2001) [hereinafter Romano, *Securities Regulation*] (noting that regulatory competition in corporate had remarkable success in producing “a regime that, on balance, benefits shareholders”).

16. *See, e.g.*, Lucian Arye Bebchuk & Allen Ferrell, *Federalism and Corporate Law: The Race to Protect Managers from Takeovers*, 99 COLUM. L. REV. 1168, 1170 (1999) (arguing that regulatory competition is “likely to produce troubling results with respect to some critical aspects of corporate law”); Lucian Arye Bebchuk & Allen Ferrell, *A New Approach to Takeover Law and Regulatory Competition*, 87 VA. L. REV. 111, 161–62 (2001) (arguing that the corporate charter market causes states to offer managers an inefficiently high level of protection against takeovers).

law?¹⁷ And how many states compete? Do most states make efforts to attract corporate charters, or do most jurisdictions remain on the sidelines, content to let a few select states—such as Delaware and Nevada—battle for corporate charters?¹⁸ Moreover, to what extent do additional factors, such as network effects or homogeneity benefits,¹⁹ play a role in firms' incorporation choices?²⁰

While all these questions continue to generate discussion among corporate scholars, most voices in the literature seem to agree on one fact: regulatory competition, made possible by the internal affairs rule, is a crucial feature of U.S. corporate law.²¹ Therefore, firms' incorporation and

17. Most scholars seem to oppose further federal interventions in the area of corporate law. See, e.g., Jill E. Fisch, *Leave It to Delaware: Why Congress Should Stay Out of Corporate Governance*, 37 DEL. J. CORP. L. 731, 782 (2013) (arguing that “members of Congress should resist the temptation to interfere with Delaware lawmaking”). However, some scholars cautiously take a more benign view of federal intervention. See, e.g., Lucian A. Bebchuk & Assaf Hamdani, *Federal Corporate Law: Lessons from History*, 106 COLUM. L. REV. 1793, 1794–95 (2006) (arguing that “federal officials should proactively and systematically review all corporate law areas now governed by state law to determine which ones should be fully or at least partly federalized”). For a detailed account of how the federal law has progressively taken over large swaths of what was once, or is still, considered corporate law see Mark J. Roe, *Delaware's Competition*, 117 HARV. L. REV. 588, 607–34 (2003) (tracing the history of federal interventions in the area of corporate law).

18. See Marcel Kahan & Ehud Kamar, *The Myth of State Competition in Corporate Law*, 55 STAN. L. REV. 679, 748–49 (2002) (arguing that Delaware is alone among U.S. states in making active efforts to attract public corporations). But see Romano, *Securities Regulation*, *supra* note 15, at 507–13 (arguing that states are also typically involved in “‘defensive’ competition” in that they try to keep locally headquartered firms from incorporating out of state).

19. Jens Dammann, *Homogeneity Effects in Corporate Law*, 46 ARIZ. ST. L.J. 1103, 1105–06 (2014) (distinguishing homogeneity benefits from network benefits and arguing that homogeneity benefits can explain various features of U.S. and European Union corporate law that network theory cannot explain).

20. The first scholar to suggest that network benefits play an important role in explaining Delaware's dominance in the charter market was Michael Klausner. See Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 842–47 (1995) (showing why network benefits may be one important factor in explaining Delaware's success). Many scholars now argue that network benefits contribute to Delaware's success in the charter market. E.g., Mark J. Roe, *Delaware's Competition*, 117 HARV. L. REV. 588, 594 (2003); Michal Barzua, *Price Considerations in the Market for Corporate Law*, 26 CARDOZO L. REV. 127, 142, 146 (2004); Ehud Kamar, *A Regulatory Competition Theory of Indeterminacy in Corporate Law*, 98 COLUM. L. REV. 1908, 1923–24 (1998) [hereinafter Kamar, *Indeterminacy*]. But see Henry Hansmann, *Corporation and Contract*, 8 AM. L. & ECON. REV. 1, 6 (2006) (arguing that network theory may overstate firms' demand for legal uniformity); Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CALIF. L. REV. 479, 570 (1998) (questioning the practical importance of network benefits in corporate law).

21. Guhan Subramanian, *The Influence of Antitakeover Statutes on Incorporation Choice: Evidence on the “Race” Debate and Antitakeover Overreaching*, 150 U. PA. L. REV. 1795, 1797 (2002) (categorizing the question of whether regulatory competition produces a race to the top or the bottom as “[o]ne of the most important questions in U.S. corporate law”).

reincorporation choices have long been a primary focus of American and international corporate law scholarship.²²

By contrast, corporate law scholars have paid no attention to firms' ability to move their headquarters from one U.S. state to another.²³ This lack of interest is unsurprising. Under the internal affairs rule, a publicly traded corporation's decision to relocate its headquarters from one state to another does not change the applicable corporate law, which continues to be

22. There now exists a well-developed body of empirical research exploring the incorporation choices of publicly traded corporations in the United States. *See, e.g.*, Lucian Arye Bebchuk & Alma Cohen, *Firms' Decisions Where to Incorporate*, 46 J.L. & ECON. 383, 421 (2003) (analyzing the incorporation choices of IPO firms and providing evidence that states adopting a greater number of antitakeover statutes tend to attract more corporations); Marcel Kahan, *The Demand for Corporate Law: Statutory Flexibility, Judicial Quality, or Takeover Protection?*, 22 J.L. ECON. & ORG. 340, 363 (2006) (analyzing the incorporation choices of IPO firms and finding that the flexibility of a state's corporate law regime is positively correlated with success in the charter market). The literature has also analyzed the incorporation choices of closely held firms. *See, e.g.*, Jens Dammann & Matthias Schündeln, *The Incorporation Choices of Privately Held Corporations*, 27 J.L. ECON. & ORG. 79, 84–85 (2011) (demonstrating that most privately held corporations incorporate either locally or in Delaware; and identifying features of corporate law that are positively correlated with success in the charter market).

23. That does not mean that firms' decisions where to locate their headquarters have entirely escaped empirical scrutiny. Economists, most notably those focusing on what is known as regional economics, have long analyzed firms' decisions where to direct their investments. As a result, various studies have examined firms' *original* location decisions. *See, e.g.*, Peter Egger, Doina Radulescu & Nora Strecker, *Effective Labor Taxation and the International Location of Headquarters*, 20 INT'L TAX & PUB. FIN. 631, 631 (2013) (using a dataset including 35,206 firms from 120 countries to assess the impact of labor taxation on the choice of headquarters location); J. Vernon Henderson & Yukako Ono, *Where Do Manufacturing Firms Locate Their Headquarters?*, 63 J. URB. ECON. 431, 431 (2008) (analyzing the headquarters-location choices of manufacturing firms in the United States). Firms' *relocation* choices have attracted much less attention, and the empirical studies focusing on relocation choices typically concentrate on firms' choices where to locate their manufacturing establishments rather than their headquarters. *See, e.g.*, Miguel C. Manjón-Antolín & Josep-Maria Arauzo-Carod, *Locations and Relocations: Determinants, Modelling, and Interrelations*, 47 ANNALS REG'L SCI. 131, 131 (2011) (focusing on the relocation of manufacturing establishments between different municipalities within Catalonia, Spain). A few studies deal with headquarters locations. However, most of them focus on relocations from one country to another. *See, e.g.*, Johannes Voget, *Relocation of Headquarters and International Taxation*, 95 J. PUB. ECON. 1067, 1067 (2011) (examining the role of taxation as a determinant of multinational companies' decision to move their headquarters across international borders); Tomi Laamanen, Tatu Simula & Sami Torstila, *Cross-Border Relocations of Headquarters in Europe*, 43 J. INT'L BUS. STUD. 187, 187 (2012) (using a dataset of fifty-two cross-border headquarters relocations in Europe to analyze the determinants of such relocation choices, including taxation and employment rates); Marc G. Baaij, Tom J.M. Mom, Frans A.J. Van den Bosch & Henk W. Volberda, *Why Do Multinational Corporations Relocate Core Parts of Their Corporate Headquarters Abroad?*, 48 LONG RANGE PLAN. 46, 46 (2015) (analyzing the determinants of firms' decisions to move parts of their headquarters to foreign countries). Other studies focus on the within-country relocations, but focus on countries other than the United States. *See, e.g.*, Kristin Kronenberg, *Firm Relocations in the Netherlands: Why Do Firms Move, and Where Do They Go?*, 92 PAPERS REG'L SCI. 691, 691 (2013) (reexamining firms' relocation choices within the Netherlands).

determined by the corporation's state of incorporation.²⁴ For example, if a publicly-traded Delaware corporation moves its principal place of business from Texas to Florida, the firm's internal affairs remain subject to Delaware corporate law.²⁵ Traditionally, therefore, the internal affairs doctrine rendered headquarters relocations within the United States irrelevant to corporate law.

Of course, there have long existed certain modest exceptions to the internal affairs doctrine. The state corporate laws of both New York and California traditionally include so-called pseudo-foreign corporation statutes that apply certain aspects of New York or California corporate law to firms that are incorporated elsewhere but do most of their business in New York or California.²⁶ However, these statutes explicitly exempt corporations whose shares are listed on national securities exchanges.²⁷

Consequently, California's gender quota statute, which focuses on the location of a firm's principal executive offices rather than on the place of incorporation, amounts to a fundamental shift in the law, not just from the perspective of discrimination law, but also with a view to regulatory competition in corporate law.²⁸ As a result, domestic relocations to and from California now have a direct impact on the applicable corporate law.

Moreover, there is no reason to believe that California will remain an outlier in this regard. Several other states, such as Hawaii,²⁹ Massachusetts,³⁰

24. See *Edgar v. MITE Corp.*, 457 U.S. 624, 645 (1982) (holding that the "internal affairs doctrine" is a conflict of laws principle that "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—because otherwise a corporation could be faced with conflicting demands").

25. As opposed to domestic relations, defined as relocations from one U.S. state to another, firms' *international* relocations have attracted substantial attention. Unlike the United States, most countries take a corporation's principal place of business into account in determining the corporation's residence for tax purposes. See Eric L. Talley, *Corporate Inversions and the Unbundling of Regulatory Competition*, 101 VA. L. REV. 1649, 1661 (2015). Accordingly, relocating a corporation's headquarters from one country to another, can change the corporations' tax residence status.

26. In California, the Corporations Code lists the various provisions applicable to pseudo-foreign corporations. See CAL. CORP. CODE § 2115 (West 2020). In New York, different provisions in the Business Corporation Law provide that they apply to pseudo-foreign corporations. See N.Y. BUS. CORP. LAW §§ 1316(e) (governing voting trust records), 1317(a)(1) (governing the liability of directors and officers), 1318 (governing the liability for disclosure failures), 1319(a)(4) (governing various other provisions) (McKinney 2000). For a detailed analysis of these statutes and their constitutionality see Hartwin Bungert, *Equal Protection for Foreign and Alien Corporations: Towards Intermediate Scrutiny for a Quasi-Suspect Classification*, 59 MO. L. REV. 569 (1994).

27. CAL. CORP. CODE § 2115(c) (West 2000); N.Y. BUS. CORP. LAW § 1320 (McKinney 2000).

28. See *supra* note 1.

29. *Relating to Gender Equity*, H.B. 2720, 30th Leg., Reg. Sess. (Haw. 2020).

30. *Resolutions Encouraging Equitable and Diverse Gender Representation on the Boards of Companies in the Commonwealth*, S. Res. 1007, 189th Gen. Ct. (Mass. 2015).

Michigan,³¹ New Jersey,³² and Washington,³³ are now considering quota bills, as well. Furthermore, state legislation focusing on a corporation's principal executive offices rather than its place of incorporation may not remain limited to board quotas. For example, Senators Elizabeth Warren and Bernie Sanders have proposed reforms that would give employees of large corporations a voice in electing corporate directors.³⁴ If individual states rather than the U.S. Congress were to implement these reforms, the pertinent legislation would have to focus on the corporation's headquarters to prevent regulatory arbitrage.³⁵ Therefore, California's gender quota may mark the

31. Business Corporation Act, S.B. 115, 100th Leg., Reg. Sess. (Mich. 2019).

32. See S.B. 3469, 218th Leg., Reg. Sess. (N.J. 2019).

33. Increasing Equitable Gender Representation on Corporate Boards, S.B. 5142, 66th Leg., Reg. Sess. (Wash. 2019).

34. Senator Elizabeth Warren has introduced the Accountable Capitalism Act, which applies to corporations with gross receipts exceeding one billion dollars, and allows a corporation's employees to elect forty percent of corporate directors. Accountable Capitalism Act, S. 3348, 115th Cong. (2018). Senator Bernie Sanders has proposed legislation that would apply to corporations that are publicly traded or that have revenues or assets of at least one hundred million dollars. Employees at these firms would elect forty-five percent of their corporation's members. Bernie Sanders, Corporate Accountability and Democracy, <https://berniesanders.com/issues/corporate-accountability-and-democracy/> (last visited Mar. 7, 2020). For an analysis of the economic costs and benefits that mandatory codetermination would have in the United States see Jens Dammann & Horst Eidenmüller, *Codetermination: A Poor Fit for U.S. Corporations*, COL. BUS. L. REV. (forthcoming 2021). For an account of the benefits that codetermination may have for the protection of democratic institutions against excessive corporate power see Jens Dammann & Horst Eidenmüller, *Taming the Corporate Leviathan: Codetermination and the Democratic State* (Eur. Corp. Governance Inst. L. Working Paper No. 536/2020, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3680769.

