



Brian Callaci, Open Markets Institute*

What Do Franchisees Do? Vertical Restraints as Workplace Fissuring and Labor Discipline Devices

Abstract: Applying a simple model to a data set created from 530 franchise contracts, this article shows that the loosening of antitrust restrictions on vertical restraints—competition restrictions in agreements between firms at different levels of the production and distribution process—allows trademarked brands to control wages and working conditions across the boundaries of the firm, at legally separate franchised establishments. Some vertical restraints reduce the bargaining power of franchisees, causing them to exert extraordinarily high effort levels. Other vertical restraints limit franchisee discretion and focus their efforts on labor cost and labor discipline for their profit margins. By monitoring the franchisees who monitor workers, franchisors control wages at franchised establishments without incurring the legal responsibilities and liabilities of traditional employment. To properly regulate franchising and other similar contracting arrangements, antitrust and labor law should be brought together rather than considered in isolation.

Keywords: vertical restraints; franchising; fissured workplace; joint employment

I. Introduction

As domestic outsourcing and subcontracting become increasingly prominent features of the US labor market, the question of how much influence corporations have on wages and working conditions at smaller firms in their production networks is of growing importance for labor and antitrust law and policy. Evidence is emerging that in many cases, powerful firms do exert control over wages and working conditions across the boundaries of the firm. For example, Wilmers (2018) shows that large firms with buyer power in supply chains cause upstream suppliers to pay lower wages to their employees than those firms would do under competitive conditions. Meanwhile, Ashenfelter and Krueger (2018) present evidence from franchise contracts suggesting that the no-poaching agreements that franchisor firms impose on their franchisees, which prohibit franchisees from hiring workers away from each other, function as mechanisms of monopsony power that restrain the job mobility of high-turnover workers. Griffith (2019) and Elmore and Griffith (forthcoming) marshal empirical evidence from forty-four franchise contracts and documentation in two large joint employer cases against franchisors to argue that some franchisors may be joint employers responsible for the wages and working conditions at franchised establishments under labor laws. Both papers argue that

* Chief Economist, Open Markets Institute. Please direct correspondence to callaci@openmarketsinstitute.org. The author would like to thank the Center for Engaged Scholarship, the Data & Society Research Institute, and the Washington Center for Equitable Growth for financial support, and the following people for comments on earlier drafts: Nancy Folbre, Carol E. Heim, Gustavo Pereira Serra, Mark Stelzner, and two anonymous reviewers. Any remaining errors or omissions are the author's alone.

franchise contracts allow franchisors to exercise power across the boundaries of the firm, influencing frontline worker wages and working conditions. While Elmore and Griffith theorize franchisor power as the franchisor's power over franchisees through contractual restrictions, ongoing monitoring, communications, and evaluations, and Griffith (2019) emphasizes franchisor influence on wages and working conditions through the franchisor's control of the franchisee's line supervisors, this article takes a different approach.

Using a larger corpus of franchise contracts and a wider range of contract terms than previous studies, this article presents a new theory of franchisor power, in which franchisors use restrictive contracts to leverage their product market power as holders of valuable trademarks across the legal boundaries of the firm, shaping working conditions and holding down wages at legally distinct franchised establishments. Franchisors specialize in the lucrative activity of licensing their trademarked brand names, while outsourcing less profitable, labor-intensive operations to franchisees whom they tightly control by contract. I extend Skott and Guy's (2007) employer-employee principal-agent model of "power-biased technological change" to encompass the two-level principal-agent conflict between franchisors and franchisees and between franchisees and workers, but I focus on *organizational* instead of technological innovation. I demonstrate that franchise contracts contain features that maximize franchisor power over franchisees and workers, allowing franchisors to impose a high-effort, low-wage labor management regime on franchisees, while also deploying the legal boundaries of the firm as instruments of exclusion to deny franchisees and workers access to the brand's product market rents.

This article also contributes to the literature on vertical restraints, those competition restrictions in agreements between firms or individuals at different levels of the production and distribution process, such as price, supplier, and customer restrictions. Callaci (2021a) and Hafiz (2021) implicate the relaxation of antitrust prohibitions on vertical restraints since the 1960s as a key policy mechanism enabling the creation of franchised businesses. As Callaci shows, franchisors led the efforts to legalize vertical restraints under antitrust law. While some vertical restraints, such as resale price maintenance, are common across a number of industries, the simultaneous use of a large number of vertical restraints is the defining characteristic of the franchising method of doing business. Franchise contracts are saturated with them. In this article I move beyond this history of the liberalization of antitrust prohibitions on vertical restraints to show one outcome of those efforts—the ability of franchisors to disempower franchisees and workers and minimize the wages paid to workers at legally independent establishments.

Analyzing data on the incidence of vertical restraints from 530 franchise contracts, along with information from litigation and legislative archives, this article extends the standard principal-agent models from the social scientific literature on franchising to include the effects of vertical restraints commonly found in franchise contracts on workers.¹ It argues that through:

- (1) intervening to reduce the bargaining position of both franchisees and production workers, and

¹ The author presented an earlier version of the economic model in this article in Callaci (2018). This article develops the model from that working paper to focus on the specific role of vertical restraints in fissuring workplaces and disempowering franchisees and workers.

