THE ECONOMIC EFFECTS OF FRANCHISE TERMINATION LAWS*

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I. INTRODUCTION

FOURTEEN states have laws that require good cause for the termination of franchise contracts. Similar laws are considered frequently by other states and by Congress.[1] Economists generally argue that these laws increase the costs of controlling quality within a franchise system and make franchising less desirable as an organizational form.[2] The laws typically

[1] See Mark Robichaut, Franchise Rules Are Back Off Drawing Board, Wall St. J., July 6, 1990, at B1. Note that, in this article, we focus on laws that apply to business-format franchises. For an analysis of state laws in automobile franchising, see Richard L. Smith II, Franchise Regulation: An Economic Analysis of State Restrictions on Automobile Distribution, 25 J. Law & Econ. 125 (1982).

[2] Richard A. Epstein, Unconscionability: A Critical Appraisal, 18 J. Law & Econ. 293, 314–15 (1975); and Paul H. Rubin, The Theory of the Firm and the Structure of the Franchise Contract, 21 J. Law & Econ. 223 (1978). Other work on the economics of franchising includes James A. Brickley & Frederick H. Dark, The Choice of Organizational Form: The Case of Franchising, 18 J. Fin. Econ. 401 (1987); James A. Brickley, Frederick H. Dark, & Michael S. Weisbach, An Agency Perspective on Franchising, 20 Fin. Mgmt. (1991, in

are also opposed by franchisors. For example, the International Franchise Association (the leading franchisor lobby) has argued that termination laws could "lead to the destruction of franchising."[3] In contrast, proponents of the laws argue that restrictions on terminations are not detrimental to franchising and are important in protecting franchisees from opportunistic behavior by franchisors.

We provide three alternative models of how termination laws can affect franchising. The first model analyzes how the laws might increase the costs of controlling quality within franchise systems. In equilibrium, the model predicts that the laws result in less franchising relative to company ownership. The model further predicts that, for our type of sample, which consists of industries with a relatively high proportion of franchised units, the strongest effects will be in those industries in which nonrepeat customers make the problem of free riding on the trademark a serious issue. The analysis also suggests that the laws transfer wealth from franchisors to a subset of franchisees. An alternative model is that the laws protect naive franchisees who do not fully realize the potential for quasi-rent appropriation by franchisors. This model also predicts that the laws will result in less franchising but differs from the former model because it does not appear to make predictions about how the quantity reductions relate to the number of nonrepeat customers. In a third model, the laws are predicted to increase the level of franchising by providing a cost-reducing, boilerplate contract and/or reducing the uncertainty franchisees face about future quasi-rent appropriation.

We provide institutional and statistical evidence on which of the alternative models best explains the effects of termination laws. First, we discuss court cases that indicate that the laws have real economic consequences. We then examine actual franchise contracts and the lobbying activity around the passage of the laws. This analysis also suggests that the laws are important and that, in addition to any efficiency effects, they potentially transfer wealth from franchisors to franchisees.

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press); Richard E. Caves & William F. Murphy II, Franchising: Firms, Markets, and Intangible Assets, 42 S. Econ. J. 572 (1976); Benjamin Klein & Lester F. Saft, The Law and Economics of Franchise Tying Contracts, 28 J. Law & Econ. 345 (1985); Alan Krueger, Ownership, Agency, and Wages: An Examination of Franchising in the Fast Food Industry, Q. J. Econ. (1991, in press); Francine Lafontaine, Agency Theory and Franchising: Some Empirical Results (unpublished manuscript, Carnegie Mellon Univ. 1990); G. Frank Mathewson & Ralph A. Winter, The Economics of Franchise Contracts, 28 J. Law & Econ. 503 (1985); and Seth W. Norton, An Empirical Look at Franchising as an Organizational Form, 61 J. Bus. 197 (1988).

[3] In Absence of Federal Rules, More States Begin Regulating the Franchising Industry, Wall St. J., October 11, 1971, at 20, col. 1.

In the first part of our empirical analysis, we use industry-level data from 1985 and firm-level data from 1984 to test cross sectionally whether the amount of franchising is different in the states which have termination laws (after controlling for other potentially relevant variables). In industries characterized by nonrepeat customers, we find that there is significantly less franchising in states with termination laws (between 2 and 5 percent less than in other states, depending on the specification). For the other industries in our sample, our results are mixed. Only with some nonparametric tests do we find differences across states. Statistical tests reject the hypothesis that the effect of the laws is the same across repeat and nonrepeat-customer industries. To provide additional evidence on whether the difference for the nonrepeat-customer industries is due to the termination laws, we would like to compare the 1984–85 results to a cross-section prior to 1971, the year the first state law was passed. Such a comparison would provide added control for other factors that might influence the decision to franchise in the two sets of states. Unfortunately, we are unable to obtain pre-1971 data. Using Department of Commerce industry-level from data from 1974, we find that, in contrast to 1985, the difference between the two groups of states is not significantly different from zero.[4] We interpret the evidence as support for the hypothesis that termination laws increase the costs of quality control.

In the second part of the empirical analysis, we provide evidence on the magnitude of the wealth effects of the laws by examining the stock returns of franchise companies around the adoption of the California law. The evidence suggests that the law generated relatively large wealth losses for the shareholders of California franchise companies. These wealth losses appear to come from at least two sources. First, franchisors are likely to bear part of the apparent increase in the costs of franchising due to regulation. Second, the nature of the politics around the passage of the laws suggests that the regulations transfer wealth from franchisors to some of the existing franchisees.

This study is organized as follows. Section II presents alternative models of the effects of the laws. Section III discusses the termination laws, their effects on court cases and contract design, and the political economy surrounding their adoption. Section IV contains the cross-sectional analysis, while Section V analyzes the stock-market response to the Califiornia law. The study concludes with a brief summary.

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[4] By 1974, nine states had already adopted a law. These data limitations preclude a more detailed time series analysis of how the adoption of the laws affected the growth trends in franchising. We provide some additional evidence using a smaller data set from the 1972 census that confirms the results from the 1974 Department of Commerce data.

II. THE ECONOMIC EFFECTS OF FRANCHISE-TERMINATION LAWS

A. Inefficiency Arguments

Individual franchisees have the incentive to free ride on the trademark and produce a below-standard-quality product. A given customer is less likely to frequent the franchise chain after receiving a low-quality product. However, this cost is shared with other units, which lose the customer's patronage, and the franchisor, who will have a less valuable trademark to franchise in the future. This incentive will be lower if franchisees who are caught cheating are punished by contract termination and thus lose any remaining quasi rents on firm-specific investments.[5]

Good cause provisions increase the costs of terminating units and thus potentially reduce the threat of termination (the laws require increased payments to the franchisee in the case of termination unless good cause can be documented in court, which is expensive). Hence, franchisees will have an increased incentive to free ride, and the costs of controlling quality are likely to increase. If the laws do increase the costs of franchising relative to company ownership, franchisors would shift marginal operations toward central ownership.[6] Since the incentives to shirk on quality are highest in units where the level of repeat customers is low, the marginal units are likely to be those that cater primarily to nonrepeat customers.

Basic Model.[7]   Potential efficiency and transfer effects of termination laws can be illustrated using a model patterned after Becker and Stigler.[8] The basic assumptions and definitions for the model are as follows:

1. A franchisee faces a discrete choice of whether or not to cheat in providing quality.
2. Term $F(\alpha)$ represents the gains an individual franchisee can realize from cheating. The parameter, α, is the particular unit's proportion of repeat customers and $F'(\alpha) < 0$: the gains from cheating decrease as the proportion of repeat customers increases.

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[5] See Epstein, *supra* note 2; Benjamin Klein & Keith B. Leffler, The Role of Market Forces in Assuring Contractual Performance, 89 J. Pol. Econ. 615 (1981); Klein & Saft, *supra* note 2; Mathewson & Winter, *supra* note 2; and Rubin, *supra* note 2.

[6] On average, franchise companies own about 20 percent of the units and franchise the remainder. (See Andrew Kostecka, Franchising in the Economy, 1985–1987, at 2 (1987).)

[7] We would like to thank Kevin J. Murphy for substantial and valuable help in the development of this model.

[8] Gary S. Becker & George J. Stigler, Law Enforcement, Malfeasance, and Compensation of Enforcers, 3 J. Legal Stud. 1 (1974).