35. The Securities and Exchange Commission ("SEC") has not yet defined the term "principal executive offices," that the California statute refers to. William J. Moon, *Delaware's New Competition*, 114 NW. U. L. REV. 1403, 1425 n.103 (2020). Against this background, it has been suggested that may be able to abuse this shortcoming to manipulate the location of their principal executive offices. *Id.* This line of reasoning, if taken at face value, might suggest that corporate law rules tied to the location of firms' principal executive offices might be easy to avoid. However, this logic would be misguided on several counts. To begin, even if corporations were able to manipulate the location of their principal executive offices this would hardly suffice to frustrate California's gender quota policy. California could simply amend its statute and replace the term "principal executive offices" with the term "place of business" as used in 28 U.S.C. § 1332(c)(1). The U.S. Supreme Court defines the term "place of business" as "the place where the corporation's high level officers direct, control, and coordinate the corporation's activities," that is, its "nerve center." *Hertz Corp. v. Friend*, 559 U.S. 77, 80–81 (2010) (citing *Wis. Knife Works v. Nat'l Metal Crafters*, 781 F.2d 1280, 1282 (7th Cir. 1986); *Scot Typewriter Co. v. Underwood Corp.*, 170 F. Supp. 862, 865 (S.D.N.Y. 1959) (Weinfeld, J.)). But even state laws use the term "principal executive offices," there is little reason to fear that this term will lack bite. The fact that the SEC has failed to define the meaning of the term "principal executive offices" does not imply that firms are free to apply their own definitions; rather, it is up to the courts to define this term. And there is every reason to think that courts will rise to this challenge and rein in attempts at manipulation. For example, in *Desta v. Wins Finance*, a federal district court denied a motion to dismiss against a Chinese firm that had allegedly misrepresented the location of its principal executive offices in order to be eligible for inclusion in the Russell 2000. *Desta v. Wins Fin. Holdings Inc.*, No. 2:17-cv-02983-CAS-AGR, 2018 WL 7458639, at *6 (C.D. Cal. Nov. 9, 2018).

beginning of an age in which the law governing a corporation's internal affairs is a combination of the law of the state of incorporation and the law of the headquarters state.

This change has important theoretical and practical implications. As a matter of corporate law theory, even partial adoption of a rule determining the applicable corporate law based on the location of a corporation's headquarters—a principle known as the real seat rule³⁶—opens up a new dimension in which state competition impacts corporate law. In the future, states' efforts to attract or retain corporate headquarters may have a direct impact on state corporate law. For example, some states may shy away from adopting gender quotas or other corporate law norms that aim to protect employees for fear of causing corporations to relocate their headquarters elsewhere.

On a policy level, the interplay between headquarters-based corporate law and corporate relocations is equally essential. Those who find specific headquarters-based rules such as the California gender quota statute desirable may wonder whether firms' ability to relocate their headquarters threatens to undermine the quota's effectiveness. On the other hand, those who fear that states will use their regulatory authority over locally headquartered firms to impose inefficient rules may wonder if a firms' ability to relocate can provide a useful check on the headquarters state's power.

Crucially, the relevance of these theoretical and policy concerns depends, in large part, on empirical issues. For example, if, in practice, firms very rarely change the location of their headquarters, then there is little reason to assume that state competition for corporate headquarters will have any impact on state corporate law. Furthermore, in that case, there is no need to be concerned that firms will evade real-seat-based corporate law by moving their headquarters elsewhere.

Therefore, this Article provides a much-needed empirical analysis of domestic state-to-state relocation choices. Combining various datasets on publicly traded corporations, corporate mergers, and states' regulatory and tax environments, this Article presents a detailed analysis of relocation

36. It is worth noting that the exact definition of what constitutes a corporation's real seat varies. See, e.g., Clark D. Stith, *Federalism and Company Law: A "Race to the Bottom" in the European Community*, 79 GEO. L.J. 1581, 1600 (1991) (noting that the "real seat of a company has been described as the company's 'headquarters,' the 'brain of the enterprise,' or the place where the 'final decisions' are made") (quoting 2 E. RABEL, *THE CONFLICT OF LAWS*, 40–41 (2d. ed. 1958); 1 H. BATIFFOL & P. LAGARDE, *DROIT INTERNATIONAL PRIVÉ* 232 (7th ed. 1981)). However, in the corporate law literature, the "real seat rule" is typically described as a rule according to which a corporation's internal affairs are governed by the law of the state where the corporation's headquarters are located. See, e.g., Jens Dammann, *A New Approach to Corporate Choice of Law*, 38 VAND. J. TRANSNAT'L L. 51, 55–56 (2005) (noting that the real seat rule "dictates that the internal affairs of a corporation are governed not by the law of the state of incorporation but by the law of the state in which the corporation's headquarters is located").

choices over twenty-five years (1994–2018). It is important to note that the resulting dataset lacks information on the headquarters locations of privately-held corporations. Therefore, this Article focuses solely on publicly-traded firms.

The analysis that this Article undertakes yields several core insights. To begin, firm relocations from one U.S. state to another are by no means uncommon. On average, about nine percent of all public corporations relocated their headquarters at least once between 1994 and 2018³⁷ The majority of these relocation choices are not merely a byproduct of corporate mergers. Even if one excludes relocations occurring in the context of mergers, about five percent of all public corporations relocated at least once.³⁸

Moreover, just like the market for corporate charters, state competition for corporate headquarters has winners and losers. For example, whereas for every one million inhabitants Massachusetts has about forty-four headquarters of public corporations, New Mexico has only one.³⁹

I also show that even if a state accounts for a substantial share of the market for corporate headquarters, this success does not necessarily translate into an equally large percentage of the market for headquarters relocations. Some states, such as California and New York, are home to an unusually large number of corporate headquarters both in absolute terms and on a per capita basis.⁴⁰ Still, both states tend to lose out when it comes to firms' headquarters relocation choices.⁴¹

Finally, I provide some evidence that the quality of a state's legal institutions appears to play a role in firms' relocation choices. Specifically, I find that the quality of state courts, as measured by a survey-based U.S. Chamber of Commerce ranking, is positively correlated with the (net) number of firms relocating their headquarters to a state.⁴² By contrast, I do not find any evidence that corporate income tax rates drive relocation choices.⁴³

Part I of this Article analyzes and dismisses potential constitutional obstacles to headquarters-based corporate law norms.⁴⁴ Part II discusses the differences between charter competition and competition for firms'

37. See *infra* Table 1.

38. See *infra* Table 1. I only consider completed mergers with a deal value of at least one million U.S. dollars.

39. See *infra* Table 5.

40. See *infra* Tables 4 and 5.

41. See *infra* Table 9 & 10.

42. See *infra* Table 13.

43. See *infra* Table 13.

44. See *infra* Part I.

headquarters.⁴⁵ Part III explains the data sources used for this study.⁴⁶ Part IV provides descriptive statistics on firms' relocation choices.⁴⁷ Part V analyzes potential firm-level determinants of firm mobility.⁴⁸ Lastly, Part VI focuses on state-level characteristics that may drive relocation choices.⁴⁹

I. CONSTITUTIONAL CONCERNS

In the literature, it has been suggested that tying California's gender quota to the location of a corporation's principal executive offices violates the Commerce Clause of the U.S. Constitution.⁵⁰ According to this line of reasoning, the Commerce Clause requires the headquarters state to abstain from interfering with the internal affairs of corporations formed in other states.⁵¹ If this assertion were correct, it would sever any link between state corporate law and state competition for corporate headquarters. However, the suggestion that the Commerce Clause generally requires the application of the internal affairs rule is unfounded.⁵²

45. See *infra* Part II.

46. See *infra* Part III.

47. See *infra* Part IV.

48. See *infra* Part V.

49. See *infra* Part VI.

50. Teal N. Trujillo, *Do We Need to Secure a Place at the Table for Women? An Analysis of the Legality of California Law SB-826*, 45 J. LEGIS. 324, 343 (2019) (asserting that "a strong argument could be made under the Commerce Clause alongside a Fourteenth Amendment argument for why SB-826 is unconstitutional").

51. See *Citigroup Inc. v. AHW Inv. P'ship*, 140 A.3d 1125, 1134 (Del. 2016) (asserting that under both the Commerce Clause and the Full Faith and Credit Clause, Delaware corporate law must be applied to fiduciary claims arising in a Delaware corporation); *VantagePoint Venture Partners 1996 v. Examen, Inc.*, 871 A.2d 1108, 1113 (Del. 2005) (claiming that the Commerce Clause of the U.S. Constitution mandates the application of the internal affair rule "except in the 'rarest situation'" (quoting *CTS Corp. v. Dynamics Corp. of America*, 481 U.S. 69, 90 (1987)); *McDermott Inc. v. Lewis*, 531 A.2d 206, 217 n.12 (Del. 1987) (claiming that "*CTS Corp. v. Dynamics Corp. of America*, provides strong support for a conclusion that the commerce clause mandates that a state apply the internal affairs doctrine to disputes involving corporations organized under the laws of a sister state"). Part of the literature also takes the view that the internal affairs rule is protected by the Commerce Clause. *E.g.*, Trujillo, *infra* note 50, at 343; see P. John Kozyris, *Some Observations on State Regulation of Multistate Takeovers—Controlling Choice of Law Through the Commerce Clause*, 14 DEL. J. CORP. L. 499, 534 (1989) (arguing that states other than the state of incorporation "are in principle prevented from applying their law on a piecemeal basis to foreign corporations having local contacts").

52. The prevailing view in the literature rightly rejects the idea that the U.S. Constitution requires the application of the internal affairs rule. *See, e.g.*, Richard M. Buxbaum, *The Threatened Constitutionalization of the Internal Affairs Doctrine in Corporation Law*, 75 CAL. L. REV. 29, 53 (1987) (arguing that the U.S. Supreme Court's *CTS* decision only concerns antitakeover statutes and is not meant to enshrine the internal affairs rule as a constitutional law doctrine); Timothy P. Glynn, *Delaware's VantagePoint: The Empire Strikes Back in the Post-Post-Enron Era*, 102 NW. U. L. REV. 91, 118 (2008) (arguing that the relevant U.S. Supreme Court cases do not support the claim that the internal affairs rule enjoys constitutional protection); Robert E. Suggs, *Business Combination Antitakeover Statutes: The Unintended Repudiation of the Internal Affairs Doctrine*

A. *Edgar v. MITE Corp.*

In *Edgar v. MITE Corp.*,⁵³ the U.S. Supreme Court famously invalidated an Illinois antitakeover statute for violating the Commerce Clause.⁵⁴ The statute imposed notification and registration requirements on tender offerors and authorized the Illinois Secretary of State to prevent the tender offer if its terms were unfair to the target shareholders.⁵⁵ The statute applied if the target corporation had specific generously defined ties to Illinois.⁵⁶ In particular, the fact that Illinois shareholders owned ten percent of the securities subject to the tender offer was sufficient to trigger the statute's application.⁵⁷ Alternatively, the statute also applied if the target corporation met two of the following three conditions: (1) the target corporation's principal office was located in Illinois, (2) the target corporation was incorporated in Illinois, or (3) Illinois accounted for at least ten percent of the target corporation's capital and paid-in surplus.⁵⁸

The U.S. Supreme Court held that the statute violated the Commerce Clause both because it directly regulated interstate commerce and because its impact on interstate commerce would even fail the requirements for permissible indirect regulation of trade.⁵⁹

The Court noted that even in the absence of federal legislation, states were only permitted to regulate interstate commerce "incidental[ly]," while having to abstain from any "direct" regulation of interstate commerce.⁶⁰ According to the Court, the Illinois statute directly regulated interstate commerce since it purported to prevent even transactions between an out-of-state acquirer and non-resident shareholders who lacked any connection with Illinois.⁶¹

Furthermore, applying the so-called *Pike* test,⁶² the Court noted that even statutes that seek to protect local interests and affect interstate

and *Constitutional Constraints on Choice of Law*, 56 OHIO ST. L.J. 1097, 1103 (1995) (rejecting the claim that *CTS* constitutionalized the internal affairs doctrine).

53. *Edgar v. MITE Corp.*, 457 U.S. 624 (1982).

54. *Id.* at 640.

55. *Id.*

56. *Id.* at 627.

57. *Id.*

58. *Id.*

59. *See id.* at 643 (noting that the Act is invalid because it "purports to regulate directly and to interdict interstate commerce" but would also be invalid as an indirect regulation of interstate trade under *Pike v. Church*).

60. *Id.* at 640 (emphasis omitted) (citing *Shafer v. Farmers Grain Co.*, 268 U.S. 189, 199 (1925)).

61. *Id.* at 642.

62. *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970). Under the *Pike* test, "[w]here [a] statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on

commerce only incidentally violate the Commerce Clause if “the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.”⁶³ According to the Court, this condition was met since the statute had a substantial impact on shareholders in other states⁶⁴ even though Illinois had no legitimate interest in protecting non-Illinois shareholders.⁶⁵

It is easy to distinguish the takeover statute in *MITE* from real or hypothetical state corporate law statutes that impose gender quotas based on a corporation’s headquarters. To begin, statutes of the latter type do not prevent or regulate transactions between non-residents and hence fail to trigger the Supreme Court’s first Commerce Clause concern in *MITE*.

Moreover, board-quota statutes of the type enacted in California do not fall afoul of the *Pike* test. Unlike the Illinois takeover statute, board-quota statutes are not aimed at protecting shareholders or other stakeholders without ties to the state. There are compelling reasons to think that California has a legitimate interest in promoting diversity at corporations that are headquartered in the state.⁶⁶ Perhaps most importantly, a gender-quota allows the headquarters state to create more equal professional opportunities for its residents regardless of gender—the board quota gives California’s female residents a more meaningful chance to break the corporate glass ceiling and become corporate directors.⁶⁷ Moreover, gender-quotas for corporate boards may well have positive spillover effects for gender equality for corporate employees outside the board,⁶⁸ as well as for other areas of society. Such

interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.” *Id.*

63. *MITE*, 457 U.S. at 640 (quoting *Pike*, 397 U.S. at 142).

64. *Id.* at 643.

65. *Id.* at 644.

66. Even in the corporate community, scholars perceive a growing consensus that increasing board diversity is an important policy objective. See, e.g., Deborah L. Rhode, Amanda K. Packel, *Diversity on Corporate Boards: How Much Difference Does Difference Make?*, 39 DEL. J. CORP. L. 377, 382 (2014) (noting a “growing consensus within the corporate community is that [board] diversity is an important goal” and citing survey data from the 1990s according to which “of 325 CEOs, almost three-quarters (72%) reported that recruiting a woman director to serve on their company’s board was either a “top priority” or a “priority.”).

67. See, e.g., Catherine M.A. McCauliff & Catherine A. Savio, *Gender Considerations on the Boards of European Union Companies: Lesson for Us Corporations or Cautionary Tale?*, 16 GEO. J. GENDER & L. 505, 542 (2015) (noting that “[d]eep-seated societal misconceptions act as a glass ceiling excluding the most qualified women from the highest positions at corporations” and arguing that board quotas can help the glass ceiling).