- (2) taking virtually everything but labor costs and labor discipline out of the franchisee's profit maximizing choice set,

vertical restraints incentivize, and indeed compel, franchisees to adopt a labor management strategy of minimizing the wage bill and extracting high levels of labor effort from production workers, over possible alternative strategies.

Economist David Weil (2014) has coined the term “fissured workplace” to refer to contracting arrangements where a “lead” firm contracts out economic activity formally performed in-house. Franchisees, temporary help agencies, and subcontractors are examples of contractors subordinated to lead firms in fissured workplaces. By placing workers outside the boundaries of the “lead” firm, fissuring limits the organizational voice and wages of the contracted-out workers while excluding them from career ladders and firm-specific and union rents. In the case of franchising, vertical restraints are the mechanism *creating* the fissured workplace, since vertical restraints allow franchisors to discipline the workers that produce their profits without incurring the legal costs, risks, and responsibilities of employing them. As a form of “refractive surveillance” (Levy and Barocas 2018), franchise contracts allow franchisors to indirectly monitor and manage production workers *through* the franchisees they directly monitor and manage, via vertical restraints that limit the choice set open to franchisees. Under commonly used vertical restraints, franchisees have no choice but to make their profit margins by intensively monitoring wage workers. According to standard principal-agent model assumptions, this intensive monitoring lowers the wages paid to workers to incentivize a given level of effort. However, despite this indirect control, existing employment law holds that vertical restraints in franchise contracts do not create “joint employment” relationships between franchisors and workers, which would hold franchisors responsible for wages and working conditions at franchised establishments.²

II. Vertical Restraints and Fissured Workplaces

Franchising is an organizational form in which one firm (a “franchisor”), rather than operate individual establishments itself, contracts with legally separate individuals or firms (“franchisees”) to do so on its behalf. Franchisors charge franchisees a royalty in exchange for this license and impose vertical restraints detailing how the franchisee must operate the establishment. Vertical restraints are the essential features of franchise contracts because the presence or absence of particular vertical restraints reveals which business decisions the franchisor seeks to control and which decisions it seeks to delegate to franchisees. In 2012, the most recent year for which data are available, franchise establishments accounted for 7.3 million jobs in the United States. Franchised establishments numbered 409,000—9.8 percent of all establishments. Sales of franchised chains were about 1.3 trillion dollars in 2012, or 7.8 percent of total US GDP (US Census Bureau 2012).

The role of vertical restraints in labor discipline goes back to the birth of the factory system in early industrial England. As Marglin (1974) argues, early capitalists introduced the factory system for reasons that went beyond productive efficiency. First, it allowed capitalists to take control of the work process, bringing producers together under a single roof under the watchful eye of the factory owner. Second, factory owners imposed vertical restraints on these producers, requiring them to sign agreements that prevented them from contracting with others. The criminalization of breach of

² See, for example, *Browning-Ferris Industries of Cal., Inc. v. N.L.R.B.*, No. 16-1028 (D.C. Cir. 2018).

contract under English master-servant law made these vertical restraints a particularly powerful exercise of monopsony power (Steinfeld 1991; Naidu and Yuchtman 2013).

Employers rarely need to impose specific vertical restraints within the boundaries of the firm, because the law grants capital nearly plenary power to command and direct labor within firms. Coase (1937) recognized this as the distinctive feature of firms relative to markets. However, employers do sometimes impose vertical restraints on the ability of workers to contract outside the firm with other employers, such as through non-compete agreements. The specificity of franchising lies in its imposition of a large number of vertical restraints simultaneously on independent contractor franchisees. The effect is to substitute vertical integration by contract for vertical integration by ownership (International Franchise Association 1973, 49).

From the beginning, franchisors looked on vertical restraints as a substitute for formal vertical integration and a mechanism to enable workplace fissuring (Callaci 2021a). Vertical restraints allowed them to centrally command economic activity similar to fully vertically integrated chains, but without the risks, costs, and legal obligations that went with formal integration, ownership of assets, and employment of workers. Franchisors sought the legalization of vertical restraints in part because it allowed them to fissure their workplaces, pulling in the legal boundaries of the firm, while leaving workers and other stakeholders outside. Without this ability to control franchisees and maintain brand uniformity through vertical restraints, franchisors like McDonald's would be forced to vertically integrate—taking ownership of establishments and employing the workers directly—to control their chains to the same extent.

However, vertical restraints of the kind found in franchise agreements were not always fully legal under US law. Franchising firms waged a years-long struggle of lobbying and litigation to win the right to impose the wide range of vertical restraints that they are able to impose today. Federal courts, uncomfortable with the rise of franchise arrangements in which large corporations dominated and controlled small businesses through restrictive contracts, initially looked skeptically on the legality of many vertical restraints under antitrust laws. However, after the Supreme Court's decision in *Continental Television, Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36 (1977), which followed fifteen years of franchisor lobbying and litigation, franchisors have had wide latitude to impose non-price vertical restraints under the Rule of Reason. Since *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007), they have had similar freedom to impose vertical price restraints (Sokol 2014).