3. The franchisee has insufficient wealth to post a sufficient bond to guarantee that he will not cheat.
4. Termination laws require franchisors to make a payment, S_T, to the franchisee in the case of termination. We assume there is no required severance fee when there is no termination law ($S_N = 0$).
5. The only asymmetric information concerns franchisee cheating. The franchisor can monitor the franchisee at zero cost with an exogenously given probability, ρ, of detecting cheating when it occurs. If cheating is detected, the franchisor terminates the franchisee and gives him a severance payment, S. Otherwise, the franchisee receives rents, $R(\alpha)$, from the franchisor plus, if the franchisee cheats, $F(\alpha)$. The probability of detection and all other parameters in the model are common knowledge.
6. Assume that the costs to the franchisor if a franchisee cheats are sufficiently large to make it optimal for the franchisor to offer an incentive-compatible contract that guarantees no franchisee cheating (in those units that are franchised). In the absence of bonding, the minimum rent $[R(\alpha)]$ that the franchisor must pay to the franchisee to assure no cheating is the expected value of the rents when cheating takes place, $(1 - \rho)[R(\alpha) + F(\alpha)] + \rho S$ (assuming risk neutrality).[9] This condition implies

$$R(\alpha) = \left[\frac{(1 - \rho)}{\rho} \right] F(\alpha) + S. \tag{1}$$

7. The profits to the franchisor are X if the unit is centrally owned and W if the unit is franchised (before the payment of rents to prevent cheating by the franchisee). Assume that X is independent of α and $W > X$.[10]

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[9] Our model is similar to Mathewson & Winter, *supra* note 2. In both models, franchisees receive rents to induce them not to cheat on quality. In either case, the positive rents to franchisees are expected to generate queues for new franchises. Mathewson and Winter indicate that McDonald's has an acceptance rate of 1.0 percent of applicants for franchises, while Burger King's rate is 1.5 percent (*id.* at 513 n.2). These queues do not necessarily imply the presence of rents for franchisees. However, the data are very suggestive.

[10] We assume $W > X$ because of the observation (Rubin, *supra* note 2) that franchising internalizes many of the agency costs unrelated to quality control. Note that we have purposely abstracted from certain elements of the franchise contract to keep the analysis tractable and to focus on termination laws and franchisee free riding. In particular, we have not delineated how the franchisee receives his compensation. Implicitly, we are assuming that portions of the franchisee contract (input prices, building rental, and so on) are adjusted so that franchisees receive rents $R(\alpha)$ greater than their best alternative income. Typically, franchisee compensation comes through profit sharing, which reduces the incentives to shirk.

Owning versus Franchising.   The franchisor will own the unit if $X >$ $W - R(\alpha)$ or, equivalently,

$$X > W - \left[\frac{(1 - \rho)}{\rho}\right] F(\alpha) - S \qquad (2)$$

and will franchise the unit if the inequality is reversed. Define $\alpha^*(S,\rho,X,W)$ such that the franchisor is indifferent between owning and franchising. Units with $\alpha < \alpha^*$ will be company owned, and units with $\alpha > \alpha^*$ will be franchised.

Let $G(\cdot)$ be the cumulative distribution function for α. Thus $G(\alpha^*) =$ prob($\alpha < \alpha^*$) is the proportion of company-owned units. Comparative statics indicate that the proportion of units franchised increases with the proportion of repeat customers, decreases with the required severance payment (S), and increases with the likelihood of detecting cheating (ρ).

Effects of Termination Laws.   Franchisors are strictly worse off as termination laws are passed that increase the required severance payment. Increases in S reduce franchisor profits dollar for dollar for each franchised unit up to the point at which it becomes optimal to own the unit centrally (see eq. [2]). The effects of the laws on existing franchisees are less obvious. Inframarginal franchisees (units that will not be converted) will favor the laws since they will receive increased rents, while marginal franchisees will be against the laws because they will lose rents when the unit is converted.[11] The change in total rents is equal to the gains to the inframarginal franchisees minus the losses to the marginal franchisees. More formally, total rents to franchisees, π, are

$$\pi = N \int_{\alpha^*}^{1} \left[\frac{(1 - \rho)}{\rho} F(\alpha) + S\right] g(\alpha)\, d\alpha, \qquad (3)$$

where N equals the total number of units within the organization (owned and franchised). The change in total rents given a change in S is thus

$$\frac{d\pi}{dS} = N\left[1 - G(\alpha^*)\right] - N(W - X)\frac{dG(\alpha^*)}{dS}. \qquad (4)$$

Existing franchisees benefit from the increase, reflected by the term

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[11] As discussed below, new termination laws often do not cover existing contracts. However, they do cover renewals. As long as existing franchisees are given priority in renewing contracts on expiration (if the unit is not converted to central ownership or discontinued), inframarginal franchisees would favor the laws assuming renewal prices adjust to pay franchisees increased rents. However, the incentives of the inframarginal franchisee to lobby for the laws will depend on whether the franchisee expects the franchisor to punish lobbying franchisees by not renewing their contracts.

$N[1 - G(\alpha^*)]$. Some marginal franchisees, however, will become company owned and will lose their rents, which, for a marginal franchisee (one with α^* repeat customers), are $W - X$; this loss is reflected in the second term. The sign of the total effect is ambiguous, so franchisee rents could either increase or decrease with a law. The franchisees who are making the largest rents (because they have the largest fraction of nonrepeat customers) will be the first ones converted, so they stand to lose the most from an increase in severance payments resulting from the termination laws.

In equilibrium, since franchise contracts are incentive compatible, there is no cheating or terminations.[12] Nonetheless, the laws result in less franchising and have potentially important efficiency (total surplus is reduced when units are converted) and wealth-transfer effects.

Termination Laws and the Level of Repeat Customers. Suppose there are two industries. The first is characterized by a relatively high proportion of repeat customers, while the second has a relatively low proportion of repeat customers. Which industry will experience the most pronounced effect given increases in the severance fee? Assume that both industries have the same W, X, and ρ, and that both industries have the same benefit function for cheating, $F(\alpha)$. In this case, α^* will be the same for both industries, and the low-repeat industry, l, will convert a larger proportion of its units than the high-repeat industry, h, if $[d(G_l(\alpha^*)/dS]$ > $[d(G_h(\alpha^*)/dS]$, or if

$$g_l(\alpha^*)\left[- \frac{\rho}{(1 - \rho)\, F'(\alpha^*)}\right] > g_h(\alpha^*)\left[- \frac{\rho}{(1 - \rho)\, F'(\alpha^*)}\right], \qquad (5)$$

where $g_i(\alpha)$ is the probability density function for α for industry i. Whether or not this condition holds depends solely on the height of the density function for each industry at α^*. Thus, the proportion of units converted is determined by the mass of units in the vicinity of α^*. The greater the number of marginal units, the greater will be the size of the effect.

In general, there is no reason to expect that (5) will hold; which industry will experience the greatest effect is ambiguous. Note, however, that we limit our empirical analysis to industries characterized by a relatively high level of franchising. In our sample, the average percentage of units

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[12] In actuality, terminations do occur. However, they represent a relatively small proportion of the franchise population. For example, Kostecka, *supra* note 6, at 13, estimates that franchisors terminated 2,651 units in 1985, which equals .87 percent of the estimated 301,689 units of business-format franchise companies existing then.

franchised ranges from 48 percent for convenience stores to 99 percent for accounting, credit, and collection agencies. Given the sample characteristics, assume that the optimal percentage of units franchised in both industries (l and h) is at least 50 percent (with or without the law). Assume, further, that each industry has a probability density function, $g_i{}^*(\alpha)$, that is symmetric, single peaked, and nonuniform (for example, a bell-shaped or triangular distribution) and that each distribution is identical except for the location of the mean ($\overline{\alpha}_l < \overline{\alpha}_h$). In this case $g_l(\alpha^*)$ is strictly greater than $g_h(\alpha^*)$, that is, α^* is located more in the center of the distribution for the low-repeat industry and more in the left tail of the distribution for the high-repeat industry.

Figure 1 illustrates this case. The figure portrays two density functions, $g(\alpha_i)$. The one on the right represents a high-repeat-customer industry. The distribution on the left illustrates a low-repeat-customer industry. Given our assumptions, the optimal cutoff point, α^*, for franchising is the same for both industries (for example, it might be optimal to franchise once repeat customers are over 30 percent in either industry). Let α_b^* represent the cutoff point before a termination law is passed. All units with repeat customers $\alpha > \alpha_b^*$ are franchised. All with $\alpha < \alpha_b^*$ are owned. Obviously the high-repeat industry franchises a higher proportion of its units. Let α_a^* represent the optimal cutoff point after the law is passed. The area under the density functions between α_b^* and α_a^* represents the proportion of units that are switched to company ownership. Given our distributional assumptions and the assumption that it is optimal for both firms to franchise at least 50 percent of the units, the area is always larger for the low-repeat industry (as illustrated in Figure 1).