68. For example, David A. Matsa and Amalia R. Miller, *Chipping Away at the Glass Ceiling: Gender Spillovers in Corporate Leadership*, 101 AM. ECON. REV. 635 (2011), examine spillover effects of female board members on the gender composition of corporation’s top management. *Id.* at 635. They find, among other things, that “lagged female board membership predicts female executives.” *Id.* at 636. But see Marianne Bertrand, Sandra E. Black, Sissel Jensen & Adriana Lleras-Muney, *Breaking the Glass Ceiling? The Effect of Board Quotas on Female Labour Market Outcomes in Norway*, 86 REV. ECON. STUD. 191, 191–239 (2019) (examining the impact of the

spillover effects are likely to arise primarily in the headquarters state. In sum, nothing in *MITE* supports the argument that California's gender quota statute violates the Commerce Clause.

B. CTS Corp. v. Dynamics Corp. of America

In a later case, *CTS Corp. v. Dynamics Corp. of America*,⁶⁹ the U.S. Supreme Court upheld an Indiana anti-takeover statute that applied only if the target corporation incorporated in Indiana.⁷⁰ The Court first noted that the statute did not discriminate against interstate trade.⁷¹ It then acknowledged that even non-discriminatory legislation can violate the Commerce Clause but argued that the Indiana statute did not meet the relevant conditions.⁷² In particular, the Court held that legitimate local interests justified the statute.⁷³ Furthermore, the Court reasoned that the statute did not impose an excessive burden on interstate trade since it did not create the risk of inconsistent regulation.⁷⁴

The Court invoked the internal affairs doctrine both to argue that Indiana had a legitimate interest in imposing anti-takeover legislation governing Indiana corporations⁷⁵ and to explain why the burden imposed on interstate commerce was not disproportionate.⁷⁶

Regarding the question of whether Indiana had a legitimate regulatory interest, the Court stressed that states have a legitimate interest in regulating the affairs of corporations formed under their law.⁷⁷ The Court also pointed out that the free market for corporate shares “depends at its core upon the fact that a corporation—except in the rarest situations—is organized under, and governed by, the law of a single jurisdiction, traditionally the corporate law of the State of its incorporation.”⁷⁸

Norwegian board quota law enacted in 2003 and finding no evidence that this quota benefited female employees below the board level).

69. *CTS Corp. v. Dynamics Corp. of America*, 481 U.S. 69 (1987).

70. *Id.* at 94.

71. *Id.* at 87.

72. *Id.* at 88–94.

73. *Id.* at 93.

74. *Id.* at 88–89.

75. *Cf. id.* at 89 (arguing that “[n]o principle of corporation law and practice is more firmly established than a State’s authority to regulate domestic corporations, including the authority to define the voting rights of shareholders”); *id.* at 93 (distinguishing the facts in *MITE* from those in *CTS* by pointing out that the statute at issue in *CTS* “applies only to corporations incorporated in Indiana”). Note that while these quotes do not reference the internal affairs doctrine by name, they do so implicitly by assuming that “corporations incorporated in Indiana” are Indiana corporations and hence constitute “domestic corporations” for Indiana law.

76. *Id.* at 88–89.

77. *Id.* at 89; *see also supra* note 75.

78. *Id.* at 90.

Concerning the burden on interstate trade, the Court explained that the Indiana Statute failed to expose corporations to the risk of inconsistent regulation:

So long as each State regulates voting rights only in the corporations it has created, each corporation will be subject to the law of only one State. No principle of corporation law and practice is more firmly established than a State's authority to regulate domestic corporations, including the authority to define the voting rights of shareholders. See Restatement (Second) of Conflict of Laws § 304 (1971) (concluding that the law of the incorporating State generally should "determine the right of a shareholder to participate in the administration of the affairs of the corporation"). Accordingly, we conclude that the Indiana Act does not create an impermissible risk of inconsistent regulation by different States.⁷⁹

The *CTS* decision is sometimes adduced as evidence that the internal affairs doctrine enjoys constitutional status.⁸⁰ For example, the Delaware Supreme Court cites *CTS* in support of the proposition that the Commerce Clause mandates the application of the internal affair rule "except in the 'rarest situations.'"⁸¹ However, *CTS* did not at all address conflicts between the state of incorporation and the real seat state. Moreover, nothing in the Court's reasoning implies that it views headquarters-state regulation of a corporation's internal affairs as inherently illegal.

Admittedly, the Court goes to great length to argue that the state of incorporation has a well-recognized legitimate interest in regulating a corporation's internal affairs.⁸² However, that does not imply that the state of incorporation is the only state with a legitimate interest in adopting laws applying to a corporation's internal affairs. In fact, the Court itself points to the residence of some of the corporation's shareholders in Indiana as an additional reason why Indiana has a legitimate interest in adopting takeover protection legislation.⁸³ The Court thereby implies that the place of incorporation is not the only factor that matters. Of course, not every conceivable corporate legislation adopted by the headquarters state may be justified by local interests. However, as noted above, the headquarters state's has a legitimate interest in creating equal professional opportunities for its

79. *Id.* at 89.

80. *See, e.g.*, *VantagePoint Venture Partners 1996 v. Examen, Inc.*, 871 A.2d 1108, 1113 (Del. 2005) (noting that "application of the internal affairs doctrine is mandated by constitutional principles, except in the 'rarest situations'" (quoting *McDermott Inc. v. Lewis*, 531 A.2d 206, 217 (Del. 1987); *CTS Corp.*, 481 U.S. at 90)).

81. *Id.* (quoting *CTS Corp.*, 481 U.S. at 90).

82. *CTS Corp. v. Dynamics Corp. of America*, 481 U.S. 89 (1987); *see also* text accompanying note 79.

83. *See id.* at 93 (pointing out that "every application of the Indiana Act will affect a substantial number of Indiana residents, whom Indiana indisputably has an interest in protecting").

female residents, and board quotas may also have a spill-over effects for the headquarters state's economy and society in general.⁸⁴ Therefore, board-quota laws are very much designed to protect the headquarters state's legitimate interests.⁸⁵

The question remains whether the Court's reasoning in *CTS* implies that headquarters state laws applying to a corporation's internal affairs necessarily fail the *Pike* test because they create the risk of inconsistent regulation and therefore impose an excessive burden on interstate commerce. However, this line of reasoning does not find any real support in the decision either. In *CTS*, the Court stresses the lack of an excessive burden on interstate commerce by pointing to the fact that the application of the internal affairs rule prevents the risk of inconsistent regulation.⁸⁶ This statement does not imply the inverse, however: that any law that a state other than the state of incorporation enacts must lead to inconsistent regulation and must, therefore, be disproportionate.

Board quota legislation perfectly illustrates this point. California's board quota does not presently subject corporations to the risk of inconsistent regulation because nothing in the law of other states prohibits corporations from having female directors and thereby complying with California law.⁸⁷ Even if the state of incorporation were to enact a board quota law of its own, the different board quota laws do not need to be incompatible. For example, the headquarters state may require thirty percent of directors to be women. At the same time, the state of incorporation may demand that forty percent of directors are women. In this hypothetical, corporations could still comply with both statutes by satisfying the stricter of the two requirements. Admittedly, it is conceivable that some other state might, in the future, enact legislation that could somehow be inconsistent with California's board-quota statute. However, nothing in *CTS* implies that the merely theoretical risk of future inconsistent regulation is sufficient to make a statute disproportionately burdensome.⁸⁸

Finally, even if a conflict between the law of the state of incorporation and the law of the headquarters state arose, nothing in *CTS* implies that the

84. See *supra* text accompanying notes 68–66.

85. See *supra* Section I.A.

86. See *CTS Corp.*, 481 U.S. at 89 (1987) (noting that “[s]o long as each State regulates voting rights only in the corporations it has created, each corporation will be subject to the law of only one State”); see also *supra* text accompanying note 79.

87. For example, § 141 of the Delaware General Corporation Law, which governs corporate boards, contains no requirement that none of the directors can be women. DEL. CODE ANN. tit. 10, § 141 (West 2020).

88. Cf. Paul N. Cox, *The Constitutional “Dynamics” of the Internal Affairs Rule—A Comment on CTS Corporation*, 13 J. CORP. L. 317, 348 (1988) (noting that “[t]here is no general constitutional requirement that a single state's law be applicable predictably to a multistate commercial activity”).

interest of the state of incorporation would always take precedence. Acknowledging, as the Court does in *CTS*, that the state of incorporation has a legitimate interest in setting the rules governing the internal affairs of its corporation does not entail that that legitimate interest will always take precedence.

In sum, the argument that the Commerce Clause prohibits headquarters states from regulating the internal affairs of corporations must be rejected. Such statutes are lawful as long as they regulate interstate commerce only incidentally, and, like California's gender quota statute, protect legitimate local interests without imposing an excessive burden on interstate commerce.

II. TIEBOUT COMPETITION V. CHARTER COMPETITION

Traditional charter competition is typically viewed as a market for corporate law in which corporations select a particular legal product, namely a state's corporate law and courts,⁸⁹ and pay the corresponding price in the form of franchise taxes.⁹⁰ A crucial feature of this type of law market is that firms can select their corporate law unbundled from most other services provided by a state except for the state's corporate law courts and corporate bar.⁹¹

For example, a manufacturing business incorporated in Delaware but headquartered elsewhere does not have to pay income taxes in Delaware.⁹² It does not use Delaware's physical infrastructure when producing or shipping goods, and it does not rely on the protection of Delaware's police or fire department. Instead, firms that incorporate in Delaware receive a relatively narrow set of services—mostly Delaware's law and judicial services—and pay the price in the form of franchise taxes that can be viewed as consideration for these services.

By contrast, "Tiebout competition," named in honor of Charles Tiebout and his classic article *A Pure Theory of Local Expenditures*,⁹³ has a different meaning. Tiebout models competition between jurisdictions but focused on a scenario in which local governments provide bundles of public goods, paid

89. See Romano, *Product*, *supra* note 13, at 277 (noting that Delaware's "product" consists of both corporate law and courts).

90. *Id.* at 236.

91. Cf. Verity Winship, *Bargaining for Exclusive State Court Jurisdiction*, 1 *STAN. J. COMPLEX LITIG.* 51, 53–54 (2012) (noting that "Delaware markets its corporate law as a bundle of substantive provisions and expert decisionmakers"). *But see* Jens Dammann, *A New Approach to Corporate Choice of Law*, 38 *VAND. J. TRANSNAT'L L.* 51, 60 (2005) [hereinafter Dammann, *New Approach*] (noting that incorporation in a particular state such as Delaware comes with certain "side effects" such as exposure to litigation to third-party suits in that state).

92. Dammann, *New Approach*, *supra* note 91, at 71.

93. Charles Tiebout, *A Pure Theory of Local Expenditures*, 64 *J. POL. ECON.* 416 (1956).

for by residents' taxes.⁹⁴ His model assumes that citizens ("consumer-voter[s]") will choose the community with the bundle that best meets their preferences.⁹⁵ Furthermore, he assumes that the costs of producing public goods depends on the number of consumers so that "[f]or every pattern of community services . . . there is an optimal community size" and that "[t]his optimum is defined in terms of the number of residents for which this bundle of services can be produced at the lowest average cost."⁹⁶ In this model, if a community has a number of residents below the optimal size, it will make efforts to attract new residents.⁹⁷ Thus, a critical difference between charter competition and Tiebout competition is that in Tiebout's model, jurisdictions do not offer narrowly defined and individually priced products but comprehensive bundles of public goods.⁹⁸

To the extent that states compete for corporate headquarters rather than corporate charters, their competition is analogous to Tiebout competition in the sense that a firm relocating its headquarters opts into a comprehensive bundle of public goods produced by the headquarters state.⁹⁹ These goods include, for example, the state's physical infrastructure, its institutions, and all types of services rendered by the state. In return, the corporation has to pay corporate income taxes, sales taxes, and various other kinds of fees and taxes.

Crucially, competition for corporate headquarters creates different incentives for states than charter competition does. On the one hand, states have more substantial incentives to compete. On the other hand, they now compete across a whole range of services, and thus corporate law may not play a crucial role in that competition. I will address these points in turn.

A. States' Incentives to Compete

For most states, the incentives to compete for corporate headquarters are much more pronounced than the incentives to compete for corporate charters. As Marcel Kahan and Ehud Kamar have shown, most states have minimal financial reasons to compete for corporate charters.¹⁰⁰ Delaware is an exception in this regard. In particular, given the relatively small total size of its state budget, revenues from the charter business account for a substantial

94. See *id.* at 418–19 (explaining that communities use tax revenues to produce community services and referring to a particular combination of services as a "bundle" or "pattern").

95. *Id.* at 418.

96. *Id.* at 419.

97. *Id.*

98. *Id.* at 418 (pointing out that communities provide such services as "police and fire protection, education, hospitals, and courts").

99. Cf. Ehud Kamar, *Beyond Competition for Incorporations*, 94 GEO. L.J. 1725, 1750 n.130 (2006) (analogizing competition for investments to Tiebout competition).

100. Kahan & Kamar, *supra* note 18, at 748–49.

stage of Delaware's overall revenues.¹⁰¹ Most other states impose very low franchise fees, and the revenues that most states derive from charter competition are minuscule compared to their total revenues. Thus, for most states, losing corporate charters to Delaware does not constitute a significant financial concern.

By contrast, no state can ignore the competition for corporate headquarters. Corporate headquarters bring jobs. Moreover, they produce income tax revenues from both the corporation and its employees and benefit local property values.¹⁰² States are very much aware of the importance of competing for firms' headquarters. It is common practice for states to woo large corporations with subsidies or other benefits.¹⁰³ For example, when Amazon announced its intention to establish a second headquarters, many states went to substantial lengths to be chosen.¹⁰⁴ New Jersey alone offered tax incentives worth seven billion dollars to lure Amazon to New Jersey,¹⁰⁵ and that was not even enough to succeed.

B. The Role of Corporate Law

While states have more substantial incentives to compete for corporate headquarters than for corporate charters, corporate law may not play a decisive role in their efforts to compete. One of the key features of state competition for corporate headquarters lies in the fact that states compete by offering bundles of public goods.¹⁰⁶ Corporate law may be of relatively minor importance to states' efforts to attract firms. Hence, it remains unclear to what extent competition for corporate headquarters can motivate states to offer attractive corporate law.

101. See *infra* text accompanying note 132.

102. See, e.g., Peter D. Myers & Tracy M. Turner, *The House Price Impacts of Corporate Headquarter Relocations* 26 (May 2017) (Honors thesis, Iowa State University), https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1163&context=honors_posters (finding that both the arrival and the departure of a corporate headquarters correlates with higher house prices).

103. Ben Casselman, *Risks for Cities in Sweetening Amazon's Pot*, N.Y. TIMES, Jan. 27, 2018, at A1 (describing tax incentive packages offered by various states to attract major companies' headquarters).

104. See, e.g., Mitch Smith, Tiffany Hsu, Kirk Johnson & Patricia Mazzei, *Where Amazon May Build Its Second Headquarters*, N.Y. TIMES, Jan. 19, 2018, at B6 (noting that Amazon had received 238 applications from different regions); Ben Casselman, *Promising Billions to Amazon: Is It a Good Deal for Cities?*, N.Y. TIMES (Jan. 26, 2018), <https://www.nytimes.com/2018/01/26/business/economy/amazon-finalists-incentives.html> (describing offers that different states made to Amazon).

105. *Id.* (noting that "New Jersey announced a \$7 billion package of tax incentives to try to lure Amazon's second headquarters to Newark").

106. See *supra* text accompanying note 99.

III. DATA

To gain a better understanding of state competitions for corporate headquarters, I created a dataset on interstate headquarters-relocations spanning twenty-five years (1994–2018). Data on the primary place of business are obtained from a dataset of firms' SEC filings.¹⁰⁷ To obtain SEC filings, I primarily rely on a dataset made available by Notre Dame's Software Repository for Accounting and Finance¹⁰⁸ but complement this dataset with data from SEC Analytics.¹⁰⁹

Furthermore, I include firm-level financial data from CRSP Compustat Merged ("CMM") and data on mergers from SDC Platinum.¹¹⁰ To assess the quality of a state's court system, I rely on ratings published by the U.S. Chamber of Commerce's Institute for Legal Reform.¹¹¹ For any given year, a court's rank is determined by the most recent U.S. Chamber of Commerce Survey undertaken before that year. Data on corporate income tax rates are obtained from the Tax Policy Center.¹¹²

IV. DESCRIPTIVE STATISTICS

Descriptive statistics on state competition for corporate headquarters are displayed in Tables 1 to 10. These statistics yield several essential insights

107. I retain only firms headquartered in the United States. To the extent that filing information is missing for some years but not for others, I extend the information about the headquarters state backwards from the most recent filing. To reduce the risk of erroneous data, particularly as a result of firms making incorrect filings, I drop firms that are shown to have relocated their headquarters five or more times between 1994 and 2018. A manual inspection of some of the relevant firms' filings suggests that these are firms that mistakenly fill in the address of their registered agent in the fields reserved for their business address on some forms and thus falsely appear to move back and forth between their actual headquarters state and what really is their state of incorporation. I rely on information from SEC Analytics solely to add information for firms for which data is missing in the Notre Dame dataset. As between different filings made by the same firm in the same year, I use the following hierarchy, from high to low: 10-K/A, 10-K, 10-Q/A, 10-Q, 8-K/A, 8-K, all other types of filings. Filings that rank lower in this hierarchy than a filing that indicates the headquarters state and was made by the same firm in the same year are dropped.

108. *Augmented 10-X Header Data*, UNIV. OF NOTRE DAME, <https://sraf.nd.edu/data/augmented-10-x-header-data/> (last visited Nov. 22, 2020).

109. SEC Analytics is available via the WHARTON RSCH. DATA SERVS. (WRDS), <https://wrds-www.wharton.upenn.edu/> (last visited Nov. 22, 2020).

110. For SDC Platinum see REFINITIV, <https://www.refinitiv.com> (last visited Nov. 22, 2020). For CMM see *CRSP/Compustat Merged Database*, CTR. FOR RSCH. IN SEC. PRICES (CRSP), <http://www.crsp.org/products/research-products/crspcompustat-merged-database> (last visited Nov. 22, 2020). I access both datasets via the WHARTON RSCH. DATA SERVS. (WRDS), <https://wrds-www.wharton.upenn.edu/> (last visited Nov. 22, 2020).

111. The U.S. Chamber of Commerce Institute for Legal Reform has published several so-called "Lawsuit Climate Survey[s]." *Institute for Legal Reform*, U.S. CHAMBER OF COM. (on file with *Maryland Law Review*).

112. *State Corporate Income Tax Rates 2002 to 2020*, TAX POL'Y CTR. (Mar. 13, 2020), <https://www.taxpolicycenter.org/statistics/state-corporate-income-tax-rates>.

regarding the frequency with which firms relocate their headquarters, the financial and industry characteristics associated with corporations' mobility, and the success that states have in attracting or retaining corporate headquarters.

A. How Often Do Firms Relocate Their Headquarters?

One of the critical questions concerning state competition for corporate headquarters concerns how often public corporations move their headquarters. If very few firms ever change the location of their headquarters from one state to another, then states may have little reason to compete for relocating corporations. Furthermore, in that case, there is no need to be concerned that firms will evade real-seat-based corporate law by moving their headquarters elsewhere. By contrast, if relatively many firms are willing to relocate, then state competition is much more likely to be vigorous since states have more to lose by failing to compete.

Table 1, which displays summary statistics for both mobile and immobile firms, demonstrates that the percentage of mobile firms is quite substantial. Over twenty-five years (1994–2018), roughly nine percent of public corporations relocated their headquarters at least once (Table 1 Panel A).

Of course, a firm's decision to move its headquarters may simply be the byproduct of a merger. If two firms with headquarters in different states merge, the surviving corporation must decide which of the two headquarters to retain. As a result, the surviving corporation may change the location of its headquarters, even though the "new" headquarters is nothing but the "old" headquarters of one of the merging corporations. To account for this possibility, Table 1 Panel B defines relocating firms more narrowly by excluding firms that relocated within one year before or after a completed merger.¹¹³ Applying this narrower definition, the percentage of firms that relocated at least once drops to about five percent (Table 1 Panel B). Nonetheless, this percentage is substantial.

Whether or not it makes sense to exclude relocations that occur in the context of mergers depends on the context. On the one hand, excluding such relocations is helpful if one seeks to compare the characteristics of relocating and non-relocating firms.¹¹⁴ By excluding relocations that occur in the contexts of mergers, one avoids picking up differences in characteristics that are driven by differences between merging and non-merging firms. On the other hand, if one seeks to explore states' incentives to compete for corporate headquarters, there is no reason to exclude firms that relocate their

113. I only consider mergers with a deal value of at least one million dollars.

114. See *infra* Section IV.B.

headquarters in the context of corporate mergers. After all, merger-related relocations are no less relevant to a state's economy than other relocations. That is, the fact that a firm relocates in the context of a merger does not change the fact that the state losing the corporate headquarters may face job losses and a decline in tax revenues.

Finally, it is worth pointing out that Table 1, like all other Tables included in this Article, captures only those headquarters relocations, in which a corporation moves its headquarters from one U.S. state to another. In other words, Table 1 excludes all cases in which a corporation relocates its headquarters within the same state. Because this Article focuses on state competition for corporate charters, headquarters relocations within a state ("intrastate relocations") are of no interest.

B. The Characteristics of Mobile Firms

Table 1 allows for some basic comparisons between mobile and immobile firms. As shown in Panels A and B, firms that relocated (cols. 3-4) and firms that failed to relocate (cols. 1-2) differed with respect to all of the financial variables displayed. Moreover, in most cases, that difference is statistically significant at the five percent or even one percent level. For example, relocating firms are smaller in terms of their total assets, which is intuitive in that larger firms may face much higher transaction costs when relocating. Mobile firms are also less profitable and have higher leverage.

One must keep in mind, though, that the figures in Table 1 do not answer the question of whether these differences developed before or after the relocation, let alone whether they contributed to the decision to relocate. For this reason, Part V of this Article revisits the firm-level determinants of relocation choices using a more sophisticated econometric approach.

Tables 2 and 3 contain data on relocations by industry. In absolute terms, most firms that relocated at least once between 1994 and 2018 can be found in manufacturing, finance, insurance, and real estate (Table 3). However, once one divides the number of mobile firms by the total number of firms in the relevant industry, the picture changes (Table 3). Only firms in the finance, insurance, and real estate categories stand out as having an unusually high level of mobility, and only for the years after 2000. Excluding relocations that occurred in the context of mergers does not substantially change this picture (Table 3 cols. 2, 3 & 6).¹¹⁵

115. Note that Table 3 should not be used to compare mobility rates for the same category of firms across time periods. The time periods displayed in Table 3 have different lengths since firm location data are not (yet) available for years before 1994 or after 2018.

C. Which States Win and Which States Lose?

One of the undisputed facts in the literature on regulatory competition is that Delaware is the winner in the market for corporate charters.¹¹⁶ More than half of all public corporations are incorporated in Delaware.¹¹⁷ Among Initial Public Offering (“IPO”) firms, Delaware’s market share is even higher.¹¹⁸ Before addressing the question of how states fare in the market for corporate headquarters, it is worth focusing on the reasons for Delaware’s dominance.

D. The Charter Market

The fact that a single state, Delaware, dominates the charter market is not particularly surprising. Corporate law is a non-rivalrous good in the economic sense, meaning that one person’s use of it does not prevent another person from using it simultaneously.¹¹⁹ After all, the fact that Delaware law governs one corporation’s internal affairs does not prevent it from also applying to other corporations. As a result, Delaware can allow the number of corporations incorporated in Delaware to increase, without lowering the quality of the law it supplies.

Whereas Delaware’s corporate law is non-rivalrous, the same does not hold for Delaware’s corporate law courts—the Chancery Court and the

116. See, e.g., Kamar, *Indeterminacy*, *supra* note 20, at 1908 (noting that “Delaware dominates the [charter] market”); Jonathan R. Macey, *Federal Deference to Local Regulators and the Economic Theory of Regulation: Toward A Public-Choice Explanation of Federalism*, 76 VA. L. REV. 265, 277 (1990) (noting that “Delaware, has consistently led the field for the past fifty years”). Numerous other authors have pointed out that Delaware dominates the charter market. E.g., Timothy P. Glynn, *Delaware’s Vantagepoint: The Empire Strikes Back in the Post-Post-Enron Era*, 102 NW. U. L. REV. 91, 97 (2008); Lynn M. LoPucki, *Corporate Charter Competition*, 102 MINN. L. REV. 2101, 2166 (2018); Chris Brummer, *Corporate Law Preemption in an Age of Global Capital Markets*, 81 S. CAL. L. REV. 1067, 1070 (2008); Matthew D. Cain & Steven Davidoff Solomon, *A Great Game: The Dynamics of State Competition and Litigation*, 100 IOWA L. REV. 465, 472 (2015).

117. E.g., Trevor S. Norwitz, *Accountability Does Not Require Constant Vulnerability: A Simple but Necessary Update to the Delaware General Corporation Law*, 41 DEL. J. CORP. L. 105, 105 (2016); cf. *Why Businesses Choose Delaware*, DELAWARE.GOV, <https://corplaw.delaware.gov/why-businesses-choose-delaware/> (last visited May 14, 2020) (noting that “more than 60 percent of the Fortune 500 companies are incorporated in Delaware”).

118. Jens Dammann & Matthias Schündeln, *The Incorporation Choices of Privately Held Corporations*, 27 J.L. ECON. & ORG. 79, 87 (2011) (finding that in 2006 and 2007, eighty-eight percent of all corporations going public were incorporated in Delaware); Robert Daines, *The Incorporation Choices of IPO Firms*, 77 N.Y.U. L. REV. 1559, 1571–72 (2002) (examining sample of IPOs between 1978 and 2000 and finding that about fifty-six percent were incorporated in Delaware).

119. That is the generally accepted definition of non-rivalrous. See Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1605 (2003); Mark A. Lemley & Eugene Volokh, *Freedom of Speech and Injunctions in Intellectual Property Cases*, 48 DUKE L.J. 147, 184 (1998).

Delaware Supreme Court—which also constitute an essential part of Delaware’s product.¹²⁰ In theory, an increasing number of corporations choosing to incorporate in Delaware may translate into overburdened judges and delayed legal proceedings. However, Delaware has found a way to avoid this problem. Most of Delaware’s corporate law cases are litigated in Delaware’s Chancery Court,¹²¹ which has allowed Delaware to keep pace with a growing caseload by increasing the number of Chancery Court judges. Under Delaware’s 1792 Constitution, the Chancery Court only had one Chancellor and no Vice-Chancellors.¹²² That did not immediately change with Delaware’s 1897 Constitution.¹²³ However, in 1939, Delaware added the first Vice-Chancellor, thereby doubling the total number of Chancery Court judges.¹²⁴ A second Vice-Chancellor was added in 1961,¹²⁵ a third in 1984,¹²⁶ a fourth in 1989,¹²⁷ and a fifth and sixth in 2018.¹²⁸ In other words, Delaware has increased the number of corporate law judges sixfold since 1938, thereby preventing its judiciary from becoming an obstacle to Delaware’s success in the charter market.

There are other reasons for why a single state dominates the charter market. Corporate law scholars have adduced various explanations for Delaware’s success, and the relevant narratives also help to explain, either implicitly or explicitly, why such a large fraction of public corporations are incorporated in a single state.

Roberta Romano has famously advanced the so-called “hostage theory” of Delaware’s success.¹²⁹ According to Romano, Delaware has created highly valuable assets related to the charter market, such as a judicial infrastructure and a comprehensive set of corporate law precedents.¹³⁰ These

120. It is generally recognized that Delaware’s excellent courts play an important role in attracting corporate charters. *See, e.g.,* Romano, *Product*, *supra* note 13, at 280; Bernard S. Black, *Is Corporate Law Trivial?: A Political and Economic Analysis*, 84 NW. U. L. REV. 542, 589–90 (1990); Kamar, *Indeterminacy*, *supra* note 20, at 1925–26; Glynn, *supra* note 116, at 100–01; LoPucki, *supra* note 116, at 2166.