In summary, across all industries there is no necessary relation between the level of repeat customers and the size of the response to the law. For our sample, however, the model suggests that the proportion of units converted to central ownership is likely to be greatest in industries characterized by nonrepeat customers. It is interesting that, while the greatest shift of units is expected in the nonrepeat-customer industries, the model predicts that franchisors in the repeat-customer industry will actually lose a higher dollar value of surplus. Increases in S reduce surplus by the amount of the change times the number of the franchised units minus any savings from conversion to central ownership. Since the repeat industry starts with more units and converts less, the dollar loss will be higher for the repeat industry. Which industry will experience the highest proportional loss in surplus (change in surplus divided by original surplus) is unclear since the repeat industry starts with a higher level of total surplus.
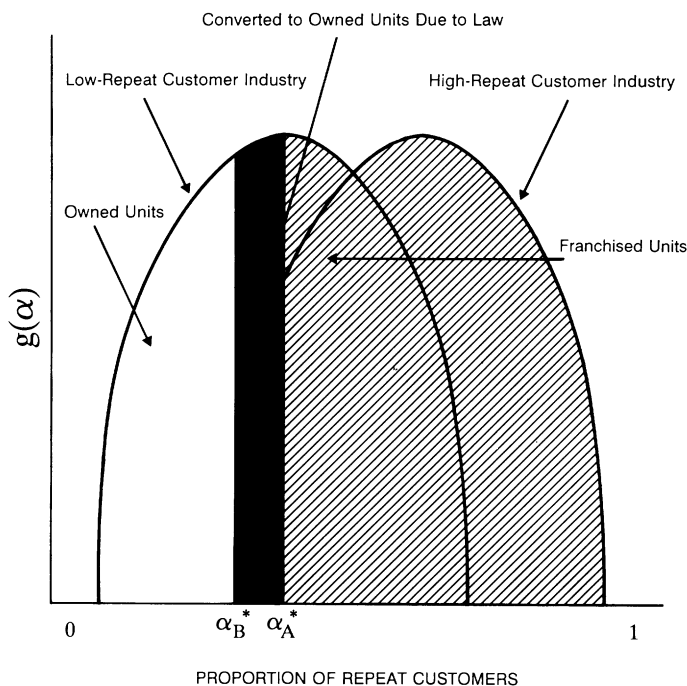
FIGURE 1.—Effect of termination laws on ownership structure in repeat- and nonrepeat-customers industries.

B. Efficiency Arguments

While our model emphasizes the potential adverse aspects of termination laws, in principle, the laws could actually reduce contracting costs and make franchising more desirable as an organizational form. The termination and nonrenewal rights of the franchisor are likely to be major points of interest in contract negotiations. The laws provide a standard contract provision for franchise terminations with the associated case history and legal system for helping to resolve related disputes ex post.[13] This standard contract provision substitutes for costly ex ante planning

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[13] See A. Mitchell Polinsky, An Introduction to Law and Economics (1983); and Richard A. Posner, Economic Analysis of Law (3d ed. 1986), for a discussion of the economics of contract law; and Paul Milgrom & John Roberts, Bargaining and Influence Costs and the Organization of Economic Activity (unpublished manuscript, Stanford Univ., Graduate School of Business 1987) for a discussion of how bargaining costs can affect organizational form.

that would specify the rights of each party under all contingencies. In addition, if franchisees are risk averse and the termination laws reduce uncertainty about potential quasi-rent appropriation by franchise companies, the demand curve for franchises would shift to the right.[14] These efficiency arguments predict that termination laws reduce the costs of franchising relative to company ownership and result in more franchising.

While it is theoretically possible that the laws reduce contracting costs, there are at least two reasons why it is unlikely. First, existing laws do not permit the parties to contract around the good-cause clause if it is not optimal. Therefore, the laws constrain contracting more than necessary if the goal is simply to provide a standard contract provision to reduce costs. Second, it is not clear what prevents the franchisor and franchisee in the absence of termination laws from adopting good-cause provisions on their own.[15]

C. Protectionist Arguments

Proponents of termination laws typically argue that the laws help to protect franchisees in dealing with larger and more sophisticated franchisors. Under this view, franchisors include liberal termination rights in contracts to increase the potential for future rent extraction (for example, if a unit is particularly profitable, the franchisor can take it over). The franchisees, in turn, are assumed to underestimate the amount of potential rent extraction. This underestimation results in the franchisees not fully adjusting their reservation prices to reflect the loss of expected rents as the franchisor moves from good cause to more liberal termination rights. Under these arguments, there is likely to be more franchising than would be socially desirable because some franchisees pay above their true reservation prices for the franchise.[16]

[14] The recent problems at Aamco, Benetton, and Burger King indicate that franchisors can, and sometimes do, appropriate quasi rents from franchisees (see Barbara Marsh, Aamco Franchisees Tilt Balance of Power, Wall St. J., Feb. 22, 1989, at B2, col. 4; Amy Dunkin, et al., Why Some Benetton Shopkeepers are Losing Their Shirts, Bus. Week, March 14, 1988, at 78; and Mark Maremont, et al., Trying to Get Burger King out of the Flames, Bus. Week, Jan. 30, 1989, at 29).

[15] One possible reason is that in states that do not require good-cause provisions for terminations, case law is insufficient to ensure that voluntary good-cause provisions would be interpreted the way they were intended.

[16] Note that with no transactions costs and franchisees correctly anticipating the amount of appropriation by franchisors, prices in a competitive market will adjust to reflect this appropriation, and the quantity of units franchised and the rent sharing between franchisors and franchisees will be independent of the type of termination clause. This adjustment does not occur in our model because of wealth constraints and transactions costs (p does not equal 1).

The protectionist arguments not only assume that franchisees are less well informed than franchisors (which could be true), but that a sizable number of franchisees systematically enter into deals at effective prices above their reservation prices. Given the widespread disclosure requirements of the termination and nonrenewal rates for individual franchise companies, such a scenario seems unlikely. Further, the argument that "individuals do not know what is best for them" can be used to justify any regulation.

Nonetheless, since protectionist arguments are the ones most commonly used to support the laws, our approach is to take them seriously and analyze their predictions. To model the naive-franchisee argument, assume that franchisees underestimate the amount of quasi-rent appropriation franchisors will engage in after the contract is written and the franchisees have made their firm-specific investment. Franchisors, conversely, know exactly how much appropriation they plan to do. These assumptions imply that firms use the correct supply curve but that the demand curve for franchises is to the right of where it would be if franchisees estimated the amount of quasi-rent appropriation correctly. If the passing of a termination law lowers the amount of quasi-rent appropriation, the supply curve will shift to the left since franchisors will demand a higher price for a given quantity of franchises.[17]

In equilibrium, the quantity of franchises will decline. Franchisors will receive less excess rents from franchisees and will correspondingly lower the sales of new franchises (their marginal costs net of excess rents will increase). There is a potential social gain with the reduction of franchising since some franchisees were paying effective prices above their true reservation prices. The predictions that emerge from these arguments are similar to those that emerge from the inefficiency (quality control) arguments. A major difference between these two, however, is that the inefficiency arguments predict for our sample that the quantity reductions will occur primarily in industries where the free-rider problem is high (those industries prone to serving nonrepeat customers), while the protectionist arguments do not appear to make a similar prediction.

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[17] This analysis makes the strong assumption that the franchisees are truly naive and assign no probability to quasi-rent appropriation by the franchisor, so that the passing of a termination law does not shift the demand curve. The price and quantity effects are the same if the passing of a law causes the demand curve to shift to the right, so long as the amount of the shift is smaller than the shift in the supply curve. (Since the model assumes that franchisees underestimate the quasi-rent appropriation by the franchisor, it seems only natural to assume that they will also underestimate the effects of laws designed to remedy this appropriation.)