121. *See* Curtis Alva, *Delaware and the Market for Corporate Charters: History and Agency*, 15 DEL. J. CORP. L. 885, 903 (1990) (noting that corporate law cases account for about three-fourths of the workload of the Delaware Chancery Court).

122. Randy J. Holland, *Delaware Directors’ Fiduciary Duties: The Focus on Loyalty*, 11 U. PA. J. BUS. L. 675, 680 n.42 (2009).

123. *Id.*

124. *Id.*; *see also* William T. Quillen & Michael Hanrahan, *A Short History of the Delaware Court of Chancery—1792-1992*, 18 DEL. J. CORP. L. 819, 846 (1993).

125. *Id.* at 851–52.

126. *Id.* at 858.

127. *Id.* at 860.

128. *See* DEL. CODE ANN. tit. 10, § 307 (West 2020) (increasing the number of vice-chancellors from four to six), *amended by* 81 Del. Laws ch. 288, § 1 (2018).

129. Romano, *Product*, *supra* note 13, at 235, 240–41.

130. *Id.* at 277.

assets would lose much of their value if Delaware lost its lead in the charter market.¹³¹ Moreover, Delaware is heavily dependent on revenues from franchise taxes, which account for a disproportionate share of Delaware's budget: more than twenty-seven percent as of 2020.¹³² As a result, Delaware can send a credible signal to its corporate customers that it will remain committed to protecting their interests.¹³³ Differently put, Delaware can provide its corporate customers with a hostage in the form of its investments in the charter market, and that hostage serves as a commitment device to guarantee Delaware's favorable treatment of corporations in the future.¹³⁴ Crucially, this theory explains the dominance of a single state. Once a state has attracted a majority of public corporations, that state has more to lose than any competing state, making it more difficult for competing states to signal their commitment in an equally credible way.

Michael Klausner has contributed another piece of the puzzle by arguing that choosing Delaware as their state of incorporation allows corporations to reap significant network benefits given the number of other large corporations incorporated in that state.¹³⁵ This "network theory" not only explains Delaware's success but also points to why any state, once it has achieved dominance in the charter market, may be difficult to dethrone: By definition, new entrants cannot offer comparable network benefits.¹³⁶

Scholars including Romano have also pointed to other benefits that Delaware offers, such as superb corporate law courts¹³⁷ and a well-developed

131. *Id.* at 235.

132. Governor's Budget Financial Summary and Charts, DELAWARE.GOV, <https://budget.delaware.gov/budget/fy2020/documents/operating/financial-summary.pdf> (last visited Oct. 13, 2020) (putting estimated revenues from incorporation revenues at 27.6 percent of the all revenues for the fiscal year 2020).

133. Romano, *Product*, *supra* note 13, at 276–77. This theory has gained widespread support in the literature as one of the factors explaining Delaware's success in the charter market. *E.g.*, Kamar, *Indeterminacy*, *supra* note 20, at 1927.

134. Romano, *Product*, *supra* note 13, at 276–77.

135. Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 841–47 (1995). Network benefits are now widely recognized to constitute one of the reasons for Delaware's success in the charter market. *E.g.*, Kamar, *Indeterminacy*, *supra* note 116, at 1923–24; Brummer, *supra* note 116, at 1070.

136. It has long been recognized that network effects are a potential to market entry. *E.g.*, Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479, 503–04 (1998); Lucian Arye Bebchuk & Assaf Hamdani, *Vigorous Race or Leisurely Walk: Reconsidering the Competition over Corporate Charters*, 112 YALE L.J. 553, 586 (2002).

137. Romano, *Product*, *supra* note 13, at 280; Bernard S. Black, *Is Corporate Law Trivial?: A Political and Economic Analysis*, 84 NW. U. L. REV. 542, 590 (1990); Kamar, *Indeterminacy*, *supra* note 20, at 1925; Glynn, *supra* note 116, at 100–01; LoPucki, *supra* note 116, at 2166; Jill E. Fisch, *The Peculiar Role of the Delaware Courts in the Competition for Corporate Charters*, 68 U. CIN. L. REV. 1061, 1064 (2000).

body of case law,¹³⁸ as factors that favor the rise of a single leading corporate law jurisdiction. As long as a disproportionate number of corporate law cases are litigated in Delaware, judges in other states will find it challenging to achieve the level of expertise and experience that Delaware judges enjoy. Nor can other states hope to create a set of precedents similar to that of Delaware as long as Delaware attracts a disproportionate share of corporate law cases. Admittedly, some years ago, John Armour and his coauthors found that Delaware's share of large corporate cases was declining, as shareholders of Delaware corporations increasingly brought lawsuits in federal or state courts outside of Delaware.¹³⁹ However, since 2014, Delaware law has allowed corporations to adopt so-called exclusive-forum bylaws, thereby forcing shareholder plaintiffs to litigate claims based on Delaware corporate law in Delaware courts.¹⁴⁰

Finally, Ehud Kamar has argued that Delaware can increase its advantages vis-à-vis other states by rendering its law indeterminate.¹⁴¹ For example, he points out that indeterminate law increases the importance of precedents, makes it more challenging to copy Delaware law and also increases the value of Delaware's expert judiciary.¹⁴² While this theory remains controversial,¹⁴³ it provides yet another potential explanation of why the state dominating the charter market may find it possible to defend its lead. As Kamar points out, copying the leading state's statutory law or case law may not offer an easy way for other states to compete.¹⁴⁴

138. Glynn, *supra* note 116, at 100; Melvin Aron Eisenberg, *The Structure of Corporation Law*, 89 COLUM. L. REV. 1461, 1511 (1989); Renee M. Jones, *Rethinking Corporate Federalism in the Era of Corporate Reform*, 29 J. CORP. L. 625, 638–39 (2004).

139. John Armour, Bernard Black & Brian Cheffins, *Is Delaware Losing Its Cases?*, 9 J. EMPIRICAL LEGAL STUD. 605, 610 (2012).

140. The Delaware Chancery Court first recognized the legality of exclusive-forum bylaws in 2014. *Boilermakers Loc. 154 Ret. Fund v. Chevron Corp.*, 73 A.3d 934, 963 (Del. Ch. 2013). The Delaware legislature subsequently codified corporations' right to adopt exclusive-forum bylaws. *See* 8 DEL. CODE ANN. § 115 (West 2020) (allowing corporations to adopt exclusive-forum bylaws) (added by 80 Del. Laws ch. 40, § 5 (2015)).

141. Kamar, *Indeterminacy*, *supra* note 20, at 1911.

142. *E.g., id.*

143. *See* ROBERTA ROMANO, *THE ADVANTAGE OF COMPETITIVE FEDERALISM FOR SECURITIES REGULATION* 87 (2002) (arguing that Delaware law offers a fairly high degree of predictability and that corporations incorporate in Delaware partly for that reason); Jens C. Dammann, *Indeterminacy in Corporate Law: A Theoretical and Comparative Analysis*, 49 STAN. J. INT'L L. 54, 58 (2013) (questioning any link between regulatory competition and indeterminacy by pointing out that U.K. and German corporate law is at least as indeterminate as Delaware corporate law despite the fact that regulatory competition in corporate law was traditionally absent in Europe).

144. Kamar, *Indeterminacy*, *supra* note 20, at 1911. In fact, it is noteworthy that two states, Kansas and Oklahoma, have copied Delaware's statutory law. *See* William J. Carney & George B. Shepherd, *The Mystery of Delaware Law's Continuing Success*, 2009 U. ILL. L. REV. 1, 57 n.304 (2009); Dammann, *supra* note 143, at 60 n.25. Yet neither Kansas nor Oklahoma have been particularly successful in attracting corporate charters. *See, e.g.,* Amanda M. Rose & Larry J.

E. The Market for Corporate Headquarters

Whereas the market for corporate charters may naturally tend to have a single dominant jurisdiction, the circumstances in the market for corporate headquarters are very different.

On the one hand, some of the considerations that favor the emergence of a dominant jurisdiction in the market for corporate charters also apply to state competition for corporate headquarters. For example, some goods that states provide to corporations headquartered there, such as the law governing relations with third parties, are also non-rivalrous.¹⁴⁵ Moreover, just as corporations choosing their state of incorporation may care about network effects, corporations selecting a location for their headquarters may be interested in finding a place that offers a cluster of similar establishments. That way, the firm can benefit from a highly trained workforce, a public administration that understands the industry, and experienced service providers.

However, unlike states competing for corporate charters, states and municipalities competing for corporate headquarters may face capacity problems. As the number of locally headquartered firms increases, so may the side effects that go hand in hand with such growth. The state's physical infrastructure may become overburdened, wages in the local labor markets may rise in response to increasing demand, and skyrocketing housing prices may lead to higher living expenses which further contribute to the rise of labor costs.¹⁴⁶

In other words, unlike in the market for corporate charters, states competing for corporate headquarters may not be able to keep expanding their market share without becoming less attractive to some of the firms already headquartered there. This may prevent any single jurisdiction from dominating the market for corporate headquarters. Moreover, it is conceivable that state competition for corporate headquarters may result in a sorting effect. As a state attracts more and more headquarters, some corporations may find the state more attractive, since they benefit from the advantages that a cluster of businesses has to offer. In contrast, other

LeBlanc, *Policing Public Companies: An Empirical Examination of the Enforcement Landscape and the Role Played by State Securities Regulators*, 65 FLA. L. REV. 395, 427 tbl.A.1 (2013) (displaying the percentage of public corporations incorporated in each state and showing that Delaware's share is 58.7 percent, whereas Oklahoma's and Kansas each account of 0.3 percent).

145. *E.g.*, Nita Ghei, *Evaluating the WTO's Two Step Test for Environmental Measures Under Article XX*, 18 COLO. J. INT'L ENV'T L. & POL'Y 117, 124 n.26 (2007) (noting that the consumption of legislation is non-rivalrous).

146. *See, e.g.*, Nour Malas & Paul Overberg, *San Francisco Has a People Problem*, WALL ST. J. (Mar. 22, 2018), <https://www.wsj.com/articles/san-francisco-has-a-people-problem-1521691260> (explaining San Francisco's economic boom has led to high housing prices).

corporations may prefer to leave because they are interested in factors, such as low labor costs, that the state can no longer offer.

F. Empirical Findings

Tables 4 to 6 display data on the migration of firms by state, and demonstrate that the market for corporate headquarters has unfolded quite differently from the charter market. There are many different ways to measure the market shares of individual states.

Table 4 displays the absolute number of headquarters by state and year. In 2018, California was home to the highest number of corporate headquarters (675), Vermont and Wyoming to the lowest (two each). Note that the total number of public corporations in the United States has dropped sharply following the financial crisis that started in 2008 so that most states were home to substantially fewer corporations in 2018 than in 2005.

Of course, the fact that many corporations are headquartered in large and populous states such as California, New York (515), and Texas (409), is not particularly surprising. A more useful indicator may be the number of corporate headquarters that each state hosts on a per capita basis (Table 5). On this dimension, Delaware, Massachusetts, and New York are leading the field, with sixty, forty-four, and twenty-three headquarters for every one million inhabitants, whereas New Mexico finds itself in the last place, with one.¹⁴⁷

Of course, not all public corporations are created equal; in particular, some public corporations are much larger than others. Therefore, Table 6 focuses on the total market capitalization of corporations headquartered in each state. California wins this race with a total market capitalization of almost seven trillion dollars, with New York (3.6 trillion dollars) and Texas (2.1 trillion dollars) taking distant second and third places. Table 7 also focuses on market capitalization but in per capita amounts. On that dimension, Nebraska, Washington, and New York take the first, second, and third places, respectively.

G. Which States Win and Lose in the Market for Relocations

Tables 8 to 10 display information on firms' interstate relocation choices.

Table 8 focuses on the net number of headquarters that states have gained or lost as a result of relocations. The net gain or loss is defined as the

147. The numbers for Delaware should, perhaps, be read with some caution. Because the SEC has not yet formally defined the meaning of "principal executive office," see the analysis *supra* note 35, it is at least conceivable that some firms indicated the address of their Delaware office, rather than that of their headquarters, in their SEC filings.

number of headquarters that have relocated to the state from other states minus the number of headquarters that have relocated from the state to other states. On this measure, Texas has consistently done very well, whereas states like California, Massachusetts, and New York have typically done quite poorly.

Table 9 takes the same approach, except that it calculates states net gains and losses on a per capita basis. As a result, the picture becomes more varied, though it is noteworthy that Massachusetts still tends to fare poorly, whereas Texas still manages to do quite well.

H. Sorting

One of the crucial characteristics of state competition for corporate headquarters is that states are competing on multiple dimensions. Moreover, because many of the goods that they are offering are rivalrous, the attractiveness of a state's business environment may change over time in a way that impacts different corporations differently. For example, continued success in attracting businesses may lead to higher wages in the local labor market as well as to higher property prices, which may be highly disadvantageous for corporations that rely on cheap labor.

Therefore, one would expect a continuous sorting process, in which states experience a combination of arrivals and departures reflecting differing preferences on the part of corporations.¹⁴⁸ Table 10, which displays information on the number of corporations moving their headquarters in and out of states, is consistent with this hypothesis. Typically states experience moves in both directions. For example, in the years 2010 to 2018, California lost fifty-seven headquarters to other states, but also gained forty-eight headquarters.

V. FIRM-LEVEL DETERMINANTS OF RELOCATIONS

The summary statistics displayed in Table 1 suggest that not all firms are equally likely to relocate. Instead, some firm characteristics may make it more likely that a firm will move its corporate headquarters from one state to another. In this Part, therefore, I will analyze the impact of firm-level variables on firms' relocation choices.

A. Hypotheses

Given that large firms may face higher transaction costs when relocating their headquarters from one state to another, I hypothesize that such firms are

148. *C.f.* Tiebout, *supra* note 93, at 421–23 (predicting that residents will move from one community to another as the bundle of goods offered by communities changes).

less likely to relocate. To capture firm size, I focus on total assets, number of employees, and assets in the form of property, plant, and equipment, as defined in Table A.1.

The literature on headquarters relocations across international borders has found that taxes play a role in firms' choices about where to locate or relocate their headquarters.¹⁴⁹ I therefore hypothesize that a firm's effective tax rate, as defined in Table A.1, is positively correlated with firms' decision to relocate.

B. Model

To explore the role of firm size and effective tax rates in firms' relocation choices, I rely on a probit model. The underlying function, which determines if a firm relocates its headquarters in a particular year, is given by equation (1):

$$(1) Y_{i,t}^* = \beta_0 + \beta_1(X_{i,t-1}) + \varepsilon_{i,t}$$

The variable $Y_{i,t}^*$ is unobserved. However, the observed outcome, that is, a firm's decision to relocate or not to relocate, is given by equation (2):

$$(2) Y_{i,c,t}^* = \begin{cases} 1 & \text{if } Y_{i,t}^* > 0 \\ 0 & \text{otherwise} \end{cases}$$

Note that i indexes firms, whereas t indexes years. The term $X_{i,t-1}$ captures various firm level characteristics including the firms' effective tax rate and various variables capturing firm size, such as the natural of the number of a firm's employees and the natural log of a firm's total assets. The desired probability is then given by the following equation:

$$(3) \text{Prob}(Y_{i,t}^* = 1 | X_{i,t-1}) = \Phi\left(\frac{\beta_0 + \beta_1 X_{i,t-1}}{\sigma}\right)$$

As a robustness check, I also use a fixed effects logit model. For the fixed-effects model, the underlying equation is given by the following equation:

149. See, e.g., Egger et al., *supra* note 23, at 632 (finding that high labor taxes in the shape of labor income taxes and employers' Social Security contributions are associated with a lower probability that a country is selected for a corporate headquarters); Laamanen et al., *supra* note 23, at 202 (finding that increases in taxation will make it more likely that firms leave a country and also reduce the chance that a country will be selected as a location for corporate headquarters).

$$(4) Y_{i,t}^* = \beta_0 + \beta_1(X_{i,t-1}) + \alpha_i + \varepsilon_{i,t}$$

Note that equation (4) differs from equation (1) only in that the right-hand side of equation (4) includes an additional term α_i which captures firm fixed effects. The probability function for the logit model is given by equation (5):

$$(5) \text{Prob}(Y_{i,t}^* = 1 | X_{i,t-1}) = \frac{e^{\beta_0 + \beta_1(X_{i,t-1}) + \alpha_i}}{1 + e^{\beta_0 + \beta_1(X_{i,t-1}) + \alpha_i}}$$

C. Results

The results for the probit model are displayed in Table 11, and those for the fixed-effects logit model in Table 12.

As hypothesized, there is some evidence that larger firms, as measured in terms of total assets and number of employees are less likely to relocate. The relevant coefficients are negative and statistically significant in several specifications.

By contrast, I find no evidence that firms with higher effective tax rates are more likely to relocate. This result does not prove that tax considerations fail to play a role in relocation choices. However, this finding raises doubts about whether a high tax burden is necessarily a primary factor determining whether corporations relocate or stay put.

VI. STATE CHARACTERISTICS AND FIRM RELOCATIONS

This Article focuses on state competition for corporate headquarters. Against this background, a central question concerns to what extent states' legal systems may be driving corporations' relocation choices.

A. Background and Hypotheses

Assessing the impact of corporate law on relocation choices is not yet an option since until recently the location of a corporation's headquarters did not affect the corporate law governing the internal affairs of public corporations. Therefore, this Article focuses on two other features of states' legal systems: state corporate income tax rates and the quality of state court systems.

In the international context, various studies have found that the determinants of firms' decisions about where to locate their headquarters include differences in taxation.¹⁵⁰ Accordingly, I hypothesize that corporate

150. See *supra* note 149 and accompanying text.

income tax rates in the (old) headquarters state correlate positively with firms' decision to relocate their headquarters.

Furthermore, various studies have shown that firms' incorporation choices are driven in part by the court quality.¹⁵¹ In particular, a well-developed body of literature stresses the importance of high-quality courts for economic development.¹⁵² Therefore, I hypothesize that corporations headquartered in states with high-quality courts are less likely to relocate their headquarters elsewhere.

B. Results

To explore the relevance of state-level differences in court quality and corporate income tax rate, I use a linear regression with fixed effects in which the dependent variable is the net number of relocations to a state in a given year, meaning the number of headquarters relocations *to* the state in a given year minus the number of relocations *from* that state to other states in that year. In other words:

$$(3) \text{NetRelocations}_{s,t} = \beta_0 + \beta_1 X_{s,t} + \mu_s + \varepsilon_{s,t}$$

In this model, s indexes headquarters states and t indexes years. Note that *the* term $X_{s,t}$ captures state characteristics that vary over time, whereas μ_s captures state fixed effects.

The results are displayed in Tables 13. I find no statistically significant evidence that state level corporate income tax rates contribute to states' success in retaining corporations (Table 13 cols. 4–6). This is consistent with the finding reported in Tables 10 and 11 that corporations' effective tax rate does not appear to be correlated with firms' decision to relocate.

151. See, e.g., Jens Dammann & Matthias Schündeln, *The Incorporation Choices of Privately Held Corporations*, 27 J.L. ECON. & ORG. 79, 106–07 (2011) (finding that large privately held corporations are more likely to incorporate outside of their headquarters state if the quality of the headquarters state's courts is poor); Marcel Kahan, *The Demand for Corporate Law: Statutory Flexibility, Judicial Quality, or Takeover Protection?*, 22 J.L. ECON. & ORG. 340, 357 (2006) (finding that public corporations from states with better courts are more likely to incorporate locally). *But see* Jens Dammann & Matthias Schündeln, *Where Are Limited Liability Companies Formed? An Empirical Analysis*, 55 J.L. & ECON. 741, 768 (2012) (finding no evidence that court quality, as measured by the U.S. Chamber of Commerce Ranking, matters to where limited liability companies are formed).

152. DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 54 (1990) (pointing to the lack of good contract enforcement mechanisms as a central obstacle to development in the third world); Jens Dammann & Henry Hansmann, *Globalizing Commercial Litigation*, 94 CORNELL L. REV. 1, 9 (2008) (stressing the central role of good courts to economic development). For a summary of the empirical literature, see generally Michael Trebilcock & Jing Leng, *The Role of Formal Contract Law and Enforcement in Economic Development*, 92 VA. L. REV. 1517 (2006).

By contrast, there is some evidence that high-quality courts contribute to states' success in retaining corporations. The court quality coefficient is positive and statistically significant at the five percent level (Table 13 cols. 1–3).

V. CONCLUSION

California's 2018 statute introducing a gender quota for corporate boards is remarkable for many reasons.¹⁵³ One of them is that the statute applies to all publicly traded corporations that have their principal place of business in California, regardless of where they are incorporated.

Statutes that tie the application of corporate law to the location of a firm's headquarters create a new dimension in which state competition can impact corporate law. In addition to traditional charter competition, competition for corporate headquarters may now begin to shape state corporate laws. For example, states may shy away from enacting headquarters-based gender quotas for fear of causing corporations to relocate.

To gain a better empirical understanding of state competition for corporate headquarters, this Article examines a dataset covering corporate relocations of publicly traded firms in the years 1994 to 2018. My analysis yields several valuable insights.

First, corporate relocations are by no means uncommon. Even if one excludes relocations that occurred in the context of a merger, roughly five percent of publicly traded firms relocated their headquarters at least once between 1994 and 2018.

Second, much like the market for corporate charters, the market for corporate headquarters has winners and losers. However, which states win and which states lose depends, to a large extent, on how one defines success in the market for corporate headquarters. Different possible criteria include the absolute or per capita number of headquarters located in each state and the absolute or per capita market capitalization of corporations headquartered in each state. States that boast an unusually large number of corporate headquarters may not be particularly successful in the market for corporate relocations. For example, while Massachusetts is home to a large number of corporate headquarters, more corporations tend to relocate from Massachusetts to other states than the other way around. By contrast, Texas is one state that has consistently been quite successful at attracting and retaining corporate headquarters.

Third, I find no evidence that high taxes are a push factor causing corporations to relocate elsewhere. I find no statistically significant evidence

153. *See supra* note 1.

that state-level state corporate income tax rates or firm-level effective rates of taxation explain firms' relocation choices.

Finally, I have some evidence that states' legal systems matter to the market for corporate headquarters. In particular, states with better courts are more successful at attracting corporate headquarters.

In the aggregate, these findings suggest that state competition for corporate headquarters may end up shaping state law—including, potentially, state corporate law—at least to some extent.

Table 1: Summary Statistics

Panel A: All relocations

	Non-Relocating Firms		Relocating Firms		Difference in Means
	Obs.	Mean	Obs.	Mean	
	(1)	(2)	(3)	(4)	(5)
<i>Firm Size</i>					
Ln (assets)	12468	5.01	1166	4.81	-0.20***
Employ. (in thousands)	11284	3.07	1090	4.11	1.04***
Total liability (\$1,000)	12408	286.76	1162	367.18	80.42**
<i>Firm Performance</i>					
Return on equity	12069	0.09	1111	0.06	-0.04
Return on assets	12069	0.00	1112	-0.02	-0.02**
<i>Other</i>					
Tobin's q.	12394	2.53	1154	2.55	0.02
Book lev.	12407	0.19	1162	0.21	0.03***
Fin. lev.	12342	0.20	1150	0.20	0.00
Tangibility	12149	0.20	1130	0.23	0.03***

Panel B: Excluding relocations that occurred within a year of a merger

	Non-Relocating Firms		Relocating Firms		Difference in Means
	Obs.	Mean	Obs.	Mean	
	(6)	(7)	(8)	(9)	(10)
<i>Firm Size</i>					
Ln(assets)	12910	5.01	724	4.73	-0.28***
Employ. (thous.)	11706	3.14	668	3.60	0.46
Total liab. (\$1,000)	12849	291.81	721	326.33	34.52
<i>Firm Performance</i>					
Return on equity	12487	0.09	693	0.06	-0.03
Return on assets	12488	0.00	693	-0.03	-0.04***
<i>Other</i>					
Tobin's q.	12831	2.53	717	2.57	0.04
Book lev.	12848	0.19	721	0.21	0.02**
Fin. lev.	12778	0.20	714	0.20	-0.00
Tangibility	12575	0.20	704	0.24	0.04***

Note: Columns 1 and 2 refer to firms that did not change their primary-place-of-business state (“PPB state”) between 1994 and 2018. Columns 3 and 4 display values for firms that changed their PPB state at least once between 1994 and 2018. Column 5 displays the results of a t-test. Firms are coded as having relocated if their PPB state in a given year is different from their PPB state in the preceding year. Financial variables are defined in Table A.1. * ** *** indicate statistical significance at the ten percent, five percent, and one percent levels, respectively.

Table 2: Absolute Number of Headquarters Relocations by Decade and Industry¹⁵⁴

	1994–1999		2000–2009		2010–2019	
	all	w/o mer ger	all	w/o mer gers	all	w/o mer gers
Agriculture, Forestry, & Fishing	1	0	1	1	1	1
Construction and Mining	40	22	35	24	37	23
Manufacturing	200	107	242	146	161	104
Transp., Communications, Electric, Gas, & Sanitary Services	58	29	61	29	32	20
Trade	43	21	36	20	30	19
Finance, Industry, and Real Estate Services	97	60	300	258	238	215
	101	45	136	62	75	50

154. Note that the industry classifications are based on the Standard Industrial Classification (SIC) System. See *Standard Industrial Classification (SIC) Manual*, OSHA, https://www.osha.gov/pls/imis/sic_manual.html (last visited Nov. 22, 2020) (defining the SIC codes).

Table 3: Percentage of Headquarter Relocations by Decade and Industry

	1994–1999		2000–2009		2010–2019	
	all	w/o mer gers	all	w/o mer gers	all	w/o mergers
Agriculture, Forestry, & Fishing	0.03	0	0.05	0.05	0.07	0.07
Construction and Mining	0.09	0.05	0.08	0.05	0.09	0.06
Manufacturing	0.06	0.03	0.08	0.05	0.07	0.05
Transp., Communications, Electric, Gas, & Sanitary Services	0.07	0.04	0.09	0.04	0.07	0.04
Trade	0.05	0.02	0.05	0.03	0.07	0.04
Finance, Industry, and Real Estate Services	0.04	0.02	0.12	0.10	0.12	0.11
	0.05	0.02	0.08	0.04	0.07	0.05

Table 4: Absolute Number of Headquarters of Public Corporations by State and Year

Rank	State	Number of headquarters in the year...						% Change (‘95–’18)
		1995	2000	2005	2010	2015	2018	
1	CA	1031	1203	863	664	685	675	-34.53
2	NY	754	698	599	548	531	515	-31.70
3	TX	550	523	417	388	420	409	-25.64
4	MA	421	410	334	269	285	303	-28.03
5	IL	358	296	335	320	291	247	-31.01
6	PA	300	293	226	192	187	173	-42.33
7	NJ	343	303	272	164	168	166	-51.60
8	FL	299	279	222	151	154	154	-48.49
9	OH	249	208	157	136	120	116	-53.41
10	CO	170	145	110	98	118	111	-34.71
11	VA	160	163	141	115	122	107	-33.13
12	GA	172	173	131	98	94	99	-42.44
13	NC	124	125	95	103	98	89	-28.23
14	CT	189	145	118	90	88	79	-58.20
15	MD	124	122	97	89	82	77	-37.90
16	MN	226	191	143	107	87	72	-68.14
17	WA	102	123	106	78	76	72	-29.41
18	MI	137	119	98	73	67	69	-49.64
19	WI	97	77	55	60	63	60	-38.14

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20	DE	33	29	53	92	64	58	75.76
21	TN	92	79	68	61	57	58	-36.96
22	AZ	79	76	61	48	52	54	-31.65
23	IN	93	89	74	64	61	49	-47.31
24	MO	110	98	76	71	58	43	-60.91
25	OK	60	52	36	38	41	37	-38.33
26	NV	61	43	43	29	31	35	-42.62
27	UT	50	48	39	34	34	34	-32
28	LA	47	38	35	31	26	24	-48.94
29	KS	34	37	29	24	29	23	-32.35
30	KY	41	46	34	30	26	23	-43.90
31	IA	53	33	33	23	23	22	-58.49
32	OR	73	71	48	35	30	21	-71.23
33	SC	42	37	29	24	23	19	-54.76
34	AR	29	26	18	16	19	17	-41.38
35	NE	27	21	23	17	21	17	-37.04
36	AL	56	50	43	20	17	16	-71.43
37	DC	18	28	22	12	16	12	-33.33
38	HI	13	12	9	10	13	11	-15.38
39	MS	29	21	18	14	11	11	-62.07
40	RI	18	19	13	12	13	10	-44.44
41	NH	32	29	23	13	9	9	-71.88

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42	WV	13	9	12	10	8	8	-38.46
43	ME	15	15	15	8	8	7	-53.33
44	SD	9	8	6	7	8	7	-22.22
45	ID	11	12	11	11	6	6	-45.45
46	MT	12	8	6	6	6	5	-58.33
47	ND	6	6	4	3	3	4	-33.33
48	AK	4	3	2	2	3	3	-25
49	NM	14	10	5	3	1	3	-78.57
50	VT	14	10	8	5	4	2	-85.71
51	WY	6	6	2	4	2	2	-66.67

Note: The rank in column 1 is based on the number of headquarters in 2018.