D. Empirical Strategy

The intent of this study is to provide evidence on which of the possible effects is dominant. We begin by presenting institutional detail on the laws (for example, information on the lobbying efforts and related court cases). This information suggests that the laws are potentially important in affecting both franchise operations and the wealth of individuals. We then present empirical evidence on how the laws affect the level of franchising relative to company ownership. In an attempt to distinguish between the inefficiency and protectionist arguments, we test whether the observed effects vary across industries based on the potential for franchisee free riding. Finally, we examine the stock prices of franchise firms around the passage of the California law. This analysis provides evidence on the magnitude of the wealth effects of the laws.

III. STATE TERMINATION LAWS

Table 1 lists the fourteen states that restrict franchise terminations to cases of good cause. These "termination states" also usually restrict the ability of the franchisor not to renew existing contracts.[18] The other thirty-six states do not require good cause for termination of franchise contracts.[19] The termination states vary widely in geographic location (from Hawaii to the eastern seaboard). The population of the termination states is, on average, somewhat larger than for the nontermination states (1985 average population of 6.3 million and 4.2 million, respectively). However, the populations of the termination states vary widely, ranging from such small states as Delaware and Hawaii to large states, such as California and Illinois.[20]

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[18] Most of the laws also place requirements on the minimum notice for contract terminations.

[19] It is the good-cause requirement that generates the primary concern among critics. Mississippi and Missouri have minimum time periods for notice in cases of contract terminations but do not require cause. These states do not have specific franchise legislation (as do the fourteen states in Table 1). Rather, franchise companies are covered under special provisions of the states' pyramid scheme laws. The classification of these two as either states with or without franchise laws does not have a major effect on the conclusions of the empirical work reported below. See Miss. Code § 75-24-53 (1990 Supp.); Mo. Ann. Stat. § 407, 405 (Vernon 1990).

[20] Both a test of means and Wilcoxon rank-sum test fail to reject the hypothesis that the populations of the fourteen termination states and the other thirty-six states are drawn from the same distribution (the p-values are .19 and .15). An interesting question concerns why some states adopt termination laws and others do not. We consider this issue and found no obvious differences between the two sets of states along a number of political, geographic, and size dimensions.

TABLE 1

STATES WITH LAWS RESTRICTING FRANCHISE TERMINATIONS TO GOOD CAUSE,
YEAR OF ADOPTION, AND 1985 POPULATION

	Year of Adoption	1985 Population*
Delaware	1971	.622
New Jersey	1971	7.562
Connecticut	1972	3.174
Virginia	1972	5.706
Washington	1972	4.409
Minnesota	1973	4.193
Hawaii	1974	1.054
Michigan	1974	9.088
Wisconsin	1974	4.775
Indiana	1976	5.499
Arkansas	1977	2.359
Nebraska	1978	1.606
Illinois	1980	11.535
California	1980	26.365

* Population is given in millions. The average population for the termination states is 6.281 million compared to an average population of 4.171 million for the thirty-six nontermination states. A test of means does not reject the hypothesis that the two subsamples are drawn from the same distribution (p-value = .19).

A.   The Effect of the Laws on Court Decisions

An analysis of the case law supports our assumption that termination laws increase the costs of termination and nonrenewal. For example, in *Kealey Pharmacy and Home Care Service, Inc. v. Walgreen Co.* (761 F. 2d 345 (7th Cir. 1985)), Walgreen terminated all of its approximately 1,400 drug franchises for "economic reasons." The court ruled that this reason did not constitute "good cause" and awarded fourteen Wisconsin franchisees monetary damages. The units in states without termination laws were not entitled to similar damages. In a similar case, *Esch, dba Oak Creek Distributors v. Yazoo Manufacturing Co. Inc.* (510 F. Supp. 53 (ED WI 1981)), a dealer was terminated by a national company along with other units across various states for "economic conditions internal to the company," and a jury award of $450,000 was ruled appropriate.

In contrast, in cases involving terminations not covered by the laws, damages for wrongful termination typically are not awarded. In *Zapatha v. Dairy Mart Inc.* (381 Mass. 784, 408 N. E. 2d 1370 (1980)), a Massachusetts court (in a nontermination state) ruled that the termination without cause was not barred by the Uniform Commercial Code (or other considered laws) as unconscionable and denied the plaintiff relief. Presumably, based on the results of the other two cases, relief would have been

granted if the termination had occurred in a termination state. In *Martino v. McDonald's Corp.* (101 Wis. 2d 612, 304 N.W.2d 780 (1981)), McDonald's had not renewed a franchise. It had, however, correctly followed the terms of its contract that stated that it would give "first consideration" to the franchisee if the grantor found the franchisee to be in "good standing." According to McDonald's, Martino was not in good standing. While McDonald's followed the contract terms, it did not comply with the provisions of the Wisconsin termination laws that gives franchisees sixty days to correct alleged deficiencies. The court ruled that the contract was entered into prior to the law and allowed the nonrenewal to stand. While the results in any individual case may be unpredictable, these cases demonstrate that damages in cases of terminations covered by the laws are typically greater than damages in cases not so covered.[21]

B. Termination Laws and Contract Design

In collecting our sample of unit-level data (described below), we obtained descriptions of the termination/nonrenewal policies of seventy-six franchise organizations. These policies reveal that companies are aware that the state laws restrict their contracting possibilities. For example, multistate franchisors tend to include the following type of provision in their contracts: "If any applicable law or rule of any jurisdiction requires a greater prior notice of the termination of, or the election not to renew this agreement, or the taking of some other action with respect to such termination or the election not to renew, than is required hereunder, the prior notice or other action required by such law or rule shall be substituted for the notice or other requirements hereof."[22]

In comparing the contracts of the thirty-five companies headquartered in states with termination laws with the contracts of the forty-one firms from states without laws, the most obvious difference is that the nontermination states tend to have less restrictive notice provisions for nonrenewal. (Companies tend to be headquartered in states in which they have the largest number of units.) All seventy-six contracts do not allow franchise terminations without a breach of contract by the franchisee. All allow some period for correcting breaches, except for criminal acts, bankruptcy, and repeated contractual violations. Eleven of the contracts indi-

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[21] We cite mostly Wisconsin cases to emphasize that the differences in the decisions are not driven by cross-state differences in interpretation of the laws. However, there are similar cases in other states; see McDonald's Corp v. Markim, 209 Neb. 49, 306 N.W.2d 158 (1981) (a Nebraska case), for example.

[22] The quote is typical of that contained in many franchise documents. We do not reveal the identity of the particular franchisor because of promised confidentiality.

cated that a franchisee had "no right" to renew the contract at the end of the term unless overridden by state law.

C. Lobbying Activity

The termination laws were adopted between 1971 and 1980, with most being passed in the early 1970s (nine states adopted the law before 1975). Popular press articles provide insights into the political forces associated with the adoption of the laws. These articles suggest that the laws were motivated in part by political pressure from former franchisees (and the related media coverage), who were either involved in failed franchise operations or terminated by the central franchisor.[23] The laws also were supported by some existing franchisees. Active lobbying for the bills was conducted by service-station-dealer associations, as well as by the National Franchisee Association Coalition, representing a variety of industries, particularly in the food sector.[24]

The support of existing franchisees could occur for at least three different reasons. First, if a law affects an existing contract, the franchisee could benefit because the law serves to add a provision to the franchise contract that is favorable to the franchisee at no cost to him (for example, if the laws reduce expected quasi-rent appropriation by franchisors). Six of the laws explicitly exclude contracts signed before the laws were passed,[25] while only one law (Delaware) explicitly includes all existing contracts. The other seven laws were vague on this issue. In most cases, the courts have ruled that existing contracts are not affected.[26] Nonetheless, given that the issue has been taken to court several times, there

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[23] Franchising grew tremendously over the last two decades and the associated number of failures and complaints appear to have generated concern among regulators and legislators at both the state and federal level. For example, William H. Clarke, an assistant attorney general for the state of Washington in 1971, stated, "There has been such a dramatic increase in our state in the problems of franchising that we couldn't wait for any kind of federal regulations" (Wall St. J., *supra* note 3).

[24] See International Franchise Association, Ninth Annual Legal and Government Affairs Symposium—Official Transcript 10 (1976). A popular argument in support of the law is that there is a disparity in size between the franchisee and franchisor that gives the franchisor an unfair bargaining position. It is pointed out that the franchisor has boilerplate contracts and that specific terms are not negotiated.

[25] The Wisconsin law explicitly excluded existing franchise contracts from the restrictions it imposed on future contracts, but was amended in 1977 to leave this provision vague (Wis. Stat. Ann. § 135 (West 1988)).

[26] See Mason v. Farmers Insurance Companies, 281 N.W.2d 344 (Minn. 1979), McDonald's Corp. v. Markim, *supra* note 21; Martino v. McDonald's Corp, 101 Wis. 2d 612, 304 N.W.2d 780 (1981), Muha v. United Oil, 180 Conn. 720, 430 A.2d 1009 (1979); and Wipperfurth v. U-Haul, 101 Wis. 2d 586, 304 N.W.2d 767 (1981).

must have been at least some expectation that existing contracts were covered. In fact, in *Reinders Brother's Inc. v. Rain Bird Eastern Sales Corp.* ((2) F.2d 44 (7th Cir. 1980)), an existing contract qualified because the franchisor had sent a new agreement each year that "superseded previous agreements. Even though the new agreements were not signed by either party, they were ruled as new contracts and subject to the Wisconsin law. A second possible reason for franchisee support is that existing franchisees could gain if the laws reduce the quantity of new franchising and increase the value of existing franchise contracts. Under this argument, the laws act as a cost inflator for the selling of new franchises that are potential competitors of existing franchisees (in both the product and franchise resale markets). In this case, existing franchisees could gain even if their contracts were not covered. Finally, our model suggests that the laws increase the quantity of rents required to prevent cheating on quality. Franchisees who expect to have their contracts renewed and hence be covered in the future have an incentive to support the laws.

The termination laws were opposed by major franchisors. The International Franchise Association (IFA), the primary lobbying group for franchisors, expended considerable resources opposing them (and similar laws proposed by other states and the federal government). A major argument used by the IFA is that documenting good cause for the marginal franchisee "would be difficult at best," hence the laws are equivalent to granting franchisees "perpetual contracts." The IFA argues that perpetual franchises make it difficult, if not impossible, to control quality within the franchise system.[27] The *Wall Street Journal* reported testimony that at least five franchise companies indicated that they would not locate in states with termination laws.[28]

Recently, termination laws have been considered by other states. For example, during 1986, lawmakers in Missouri, New York, Massachusetts, Alaska, and Tennessee introduced bills that would restrict franchise terminations to cases of good cause. The IFA lobbied intensely against these bills and none were enacted.[29]

The strong opposition from the franchisors accompanied by support from franchisees is anecdotal evidence that, in addition to any potential efficiency effects (from altering contracting costs), the laws also transfer

[27] See International Franchise Association, Seventh Annual Legal and Government Affairs Symposium—Official Transcript 78 (1974).

[28] Wall St. J., *supra* note 3.

[29] See Nation's Restaurant News, June 2, 1986, at 25. Neil A. Simon, legal council for the IFA, characterized the proposed bills as "by far the most damaging now in the hopper."

wealth. The nature of the political conflict suggests that the laws transfer wealth from franchisors to franchisees.[30]

IV. CROSS-SECTIONAL TESTS

A. Industry-Level Data

To examine empirically the effects of the termination laws, we first use industry-level data on the fraction of units franchised in each industry in each state. The industry data are supplied by the Department of Commerce in their annual publication *Franchising in the Economy*.[31] These data contain the total number of units, broken down into franchised and company owned, for fifteen industries. They cover all firms that do any franchising at all, although they do not cover firms that are in the same industry as franchise firms but do not franchise themselves. For most industries, the data are available annually starting in 1974. Table 2 summarizes the data for the year 1985. By far the largest industry is restaurants, with each state having an average of 1,555 units. The smallest is accounting, credit, and collection agencies, with an average of forty-two units. There is considerable variation by industry in the fraction franchised, from convenience stores, with about half the units franchised, to a number of industries where the median firm is entirely franchised.[32]

We estimate the effect of a termination law on the proportion of total units that are franchised (versus owned) by franchise chains within the

[30] The laws also might transfer wealth from good-performing franchisees to bad-performing franchisees if the laws reduce the likelihood of terminating low-quality units (Epstein, *supra* note 2). For example, the desire of franchisees to have poorly performing franchisees terminated has played a major role in the recent highly publicized dispute between Burger King and its franchisees. Maremont, *et al., supra* note 14, at 29, recently quoted Joseph Mirabile, the owner of fourteen Burger King restaurants, as saying "Grand Met (the new owner of Burger King) should buy out franchisees who run shoddy operations. . . . That's something Pillsbury (the previous owner) would never do."

[31] Kostecka, *supra* note 6.

[32] These data are not ideal for our purposes. In particular, the theory suggests that termination laws will cause franchisors to change the franchise/company-owned decision at the margin for new operations and renewals but not necessarily for existing ones. Therefore, we would like to test for the effect of the laws using data on new operations, rather than on the total number of operations. However, these types of data are not available, so we must resort to using the total number of operations as a proxy for the number of new operations. So long as the fraction franchised at the time the law was passed is not correlated with the error term of the "true" model, our estimates will be unbiased but less precise, so the power of our tests will go down.

We would also like to compare prices for franchises between the two sets of states, as well as the incidence of actual terminations. We cannot conduct these comparisons because of a lack of data.

TABLE 2

STATE MEAN AND MEDIAN TOTAL NUMBER OF UNITS AND FRACTION FRANCHISED BY INDUSTRY

Industry	Mean Number of Units	Mean Fraction Franchised
Accounting, credit and collection agencies	42	.99
	(28)	(1.00)
Construction, home improvement, maintenance, and cleaning services	347	.97
	(268)	(.98)
Convenience stores	301	.48
	(157)	(.52)
Educational products and services	162	.92
	(112)	(1.00)
Employment services	96	.74
	(65)	(.73)
Hotels, motels, and campgrounds	149	.87
	(111)	(.87)
Laundry and drycleaning services	47	.95
	(24)	(1.00)
Printing and copying	90	.96
	(44)	(1.00)
Real estate	278	.98
	(181)	(1.00)
Recreational, entertainment, and travel	157	.94
	(101)	(.96)
Rental services (auto-truck)	223	.82
	(133)	(.84)
Rental services (equipment)	51	.91
	(39)	(.95)
Restaurants	1555	.72
	(1292)	(.71)
Retailing (food other than convenience stores)	904	.77
	(695)	(.77)
Retailing (nonfood)	373	.86
	(225)	(.88)
All industries (average)	318	.86
	(113)	(.92)

SOURCE.—Department of Commerce data set for 1985.

NOTE.—Data are scaled by the reciprocal of the fraction reporting in a given industry. Data only include companies that do at least some franchising. The median fractions franchised are in parentheses.

state. We use the following empirical specification:[33]

$$\text{fraction franchised} = \alpha + \beta \text{ dummy if there is termination law} \tag{6}$$
$$+ \gamma \text{ log of state population} + \delta \text{ industry dummies} + \epsilon.$$

The fraction franchised consists of the proportion of units franchised (by companies involved in at least some franchising) for a given industry in a given state. We control for the state's population in our equations because the laws occur in states that are on average slightly larger (Table 1), and population tends to be associated positively with company ownership.[34] We include the industry dummies because it is likely that the costs and benefits of franchising vary systematically by industry. Given this specification, the relation between the termination law and the percentage franchised is measured by the variable β, the coefficient on a dummy variable that takes the value of one for the fourteen termination-law states.

The laws were all passed between 1971 and 1980. We, therefore, would like to estimate the equation for both a pre-1971 subperiod and a post-1980 subperiod and then use the difference in β to measure the effect of the laws. This technique would help to control for any systematic differences in the level of franchising between the two sets of states that are not due to the termination laws, industrial concentration, or population. Unfortunately, the Department of Commerce data for years prior to 1974

[33] Since our dependent variable is bounded by zero and one, we would also like to estimate our equations using the log odds of the fraction franchised as the dependent variable. Given that some of our observations are 100 percent franchised, this estimation is not possible. However, in the nonrepeat industries, all observations are less than 100 percent franchised. For these industries, the results using the log-odds specification are qualitatively identical to those reported below. We report the equations using the fraction franchised as the dependent variable because the coefficients from these equations are more easily interpretable than those from the log-odds equations.