Table 5: Per-Capita Number of Headquarters of Public Corporations by State and Year

Rank	State	Number of headquarters per one million residents in						% Change (‘95–’18)
		the year...						
		1995	2000	2005	2010	2015	2018	
1	DE	45.94	36.88	62.71	102.27	67.99	60.07	30.75
2	MA	69.45	64.45	52.16	40.97	41.95	44.02	-36.61
3	NY	41.54	36.73	31.31	28.25	27.02	26.37	-36.52
4	CT	57.88	42.50	33.65	25.15	24.53	22.12	-61.78
5	CO	45.48	33.51	23.75	19.42	21.65	19.50	-57.11
6	IL	30.12	23.81	26.57	24.92	22.63	19.41	-35.55
7	NJ	43.06	35.94	31.44	18.64	18.94	18.68	-56.62
8	CA	32.74	35.39	24.09	17.79	17.60	17.11	-47.75
9	DC	32.65	48.95	38.79	19.83	23.69	17.11	-47.61
10	TX	29.44	24.97	18.31	15.37	15.29	14.29	-51.48
11	PA	24.91	23.85	18.15	15.10	14.63	13.51	-45.74
12	MN	49.07	38.71	27.93	20.15	15.87	12.84	-73.83
13	MD	24.68	22.97	17.35	15.37	13.70	12.76	-48.32
14	VA	24.24	22.94	18.61	14.33	14.59	12.59	-48.07
15	NV	39.98	21.30	17.68	10.73	10.81	11.56	-71.08
16	UT	25.29	21.39	15.87	12.25	11.40	10.78	-57.37
17	WI	18.88	14.33	9.92	10.54	10.94	10.33	-45.28
18	OH	22.32	18.30	13.70	11.79	10.33	9.93	-55.49

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19	WA	18.78	20.81	16.94	11.57	10.61	9.57	-49.05
20	RI	18.20	18.09	12.17	11.39	12.31	9.45	-48.07
21	GA	23.93	21.03	14.68	10.09	9.24	9.42	-60.64
22	OK	18.37	15.05	10.14	10.11	10.49	9.39	-48.89
23	NE	16.51	12.25	13.06	9.29	11.10	8.83	-46.53
24	NC	17.26	15.47	10.91	10.76	9.77	8.57	-50.32
25	TN	17.55	13.85	11.35	9.60	8.65	8.57	-51.21
26	SD	12.36	10.58	7.74	8.58	9.37	7.97	-35.54
27	KS	13.14	13.74	10.56	8.40	9.97	7.90	-39.89
28	HI	11.01	9.89	6.96	7.33	9.14	7.74	-29.69
29	AZ	18.34	14.73	10.45	7.49	7.61	7.54	-58.87
30	IN	16.06	14.61	11.79	9.86	9.23	7.32	-54.42
31	FL	21.08	17.39	12.44	8.01	7.62	7.25	-65.61
32	MO	20.66	17.48	13.13	11.84	9.55	7.02	-66.00
33	IA	18.66	11.27	11.13	7.54	7.37	6.99	-62.55
34	MI	14.18	11.96	9.75	7.39	6.75	6.91	-51.27
35	NH	27.93	23.39	17.71	9.87	6.73	6.65	-76.19
36	AR	11.69	9.71	6.47	5.48	6.38	5.65	-51.69
37	ND	9.35	9.35	6.19	4.45	3.98	5.28	-43.58
38	ME	12.12	11.75	11.37	6.03	6.02	5.23	-56.87
39	KY	10.63	11.36	8.13	6.90	5.87	5.16	-51.52
40	LA	10.86	8.50	7.65	6.82	5.57	5.15	-52.57

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41	OR	23.24	20.70	13.28	9.12	7.47	5.02	-78.39
42	MT	13.82	8.85	6.38	6.06	5.82	4.71	-65.88
43	WV	7.14	4.98	6.59	5.39	4.34	4.43	-37.91
44	AK	6.65	4.78	3.00	2.80	4.07	4.08	-38.65
45	SC	11.35	9.19	6.79	5.18	4.70	3.74	-67.08
46	MS	10.78	7.37	6.19	4.71	3.68	3.69	-65.76
47	WY	12.54	12.14	3.89	7.09	3.42	3.46	-72.39
48	ID	9.44	9.23	7.70	7.00	3.63	3.43	-63.70
49	AL	13.14	11.23	9.41	4.18	3.50	3.27	-75.08
50	VT	24.02	16.40	12.88	7.99	6.40	3.20	-86.66
51	NM	8.32	5.49	2.59	1.45	0.48	1.43	-82.77

Note: The rank in column 1 is based on state's percentage of the total number of

Table 6: Market Capitalization of Headquarters of Public Corporations by State and Year

Rank	State	Market capitalization in \$ trillion for headquartered corporations in the year...						% Change ('95-'18)
		1995	2000	2005	2010	2015	2018	
1	CA	0.86	3.27	2.58	2.86	5.10	6.81	691.33
2	NY	1.10	3.58	3.15	2.58	3.34	3.58	225.11
3	TX	0.53	1.33	1.53	1.78	2.01	2.10	295.11
4	WA	0.12	0.61	0.57	0.48	1.09	2.09	1620.66
5	IL	0.50	0.71	0.83	0.84	1.18	1.40	181.31
6	NJ	0.33	0.84	0.70	0.66	1.01	1.18	263.51
7	MA	0.27	0.69	0.42	0.48	0.77	1.06	290.84
8	GA	0.28	0.62	0.47	0.47	0.81	0.88	218.48
9	OH	0.23	0.37	0.49	0.47	0.72	0.77	236.37
10	MN	0.17	0.31	0.47	0.43	0.60	0.74	338.61
11	PA	0.28	0.27	0.42	0.46	0.71	0.72	158.83
12	NC	0.10	0.28	0.48	0.38	0.57	0.64	532.70
13	NE	0.06	0.14	0.19	0.27	0.44	0.64	996.09
14	VA	0.17	0.24	0.33	0.37	0.73	0.58	237.90
15	FL	0.11	0.15	0.28	0.26	0.46	0.55	403.63
16	CT	0.31	0.65	0.63	0.42	0.74	0.48	53.76
17	MI	0.20	0.19	0.26	0.29	0.38	0.44	123.44

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18	IN	0.07	0.17	0.22	0.17	0.30	0.37	429.95
19	AR	0.07	0.29	0.25	0.24	0.26	0.33	391.35
20	MD	0.06	0.14	0.17	0.16	0.25	0.32	431.51
21	CO	0.08	0.18	0.18	0.20	0.27	0.25	216.29
22	TN	0.05	0.11	0.14	0.13	0.24	0.24	348.89
23	MO	0.13	0.30	0.20	0.23	0.31	0.24	87.61
24	WI	0.05	0.09	0.12	0.12	0.15	0.19	289.37
25	AZ	0.05	0.03	0.09	0.17	0.13	0.19	310.86
26	OR	0.04	0.09	0.05	0.08	0.16	0.15	244.90
27	OK	0.02	0.05	0.09	0.15	0.13	0.15	593.36
28	RI	0.02	0.04	0.05	0.06	0.15	0.12	416.64
29	KY	0.04	0.03	0.06	0.06	0.10	0.12	161.11
30	NV	0.02	0.02	0.09	0.07	0.08	0.11	351.60
31	DC	0.06	0.12	0.10	0.05	0.09	0.10	50.21
32	ID	0.03	0.06	0.02	0.02	0.02	0.08	154.37
33	LA	0.03	0.03	0.06	0.06	0.06	0.06	126.35
34	IA	0.04	0.04	0.04	0.03	0.04	0.06	45.05
35	KS	0.02	0.12	0.09	0.03	0.05	0.06	195.65
36	UT	0.02	0.02	0.04	0.06	0.05	0.05	150.68
37	DE	0.08	0.12	0.09	0.16	0.21	0.05	-40.78
38	AL	0.03	0.06	0.09	0.03	0.04	0.05	39.99
39	SC	0.01	0.01	0.02	0.02	0.03	0.03	97.59

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40	ME	0.00	0.00	0.05	0.01	0.02	0.02	571.71
41	MS	0.01	0.01	0.01	0.01	0.01	0.02	36.20
42	HI	0.00	0.00	0.01	0.01	0.01	0.01	240.63
43	NH	0.01	0.01	0.02	0.01	0.01	0.01	17.71
44	SD	0.00	0.01	0.00	0.00	0.01	0.01	312.70
45	WV	0.00	0.00	0.01	0.00	0.01	0.01	294.97
46	ND	0.00	0.00	0.00	0.01	0.00	0.01	597.84
47	MT	0.00	0.00	0.00	0.00	0.00	0.01	170.63
48	AK	0.00	0.00	0.00	0.00	0.01	0.00	582.32
49	NM	0.01	0.00	0.01	0.00	0.00	0.00	-50.83
50	VT	0.00	0.00	0.00	0.00	0.00	0.00	-44.28
51	WY	0.00	0.00	0.00	0.00	0.00	0.00	102.50

Note: A state's rank (column 1) is based on the market capitalization of corporations headquartered in that state in 2018.

Table 7: Per-Capita Market Capitalization of Headquartered Corporations by State and Year

Rank	State	Market capitalization in \$ million per resident in the						% Change (‘95–’18)
		1995	2000	2005	2010	2015	2018	
1	NE	0.04	0.08	0.11	0.15	0.23	0.33	830.75
2	WA	0.02	0.10	0.09	0.07	0.15	0.28	1142.04
3	NY	0.06	0.19	0.16	0.13	0.17	0.18	202.14
4	CA	0.03	0.10	0.07	0.08	0.13	0.17	531.55
5	MA	0.04	0.11	0.07	0.07	0.11	0.15	244.26
6	DC	0.12	0.20	0.18	0.08	0.14	0.14	18.03
7	CT	0.10	0.19	0.18	0.12	0.21	0.14	40.58
8	NJ	0.04	0.10	0.08	0.08	0.11	0.13	225.86
9	MN	0.04	0.06	0.09	0.08	0.11	0.13	260.31
10	RI	0.02	0.03	0.04	0.06	0.14	0.12	382.92
11	AR	0.03	0.11	0.09	0.08	0.09	0.11	304.89
12	IL	0.04	0.06	0.07	0.07	0.09	0.11	162.77
13	GA	0.04	0.08	0.05	0.05	0.08	0.08	117.81
14	TX	0.03	0.06	0.07	0.07	0.07	0.07	157.81
15	VA	0.03	0.03	0.04	0.05	0.09	0.07	162.38
16	OH	0.02	0.03	0.04	0.04	0.06	0.07	221.36
17	NC	0.01	0.03	0.06	0.04	0.06	0.06	337.91
18	PA	0.02	0.02	0.03	0.04	0.06	0.06	143.54

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19	IN	0.01	0.03	0.04	0.03	0.04	0.06	358.43
20	MD	0.01	0.03	0.03	0.03	0.04	0.05	342.38
21	DE	0.11	0.15	0.10	0.18	0.23	0.05	-55.95
22	CO	0.02	0.04	0.04	0.04	0.05	0.04	107.74
23	MI	0.02	0.02	0.03	0.03	0.04	0.04	116.18
24	ID	0.03	0.05	0.02	0.01	0.01	0.04	69.29
25	MO	0.02	0.05	0.04	0.04	0.05	0.04	63.18
26	OK	0.01	0.02	0.03	0.04	0.03	0.04	474.63
27	NV	0.02	0.01	0.04	0.03	0.03	0.04	127.60
28	TN	0.01	0.02	0.02	0.02	0.04	0.04	247.44
29	OR	0.01	0.03	0.01	0.02	0.04	0.04	159.09
30	WI	0.01	0.02	0.02	0.02	0.03	0.03	244.42
31	AZ	0.01	0.01	0.01	0.03	0.02	0.03	147.21
32	KY	0.01	0.01	0.01	0.01	0.02	0.03	125.65
33	FL	0.01	0.01	0.02	0.01	0.02	0.03	236.29
34	KS	0.01	0.04	0.03	0.01	0.02	0.02	162.70
35	IA	0.01	0.01	0.01	0.01	0.01	0.02	30.87
36	ME	0.00	0.00	0.04	0.01	0.02	0.02	520.74
37	UT	0.01	0.01	0.02	0.02	0.02	0.02	57.14
38	SD	0.00	0.01	0.01	0.00	0.01	0.01	242.04
39	LA	0.01	0.01	0.01	0.01	0.01	0.01	110.23
40	NH	0.01	0.01	0.02	0.01	0.01	0.01	-0.37

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41	HI	0.00	0.00	0.01	0.01	0.01	0.01	183.06
42	AL	0.01	0.01	0.02	0.01	0.01	0.01	22.09
43	ND	0.00	0.00	0.01	0.01	0.01	0.01	490.57
44	AK	0.00	0.00	0.00	0.00	0.01	0.01	458.14
45	MS	0.01	0.00	0.00	0.00	0.00	0.01	22.94
46	SC	0.00	0.00	0.00	0.00	0.01	0.01	43.80
47	MT	0.00	0.00	0.00	0.00	0.00	0.01	121.61
48	WV	0.00	0.00	0.00	0.00	0.00	0.00	298.53
49	VT	0.00	0.00	0.00	0.00	0.00	0.00	-47.99
50	NM	0.00	0.00	0.00	0.00	0.00	0.00	-60.47
51	WY	0.00	0.00	0.00	0.00	0.00	0.00	67.73

Note: A state's rank (col. 1) is based on the per capital market capitalization of corporations headquartered in that state in the year 2018.