[34] Brickley & Dark, *supra* note 2, document a positive correlation between company ownership and population. They argue that company ownership is most likely to occur when the cost of monitoring is low and that population serves as a proxy for low monitoring costs. Large population centers often have many units of the same franchise company, leading to economies of scale in monitoring. Anecdotal support for this argument is contained in the following quote from the 1973 10-K report for McDonald's Corporation. "The 860 restaurants owned by the company on December 31, 1973 are generally concentrated geographically because of economies and managerial efficiencies made possible by their proximity to each other." Given this argument, we also estimate the model replacing state population with variables which are potentially better measures of unit concentration. In particular, we use total units in the state, total units divided by the area of the state, and population divided by the area of the state. Our results are insensitive to the choice of this variable.

TABLE 3

INDUSTRY REGRESSIONS PREDICTING THE FRACTION OF UNITS FRANCHISED (Industry Data on the Number of Units Franchised and the Total Number of Units by State)

	ALL INDUSTRIES		NONREPEAT-CUSTOMER INDUSTRIES[a]	
	1974	1985	1974	1985
Constant	1.066*	1.073*	1.064*	1.050*
	(.0499)	(.0421)	(.0951)	(.0864)
Dummy if there is termination law[b]	.0058	−.0071	−.0229	−.0484*
	(.0143)	(.0114)	(.0289)	(.0244)
Log of state population	−.0248*	−.0260*	−.0288*	−.0208*
	(.0061)	(.0052)	(.0117)	(.0105)
Industry dummies included?	Yes	Yes	Yes	Yes
Number of observations[c]	690	745	150	150
R^2	.395	.536	.111	.307

NOTE.—The data are pooled across industries so that one observation is a given industry in a given state. The total number of observations in each regression is therefore the number of industries in each regression times the number of states with sufficient data. Heteroscedastic-consistent standard errors are in parentheses.

   [a] The nonrepeat-customer industries are restaurants, hotels, motels and campgrounds, and auto-rental agencies. Based on existing evidence, these industries are judged least likely to be able to control free-rider problems by establishing a store-specific reputation through repeat customers.

   [b] This dummy variable takes the value one if a termination law is enacted in the state by the year 1985.

   [c] Some states do not have any operations in certain industries. Also, data for the real estate industry is available for 1985 but not 1974.

   * Coefficient is significantly different from zero at the 5 percent level.

are unavailable. We therefore estimate the equation for both 1974 and 1985.[35]

The results using all industries are shown in the first column of Table 3 for 1974 and in the second column for 1985.[36] The coefficients on the termination-law variable are small and insignificantly different from zero. These results suggest that the termination laws do not affect the decision to franchise or own units. As a check on the sensitivity of our results, we also employ the Wilcoxon rank-sum test. This nonparametric test is less sensitive to outliers and requires less restrictive assumptions than

[35] We emphasize that, for our 1974 estimates, we classify states based on whether they had a law in 1985. The intent is to examine differences between the fourteen termination-law states and the other thirty-six states before any laws were passed. Finding no significant differences in 1974 would increase our confidence that any observed differences in 1985 are due to the laws. The fact that nine of the states had laws in 1974 works against us since it increases the likelihood that we will find differences in 1974, even if the laws are the cause.

[36] We calculate heteroscedastically consistent standard errors for this analysis. See Halbert White, A Heteroskedasticity-consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity, 48 Econometrica 817 (1980).

the parametric tests. For 1985, the Wilcoxon test does reject the hypothesis at the 1 percent level. The median percent franchised is 93.1 percent for the states without the laws and 89.1 percent for the states with the laws. (The corresponding means are 86.6 percent and 84.6 percent.) In contrast, for 1974, there are no significant differences between the states with and without the laws. (The median fraction franchised is 91.7 percent for states without the laws and 90.4 percent for states with laws—the corresponding means are 85.4 and 84.7.) Although the Wilcoxon test has the disadvantage of not controlling for other factors (industry effects, population), it indicates that there are significant differences across the two sets of states in 1985 but not in 1974.

Tests based on our entire sample of industries are unlikely to differentiate between the competing views of franchise-termination laws. The main prediction that distinguishes the inefficiency arguments from the protectionist arguments is that the inefficiency arguments predict that the drop in franchising will be greatest in the industries prone to nonrepeat customers while the protectionist arguments make no prediction regarding the repeat/nonrepeat distinction.

We, therefore, examine separately a subsample of industries in which units are prone to serving transient business. Since no data on the number of repeat customers per establishment are available and we wish to use an exogenous measure to classify our industries, we rely on the classification of Caves and Murphy.[37] They consider the following industries particularly subject to nonrepeat customers: (1) restaurants, (2) hotels, motels, and campgrounds, and (3) auto-rental agencies.[38] In support of this contention, Brickley and Dark[39] find significant differences between these three and other industries that seem to cater more to repeat business, such as lawn-care companies. The differences they find are consistent with the hypothesis that the incentives to free ride are the greatest in the three-industry group. In particular, for a sample of 143 franchise companies, they find that the percentage of units franchised is, on average, higher in the repeat-customer industries. They also find that companies in repeat industries on average expand further away from the nearest monitoring headquarters than companies in the nonrepeat industries.

In the third and fourth columns of Table 3 we reestimate equation (1) using data from the nonrepeat industries for the years 1974 and 1985.

[37] Caves & Murphy, *supra* note 2.

[38] If this scheme classifies industries into the wrong categories, the power of our tests will be low and the likelihood of rejecting the null hypothesis of no differences between the industries when it is false will decrease.

[39] Brickley & Dark, *supra* note 2, at 416.

The estimated equation for 1985 indicates that the termination laws are associated with a reduction of 4.84 percent in the fraction of units franchised. The coefficient on the existence of a termination law is significantly different from zero at the 5 percent level.[40] The 1974 estimates indicate that the laws at that time were associated with a reduction of 2.29 percent. This coefficient, however, is not significantly different from zero. Wilcoxon tests also indicate that states with laws had significantly less franchising than other states in 1985 but not in 1974. (The p-values are .02 and .24 for the two respective tests.)

One interpretation of these results is that the laws raised the costs of franchising in industries in which individual units tend to serve nonrepeat customers (so that franchisors substituted away from franchising toward company ownership). In 1974, nine of the laws had already been passed, so it seems plausible that some substitution away from franchising had already taken place.[41] By 1985, all of the laws had been in effect for at least four years.[42] The empirical results suggest that states with termination laws have 4.84 percent less franchising than other states. However, since we do not have data prior to 1971 and the difference between the two coefficients for 1974 and 1985 is not significantly different from zero, an alternative interpretation is that the laws were passed in states that had proportionately less franchising.

To attempt to distinguish between these two interpretations, we use data provided by the U.S. Census.[43] The census data are available for 1972, which, although not before the passage of all the laws, are still two years earlier than the earliest Department of Commerce data. The census data are for two industries: (1) restaurants, lunchrooms, and cafeterias, and (2) refreshment places. In the restaurants, lunchrooms, and cafeterias

[40] To test formally whether the effect of the law is different across repeat and nonrepeat industries, we estimate a regression using all industries in 1985 and a dummy variable for the law if the company was in a nonrepeat industry. The coefficient on this variable is − .0487 and significantly different from zero at the 5 percent level, indicating that the effect of the law in the nonrepeat industries is significantly greater than it is in the repeat industries. The coefficient for the repeat industries, is .0027, which is not significantly different from zero. However, a Wilcoxon test does reject the hypothesis at the 5 percent level that the distribution of units franchised is different between the states with termination laws and the states without them for the repeat-customer industries. (The median percent franchised for the states with the laws is 95.8 percent, versus 93.2 percent for states without them.)

[41] Laws are generally introduced or debated at least a year before adoption. Thus the time between adoption and 1974 was sufficient to have some change in the ownership structure of units (especially new ones being formed).

[42] California, the last state to adopt the law (1980), had the bill introduced to the legislature on January 17, 1979, for the 1979–80 legislative session.

[43] U.S. Bureau of the Census, Census of Retail Trade Industries, 1972 (1976).

industry, 5.4 percent are franchised, on average, while in the refreshment places industry, 29.1 percent are franchised, on average.[44] When we estimate equation (1) on these data, the coefficient on the law is positive, indicating that the states that were to adopt the law had about half a percent more franchising than other states. While we do not want to interpret this result too literally (the *t*-statistic on the law variable is only .19), this evidence suggests that the endogeneity of the law is not a major factor in explaining our results.

Some additional insights are provided by examining the circumstances around the initial passing of the laws. As discussed above, they were supported by franchisees and were opposed by franchisors. These political positions suggest that, if anything, the laws would tend to be passed in states with more franchising.[45] Thus, while we cannot rule out the possibility that our results were generated by states with less franchising passing the termination laws, it seems likely that the bias goes in the other direction.

B. Unit-Level Data

To provide additional insights into the effects of termination laws, we analyze a sample of franchise companies that provide us with detailed information on their ownership characteristics for 1984. To obtain this sample, we mailed requests for the firm's franchise-disclosure documents to the 611 franchise companies listed in the Norback and Norback[46] and Siegel[47] directories. We received 112 responses. If the documents indicated the central company owned some units, we requested information on the ownership structure of each unit. Through this process, thirty-six franchise companies with 10,524 units provided us with detailed information on their ownership characteristics. We eliminated 295 units from the sample because they were located in the District of Columbia, leaving us with a sample of 10,229 units.

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[44] These numbers are lower than the corresponding ones from the Department of Commerce data because they include all operations, not just those belonging to a chain that does some franchising.

[45] The importance of franchisees in passing the termination laws is highlighted in the following quote from an IFA spokesman indicating why additional proposals for termination laws were likely to be forthcoming at the federal level: "And if there is one thing which Congressmen and Senators know, it is how to count, and they know there are more franchisees than there are franchisors" (International Franchise Association, *supra* note 6, at 10).

[46] Peter G. Norback & Craig T. Norback, The Dow Jones-Irwin Guide to Franchises (1982).

[47] William L. Siegel, Franchising (1983).

TABLE 4

INDUSTRIAL BREAKDOWN OF 36 FRANCHISE COMPANIES PROVIDING INFORMATION ON
OWNERSHIP STRUCTURE FOR 1984*

	Number of Companies	Number of Units	Percent Franchised
Auto services†	4	568	94
Business services	3	712	97
Clothing, department, shoe, and sports stores	4	524	76
Entertainment, recreation	1	37	89
Fast-food and other restaurants	10	4,055	85
Food, ice cream, and pet-specialty stores	4	1,118	75
Home care and personal care services	5	690	71
Travel services‡	5	2,525	70
Total	36	10,229	80

* Categories are aggregated to provide the promised confidentiality to the respondents.
† This category includes only auto services such as muffler repair and lubrication services. It does not include automobile sales.
‡ Includes hotels, motels, and auto-rental agencies.

These data are described in Table 4. The categories are aggregated to provide the promised confidentiality to the respondents. The largest industry is restaurants, with ten firms and 4,055 units. One industry— entertainment, recreation—contains only one firm.

Using these data, we estimate the following equation to predict whether a particular unit is franchised:

$$\text{dummy if franchised} = \alpha + \beta \text{ dummy if there is termination law}$$
$$+ \gamma \text{ log of country population} + \delta \text{ company dummies} + \epsilon. \tag{7}$$

This equation is analogous to the equation we estimated using the industry-level data. Since we have data on the county in which the unit is located, we use the county's population rather than the state's population. Also, since we have company data, we include company dummies instead of industry dummies.

Our independent variable in equation (7) is dichotomous, so we report logit estimates as well as those from a linear probability model.[48] We also report estimates from both the entire sample and only the nonrepeat-customer industries for the reasons discussed above. The results are shown in Table 5.

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[48] For a discussion of logit, see Takeshi Amemiya, Advanced Econometrics (1985). We report the linear probability models in addition to the logit because the coefficients are more easily interpreted.

TABLE 5

UNIT-LEVEL EQUATIONS PREDICTING WHETHER A UNIT IS FRANCHISED

	ALL INDUSTRIES		NONREPEAT-CUSTOMER INDUSTRIES[a]	
	OLS	Logit	OLS	Logit
Constant	1.022*	3.919*	1.056*	3.963*
	(.018)	(.166)	(.018)	(.182)
Dummy if there is termination law	− .0098	− .045	− .0246*	− .1618*
	(.0070)	(.067)	(.0091)	(.0802)
Log of county population	− .0492*	− .480*	− .0503*	− .4617*
	(.0014)	(.023)	(.0027)	(.0273)
Company dummies included?	Yes	Yes	Yes	Yes
R^2	.313	. . .	.273	. . .
Log likelihood	. . .	− 3,362.5	. . .	− 2,307.6

SOURCE.—Unit-level data from a cross-section of franchise companies from 1984.
NOTE.—Standard errors are in parentheses. The standard errors for the OLS regressions are hetero-scedastistically consistent and for the logits are asymptotic.
[a] Nonrepeat industries are restaurants, hotels, motels and campgrounds, and auto-rental agencies. Based on existing evidence, these industries are judged least likely to be able to control free-rider problems by establishing a store-specific reputation through repeat customers.
* Coefficient is significantly different from zero at the 5 percent level.

The results are consistent with the industry-level regressions. Using the entire sample, the relation between the existence of a termination law and the probability of the unit being franchised is insignificantly different from zero. For the nonrepeat-customer industries, however, the chances a unit will be franchised are significantly less in the states with the termination laws (using both the linear probability model and the logit). The linear probability model predicts that in these industries a law lowers the probability that a unit will be franchised by 2.46 percent. The coefficient estimates from the logit equation translate to a similar effect. For a typical company in a county with an average log population, the existence of a termination law lowers the probability a unit will be franchised from 80.31 percent to 77.63 percent, a drop of 2.48 percent.[49]

These results suggest that the industry-level results are robust. Using either data set, the regression analysis indicates that the termination laws are associated with a lower probability that a unit will be franchised in nonrepeat industries but not in repeat industries. These findings are

[49] Given the apparent increased cost of franchising, it is possible that the laws not only reduce franchising relative to company ownership but also reduce the total number of units (that is, in some cases it may pay not to operate at all rather than to substitute toward company ownership). We investigate this possibility through empirical techniques similar to those used in this section. We find no evidence that the total number of operations varies across the two sets of states.

consistent with the view that termination laws increase the costs of fran-
chising and promote economic inefficiency by preventing some franchi-
sors and franchisees from reaching an optimal contract. In the resulting
equilibrium, some companies substitute away from franchising toward
company ownership.

V.   CAPITAL MARKET REACTION TO THE CALIFORNIA TERMINATION LAW

The results in the previous section suggest that termination laws affect
the decision to own versus franchise. However, since optimizing deci-
sions can be altered with small changes in the marginal costs or benefits
(if the optimizer is close to the margin), this cross-sectional analysis pro-
vides only limited insight into how the laws affect the wealth of either
franchisors or franchisees. To provide direct evidence on the magnitude
of these wealth effects, we examine franchise-company stock returns
around the adoption and passage of the California law. We limit ourselves
to franchisors because price data for franchisees are not publicly
available.

We focus on California for three reasons. First, there are enough pub-
licly traded franchise companies doing business in California to conduct
a meaningful event study. Second, because of the importance of Califor-
nia in influencing legislation in other states, the California law is a priori
one of the most likely to have a significant influence.[50] Finally, by the
time the California law was passed, there had been several years of expe-
rience with termination laws, so the market was better able to gauge the
effects of a potential new law accurately.

The cross-sectional tests reported in the previous section suggest that
the laws increase the costs of franchising. If this conclusion were true,

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[50] California was the first state to adopt a law regulating information disclosure for fran-
chise companies. This type of regulation has since been adopted by many states and by
the Federal Trade Commission. In the context of termination laws, a spokesman for the
International Franchise Association indicated, "We have in California a situation that is of
great importance to us all . . . California is looked upon by other state legislatures as a
leader. Other states pattern their legislative programs in many instances after what Califor-
nia does"(International Franchise Association, Tenth Annual Legal and Government Af-
fairs Symposium—Official Transcript 11 (1977)). Caffey notes, "New California law is
second only to federal legislation in national impact and is almost always imitated in some
states" (Andrew A. Caffey, Franchise Termination and Nonrenewal Legislation, 49 ABA
Antitrust J. 1343, 1350 (1981)).

Illinois is another state that adopted a termination law and has enough publicly traded
franchise firms to conduct a meaningful event study. We attempted to determine the key
dates surrounding the adoption of the Illinois law but could not. Also, unlike California,
the Illinois law was part of a larger bill (the Budget Reconciliation Act of the eighty-first
General Assembly) combining more than fifty different actions, which makes it difficult to
isolate the effects of the termination provisions.

the stock prices of franchise companies would be expected to decline around the introduction and passage of the laws (if they were not totally anticipated). In addition, the nature of the political conflict suggests wealth transfers from franchisors to franchisees are likely to result in further declines of franchise-company stock prices. Finally, the passage of the law also could signal an increased likelihood of additional legislation affecting franchise companies. Our measure of the wealth effects of the law includes the sum of these three components.