Table 8: Net Relocations as Percentage of Existing Number of Headquarters

	1995–2000		2000–2009		2010–2018	
1	SD	10.42	DE	64.16	NV	15.71
2	ID	7.74	MT	17.76	SD	13.13
3	CO	5.11	AZ	17.76	NE	10.53
4	AZ	3.69	RI	7.03	NH	10.24
5	NH	3.01	TX	5.53	VA	9.54
6	WA	2.71	MS	5.39	TX	8.58
7	TN	2.28	GA	5.17	RI	8.52
8	RI	0	OH	2.97	HI	8.49
9	NM	0	MO	2.53	NC	8.41
10	WV	0	AL	2.43	CO	7.10
11	ME	0	NC	1.94	AZ	6.13
12	AK	0	TN	1.45	AR	5.66
13	TX	-0.88	VA	1.42	GA	5.15
14	WI	-1.09	CT	0.83	IN	4.99
15	IL	-1.39	PA	0.41	MI	4.38
16	GA	-2.19	WY	0	OR	3.35
17	KY	-2.27	NE	0	WI	3.32
18	CA	-2.76	HI	0	FL	2.69
19	AR	-3.31	KS	0	PA	1.67
20	FL	-3.75	NV	0	AL	0
21	PA	-3.84	MN	0	AK	0

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22	IN	-4.12	AR	0	ND	0
23	NJ	-4.15	VT	0	SC	0
24	OH	-4.44	SC	0	NM	0
25	NC	-4.70	MD	-0.98	DC	0
26	MN	-4.78	MI	-1.00	VT	0
27	OK	-5.23	IN	-1.30	KY	0
28	MD	-5.31	WI	-1.58	OK	0
29	AL	-5.40	FL	-2.67	NJ	-1.22
30	MO	-5.59	CA	-3.13	CA	-1.34
31	IA	-5.78	OR	-3.70	MO	-1.68
32	MI	-5.87	OK	-4.68	TN	-1.70
33	MA	-5.89	WA	-4.78	WA	-2.60
34	NY	-6.25	KY	-5.21	CT	-4.64
35	OR	-6.58	CO	-6.84	OH	-4.80
36	SC	-6.82	MA	-6.87	UT	-6.03
37	VA	-7.00	ME	-7.47	IL	-6.53
38	NV	-7.07	NY	-8.53	MN	-7.56
39	UT	-7.15	ID	-9.05	MS	-8.22
40	VT	-7.19	WV	-9.51	MD	-8.42
41	NE	-7.42	IA	-9.74	IA	-9.19
42	DC	-8.68	NJ	-10.45	MA	-9.28
43	MT	-9.17	LA	-11.31	ID	-11.64
44	CT	-10.16	SD	-14.53	WV	-12.05
45	KS	-11.14	NM	-14.56	NY	-13.97

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46	MS	-11.43	NH	-18.55	LA	-14.71
47	ND	-13.82	ND	-20.54	KS	-18.46
48	LA	-14.82	UT	-21.00	DE	-26.93
49	HI	-15.97	IL	-22.61	ME	-27.16
50	WY	-16.36	AK	-40	MT	-31.46
51	DE	-18.23	DC	-43.63	WY	-60.47

Note: Percentages are calculated by dividing the difference between relocations into a state and relocations out of a state by the average number of firms headquartered in the relevant state during the pertinent decade.

Table 9: Net Relocations by State and Decade

	1995–2000		2000–2009		2010–2018	
1	CO	9	DE	39	TX	35
2	WA	3	TX	24	VA	11
3	AZ	3	AZ	11	CO	8
4	TN	2	GA	7	NC	8
5	ID	1	OH	5	NV	5
6	NH	1	VA	2	GA	5
7	SD	1	MO	2	FL	4
8	RI	0	NC	2	PA	3
9	WV	0	TN	1	MI	3
10	AK	0	MT	1	IN	3
11	ME	0	MS	1	AZ	3
12	NM	0	AL	1	WI	2
13	ND	-1	CT	1	NE	2
14	WI	-1	RI	1	RI	1
15	KY	-1	PA	1	HI	1
16	MT	-1	HI	0	OR	1
17	AR	-1	NE	0	NH	1
18	WY	-1	NV	0	SD	1
19	VT	-1	KS	0	AR	1
20	HI	-2	MN	0	KY	0
21	DC	-2	SC	0	NM	0

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22	NE	-2	WY	0	OK	0
23	IA	-3	VT	0	VT	0
24	SC	-3	AR	0	ND	0
25	MS	-3	NM	-1	DC	0
26	OK	-3	ID	-1	SC	0
27	AL	-3	MI	-1	AK	0
28	UT	-4	IN	-1	AL	0
29	NV	-4	WV	-1	WV	-1
30	KS	-4	WI	-1	MS	-1
31	IN	-4	SD	-1	ID	-1
32	GA	-4	AK	-1	MO	-1
33	TX	-5	MD	-1	TN	-1
34	IL	-5	ME	-1	IA	-2
35	OR	-5	ND	-1	UT	-2
36	NC	-6	OR	-2	MT	-2
37	DE	-6	KY	-2	WA	-2
38	MO	-6	OK	-2	NJ	-2
39	LA	-7	IA	-3	ME	-2
40	MD	-7	LA	-4	WY	-2
41	MI	-8	NH	-4	LA	-4
42	MN	-11	WA	-5	CT	-4
43	OH	-11	FL	-6	KS	-5
44	FL	-12	CO	-8	OH	-6
45	VA	-12	UT	-8	MN	-7

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46	PA	-12	DC	-10	MD	-7	
47	NJ	-14	MA	-23	CA	-9	
48	CT	-19	NJ	-28	IL	-19	
49	MA	-25	CA	-29	DE	-20	
50	CA	-31	NY	-52	MA	-26	
51	NY	-48	IL	-72	NY	-74	

Note: In cols. 3, 5, & 7 positive numbers mean that the number of relocations to the state exceeds the number of relocations from the state to other states, whereas a negative number signifies the opposite.

Table 10: Headquarters Relocations in and out of States by Decade and State

State	1994–1999		2000–2009		2010–2018	
	In	Out	In	Out	In	Out
AK	0	0	0	1	0	0
AL	2	5	5	4	1	1
AR	0	1	3	3	1	0
AZ	11	8	16	5	15	12
CA	69	100	65	94	48	57
CO	31	22	17	25	24	16
CT	15	34	29	28	12	16
DC	3	5	3	13	4	4
DE	10	16	69	30	10	30
FL	31	43	34	40	18	14
GA	16	20	24	17	15	10
HI	0	2	0	0	1	0
IA	2	5	0	3	1	3
ID	1	0	2	3	0	1
IL	17	22	32	104	50	69
IN	4	8	6	7	5	2
KS	4	8	7	7	1	6
KY	4	5	2	4	1	1
LA	2	9	4	8	1	5
MA	27	52	48	71	41	67
MD	11	18	17	18	9	16

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ME	0	0	3	4	0	2
MI	12	20	12	13	7	4
MN	6	17	13	13	7	14
MO	3	9	9	7	4	5
MS	1	4	4	3	0	1
MT	1	2	1	0	0	2
NC	9	15	24	22	25	17
ND	0	1	0	1	0	0
NE	1	3	4	4	3	1
NH	4	3	4	8	3	2
NJ	34	48	57	85	24	26
NM	4	4	0	1	1	1
NV	5	9	10	10	8	3
NY	71	119	149	201	85	159
OH	9	20	11	6	8	14
OK	2	5	4	6	3	3
OR	1	6	6	8	2	1
PA	30	42	24	23	21	18
RI	3	3	1	0	1	0
SC	3	6	0	0	3	3
SD	2	1	0	1	2	1
TN	12	10	10	9	3	4
TX	46	51	55	31	72	37
UT	4	8	2	10	4	6

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VA	14	26	16	14	23	12
VT	1	2	1	1	0	0
WA	8	5	6	11	5	7
WI	3	4	6	7	4	2
WV	1	1	2	3	0	1
WY	0	1	2	2	0	2

Table 11: Firm-level Determinants of the Decision to Relocate: Probit Model

Dependent variable: domestic relocation						
	(1)	(2)	(3)	(4)	(5)	(6)
	b/se	b/se	b/se	b/se	b/se	b/se
Effective Tax Rate	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)
Ln (Property, Plant, Equipment)	-0.000*	-0.000*	0.000	0.000	0.000	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
<i>Firm size</i>						
Ln (Assets)			-	-	-0.031***	
			0.027***	0.001***		
			(0.009)	(0.000)	(0.010)	
Ln (Employees)			-	-	-0.031***	
			0.030***	0.001***		
			(0.010)	(0.000)	(0.011)	
Total Liabilities (\$1,000)			0.000**	0.000**	0.000	

Firm (0.000) (0.000) (0.000)

Performance

Return on 0.000

Equity

(0.000)

Return on -0.027*

Assets

(0.014)

Other

Tobin's q. -0.006

(0.006)

Book lev. 0.241***

(0.045)

Financial lev. 0.022

(0.075)

Observations 114584 114584 106816 106816 106027 114584

Pseudo-R sq. 0.001 0.008 0.014 0.001

Chi sq. 3.446 66.472 122.250 3.446

Note: Probit regression. The sample includes all firm-year observations from 1994 to 2018. All regressions use robust standard errors and cluster at the firm level. All covariates are lagged by one year. Financial variables are defined in Table A.1. * ** *** indicate statistical significance at the one percent, five percent, and ten percent levels respectively.

Table 12: Firm-level Determinants of Reincorporation Choices: Fixed-effects Logit Model

Dependent Variable: Domestic Relocation						
	(1)	(2)	(3)	(4)	(5)	(6)
	b/se	b/se	b/se	b/se	b/se	b/se
Effective Tax Rate	0.008 (0.010)	0.002 (0.003)	0.008 (0.013)	0.002 (0.003)	0.008 (0.013)	0.008 (0.010)
Ln (Property, Plant, Equipment)	-0.000* (0.000)	-0.000* (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000* (0.000)
<i>Firm size</i>						
Ln (Assets)			-0.009 (0.072)	-0.002 (0.017)	-0.026 (0.084)	
Ln (Employees)			- 0.160** (0.077)	- 0.038** (0.018)	- 0.190** (0.077)	
Total Liabilities (\$1,000)			-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	
<i>Firm Performance</i>						
Return on Equity					0.002	

	(0.002)
Return on Assets	0.015
	(0.096)
<i>Other</i>	
Tobin's q.	-0.018
	(0.012)
Book lev.	0.235
	(0.145)
Financial lev.	0.594*
	(0.328)

Observations	9361	9361	8617	8617	8554	9361
Pseudo-R sq.	0.001		0.004		0.009	0.001
Chi sq.	3.566		15.771		47.950	3.566
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Note: Fixed-effects logit regressions. The sample includes all firm-year observations from 1994 to 2018. All regressions include firm fixed-effects and use bootstrapped standard errors. All covariates are lagged by one year. * ** *** indicate statistical significance at the one percent, five percent, and ten percent levels respectively.

Table 13: Determinants of States' Success in the Market for Corporate Headquarters

Dependent Variable: Net Number of Firms Relocating in a State in a Given Year						
	(1)	(2)	(3)	(4)	(5)	(6)
	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)
Court Quality Rank	0.036** (0.017)	0.035** (0.016)	0.038** (0.017)			
Corporate Income				0.018 (0.235)	-0.047 (0.204)	0.001 (0.222)
Tax Rate						
Other State-Level Variables						
Number of Firms in the State		-0.779* (0.404)	-0.679 (0.483)		-0.825* (0.418)	-0.731 (0.476)
Population		-0.001* (0.001)	-0.001* (0.001)		-0.001* (0.001)	-0.001 (0.001)
State GDP		0.000** (0.000)	0.000** (0.000)		0.000*** (0.000)	0.000*** (0.000)
Median Book Leverage						

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				3.266*		1.786	
Median Financial			(1.774)			(1.929)	
Leverage							
				-0.474		0.323	
Median ln			(0.839)			(0.919)	
(Assets)							
Median ROA				-0.236		-0.106	
				(0.286)		(0.254)	
Median Tobin's				0.449		0.943	
q.							
				(1.761)		(1.459)	
Effective Tax							
Rate							
				0.034		0.311	
Property, Plant,				(0.352)		(0.356)	
Equip.							
				0.037		0.046	
Observations				(0.044)		(0.046)	
R sq.							
Adjusted R sq.				-0.000*		-0.000	
State FE	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	

Note: Fixed effects model. Years 2002–2018. The dependent variable is the number of net relocations to the state in a given year, defined

as the number of firms moving their PPB into the state minus the number of firms moving their PPB out of the state. All regressions use robust standard errors and cluster at the region level. All covariates are lagged by one year. Financial variables are defined in Table A.1. * ** *** indicate statistical significance at the one percent, five percent, and ten percent levels respectively.

Table A.1: Financial Variables and Firm Age

Variable	Definition	Compustat Codes
Assets	Total Assets	at
Effective tax rate	Total income taxes/pretax income	txt/pi
Employees	Employees (in thousands)	ln(emp)
Financial leverage	Total debt over (sum of total debt and market value)	$(dlc+dltt)/((dlc+dltt+(prcc_f*csho))$
Market capitalization	Number of common stock times share price at the end of the fiscal year	$prcc_f * csho$
Return on assets (ROA)	Operating income before depreciation over assets	ebitda/at
Return on equity (ROE)	Operating income before depreciation over common equity	oibdp/ceq
Tobin's q	(Assets minus common equity plus market value) over assets	$(at-ceq+(prcc_f * csho))/at$

Total liabilities

Sum of debt in current dlc+dltt

liabilities and long-

term debt

Tangibility

(Property, plant, and ppent/at

equipment) over

assets