To collect a sample of publicly traded firms franchising in California during 1980, we examined the 1981 *Moody's Industrial Manual* and the 1981 *Moody's OTC Manual*. From these sources, we obtained thirty-three firms. We eliminated one firm (Docktor Pet Centers Inc.) because it did not have stock price data available on either the Center for Research in Security Prices (CRSP) or the CRSP National Association of Security Dealers Automated Quotation (NASDAQ) daily returns tapes, leaving us with a sample of thirty-two firms.

Table 6 contains a list of eight days on which key events occurred in the passage of the California act (starting January 17, 1979, when the bill was first introduced and ending October 1, 1980, when the governor did not either sign or veto the bill within the one-month time limit, and the bill became law).[51] The table also includes average abnormal returns around each event date for the sample of publicly traded franchise companies operating in California over the relevant time period.

The abnormal returns for each firm are calculated based on the following market model estimate over trading days -315 to -61 relative to the date in question:

$$R_{it} = \alpha_i + \beta_i M_t + \epsilon_{it}, \tag{8}$$

where R_{it} is the firm i's return on day t, M_t is the return on the equally weighted market index on day t, and ϵ_{it} is a white noise error term. The t-statistics are computed using estimated standard errors that are based on the assumption of cross-sectional dependence.[52] Since it is difficult to know when the market first receives the information related to any of the events occurring around the legislation, we report results for two intervals around each event day (day 0), day -1 to day $+1$, and day -5 to day $+1$.

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[51] The key dates are obtained prior to examining any stock-price data by a reading of the legislative history of the bill provided by state officials. Ex post, the stock returns suggest that some of the events affect the wealth of shareholders more than others.

[52] We do not discuss these empirical techniques in detail because of their general familiarity. A detailed discussion of our methods is in Stephen J. Brown & Jerold B. Warner, Using Daily Stock Returns: The Case of Event Studies, 14 J. Fin. Econ. 3 (1985).

TABLE 6

SCHEDULE OF EVENTS AND ABNORMAL RETURNS PRECEDING THE ENACTMENT OF
CALIFORNIA'S TERMINATION LAW

DATE OF EVENT	DESCRIPTION OF EVENT	PERCENTAGE ABNORMAL Days −1 to +1	AVERAGE RETURNS Days −5 to +1
January 17, 1979	Bill introduced into legislative session	−.41 (−.47)	−.54 (−.40)
March 26, 1979	Bill clears first House committee (10 to 0)	−2.29* (−2.49)	−3.50* (−2.50)
April 5, 1979	Bill passes House (75 to 0) and sent to Senate	−.94 (−1.02)	.50 (.36)
April 17, 1980	Bill amended and referred to Senate committee	.76 (.85)	1.15 (.84)
June 18, 1980	Bill passes Senate committee (5 to 1)	−1.07 (−1.19)	−.87 (−.64)
June 27, 1980	Bill passes Senate (23 to 1)	−.12 (−.14)	−.52 (−.38)
August 30, 1980	Both houses adopt same version of bill (27 to 5) and (67 to 1)	−.64 (−.69)	.48 (.34)
October 1, 1980	Bill became law (without governor's signature)	−1.95* (−2.12)	−3.80* (−2.70)
	Average effect per event	−.82* (−2.39)	−.75 (−1.43)

NOTE.—See Section III for a discussion of the law. Abnormal returns are computed using a market model (with an equally weighted market portfolio) estimated over trading days −315 to −61 relative to the relevant date in question (day 0). t-Statistics are in parentheses; $N = 32$ franchise companies that operated in California in 1980. Standard errors are estimated assuming cross-sectional dependence, as in Brown and Warner (1985).
* Abnormal return is significantly different from zero at the 5 percent level.

The results suggest that the passage of the law is associated with relatively large negative stock returns for the franchise companies. The average abnormal return per company over the day −1 to day +1 event period is −0.8 percent per event day (so for the average company the total abnormal return is −6.4 percent or $2 million for the median firm in our sample).[53] This return is significantly different from zero at the 5 percent level. The results for individual days are consistent with the overall results. On all of the days except one, the window −1 to +1 has a negative abnormal return. Some of the events seem to provide more news

[53] Similar to Wayne H. Mikkelson & Richard S. Ruback, An Empirical Analysis of the Interfirm Equity Investment Process, 14 J. Fin. Econ. 523 (1985), we sum the returns on the key dates, as an estimate of the total effect of the law, rather than cumulate prediction errors over the entire time period (from the introduction to when the bill became law). Since the entire process took nearly two years, the latter approach would contain too much noise to be informative.

than others about the future effect of the law. Apparently, the two most important days are March 26, 1979, when the bill cleared its first committee, and October 1, 1980, when the bill became law without the governor's signature.[54] Around each of these days, shareholders of franchise firms suffer a negative abnormal return of about 2 percent. In each case, more than two-thirds of the firms in the sample have negative abnormal returns. Using the three-day window, 67.8 percent of the firms' returns are negative around March 26, 1979 and 72.0 percent are negative around October 1, 1980. Using a binomial test, we can reject the hypothesis that these returns have a zero median at the 5 percent level. These results suggest that shareholders of franchisors are harmed by termination laws.

The abnormal returns for the nineteen firms from the nonrepeat industries are on average slightly more negative than for the other thirteen firms from the repeat industries (− .91 percent per event or − 7.28 percent total return for the eight days versus − .73 percent or − 5.84 percent total return). However, the average returns for the two subsamples are not significantly different.[55]

Examining the total (geometric) returns over the eight three-day windows, there are four firms with returns lower than − 20 percent, including Nathan's Famous with a return of − 33.11 percent. However, the negative average return is not solely a function of these outliers. The median abnormal return is − 3.99 percent and 69 percent of the firms have negative returns.

To help assure that the results are not driven by other contemporaneous factors affecting all companies in California (for example, general business conditions in the state), we examined the returns of a sample of firms that operated in California at the time of the law, but were not involved in franchising. We used *Moody's Industrial Manual* to select a

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[54] The negative reaction to the latter of these two actions (or inactions) may seem a bit puzzling at first. One might plausibly think that given the margins by which the bill passed both houses, it surely would have been overridden, so that when Governor Brown did not veto the bill, there would have been no information provided to the stock market. This argument does not take into consideration the fact that 1980 was an election year, and the state legislators were campaigning for reelection and not in session by October (the session adjourned on August 31). If the bill were vetoed, the entire process would have had to start over the following January with a new legislature. Given the Reagan landslide of 1980, the outcome of this process hardly seems assured. Thanks to Ben Hermalin for pointing this argument out to us.

[55] Recall that, while our model predicts that the greater number of conversions will occur in the nonrepeat industries, it does not predict that the greatest proportional change in wealth will occur in these industries. Note that we do not compare the dollar change in wealth across industries and companies because the large cross-sectional differences in company size and the number of units make such a comparison hard to interpret.

random sample of thirty-five listed firms that had their primary operations in California during 1979 and 1980. Using the same technique as for the sample of franchise firms, we calculated abnormal returns around each of the event dates in Table 6 for our sample of nonfranchise firms. We also examined separately a subsample of thirteen firms that were in industries where other firms were observed doing at least some franchising (for example, the restaurant industry). In no case are the abnormal returns significantly different from zero (all t-statistics have absolute values less than one). These results suggest that the negative abnormal returns for the franchise companies are driven by the termination law and not by general factors affecting all companies in California.

VI. SUMMARY

In this article, we examine the effects of state laws that restrict the ability of the franchisor to terminate franchise contracts. We model the effects of the laws under several varying sets of assumptions. We then present evidence from court cases that indicates that the laws affect the outcomes of court decisions. We also present evidence from contract design and lobbying activity that indicates that the laws do have real effects.

Our cross-sectional tests of the distribution of owned versus franchised outlets across states suggest that the laws reduce the amount of franchising relative to company ownership in industries where individual units are prone to serving transient customers. In contrast, most of the evidence suggests that the laws do not greatly affect other industries. These findings are consistent with the model that predicts that the laws increase the costs of franchising relative to company ownership by making quality control among franchises more expensive.

An examination of the stock returns of franchise companies around the passage of the California law suggests that stockholders of franchise companies incur significant wealth losses when termination laws are adopted. This evidence is consistent with efficiency losses as well as with transfers away from franchisors.

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