The changing legality of vertical restraints is an example of the broader phenomenon of what Paul (2020) describes as the role of antitrust law in “allocating coordination rights.” Antitrust law governs who has the right to coordinate which economic activities. As Paul demonstrates, the law has tended to favor the allocation of coordination rights to powerful actors that exercise those rights in a top-down, authoritarian manner. For example, while it is illegal for firms to coordinate with each other on price or output, if they merged into a larger firm, the merged firm would be free to set prices for each formerly independent unit. Early antitrust jurisprudence vigorously contested the efforts of workers to coordinate through trade unions, while blessing top-down coordination by property owners within giant firms. At present, antitrust law prohibits franchisees or Uber drivers from coordinating prices with each other, but protects the ability of larger corporations to accomplish the same ends across the boundaries of the firm through top-down vertical restraints.

At the same time that franchisors pursued franchising as a kind of vertical integration by other means, they also lobbied to keep vertical restraints from creating the kind of legal obligations and liabilities

that vertical control through formal integration entailed. Specifically, franchisors fought to keep vertical restraints from creating legal employment relationships between themselves and franchisees, or between themselves and their franchisees' employees under "joint employment" doctrines. Since *The Southland Corporation*, 170 N.L.R.B. 1332 (1968), franchisors have mostly succeeded in this endeavor. In that case, the National Labor Relations Board (NLRB) ruled that the franchisor was not the joint employer of a franchisee's employees, because "the critical factor in determining whether a joint employer relationship exists is the control which one party exercises over the labor relations policy of the other." *Southland Corporation*, 170 N.L.R.B. at 1334.

Joint employment tests under the National Labor Relations Act (the law governing collective bargaining in the US) have relaxed and tightened over the years, but have remained tied to common-law notions of agency and master-servant relationships, which emphasize whether a franchisor exercises sufficient control over the work process to be considered a joint employer (Linder 1990, Bender 2015). As an example of a narrow joint employment standard, the NLRB ruled in 2002 that "[t]he essential element in this analysis is whether a putative joint employer's control over employment matters is direct and immediate." *Airborne Express*, 338 N.L.R.B. 597, 597 (2002). In 2015, the NLRB widened the test to include not just "direct and immediate" control, but also "indirect" or "potential" control. *Browning-Ferris Industries of California, Inc.*, 362 N.L.R.B. 1599, 1611, n. 68 (2015).

The key point is that even the broader interpretations of joint employer status rely on evidence of employer control, eschewing modern social scientific evidence that firms can exercise power over working conditions, prices, and wages without exercising direct or indirect control over workers (Hafiz 2020; Garden 2015; Fisk and Malamud 2009). This adherence to older common-law understandings of control is also seen in the rulemaking of other federal agencies. For example, while the "suffer or permit" definition of employment under the Fair Labor Standards Act (FLSA) regulating wages and hours, which covers all instances in which an employer allows or requires someone to work, is broader than common-law tests of employment, franchisors have nonetheless largely managed to avoid joint employer status under the FLSA (Griffith 2019). Similarly, in its most recent rulemaking regarding interpretation of the FLSA, the Department of Labor set up a four-part balancing test that echoes common-law definitions by emphasizing control over working conditions, alongside setting pay, hiring and firing, and maintenance of employment records.³

III. Principals, Agents, and Misaligned Incentives

At the heart of franchising is what economists call a principal-agent relationship, in which a principal, like Burger King Corporation, contracts with an agent to conduct activities on its behalf, like managing local restaurants. Principal-agent models show that under incomplete contracts with imperfect information, agents have the ability to pursue their own narrow interests in conflict with those of the principal. Since effort levels are noncontractible and a franchisor like Burger King cannot perfectly observe local manager effort, a salaried manager of a Burger King restaurant has incentives to slack off at work and not perform as diligently as Burger King would like them to. However, unlike salary contracts, franchise contracts allow local managers to profit directly from their efforts, by charging them a small royalty on their gross sales rather than paying them a flat salary. In the language of

³ Joint Employer Status Under the Fair Labor Standards Act, 29 C.F.R. § 791 (2020). <https://www.federalregister.gov/documents/2020/01/16/2019-28343/joint-employer-status-under-the-fair-labor-standards-act>.

principal-agent models, franchise contracts make franchisees “residual claimants”—the recipients of the entire net income of the establishment after the contractually mandated costs are paid.⁴ This aligns franchisee incentives with the franchisor’s own interests. The standard principal-agent models of franchising emphasize how franchise contracts resolve principal-agent conflicts through making franchisees residual claimants on establishment-level profits (Blair and Lafontaine 2010, 107-116; Mathewson and Winter 1985; Rubin 1978; Norton 1988).⁵

The poor quality of franchised jobs has long been something of a stylized fact, and the existing literature implicates residual claimancy as contributing to this. Krueger (1991) finds that wages are lower at franchised outlets than at outlets directly owned by the parent company. Ji and Weil (2015) find that franchised outlets have more wage and hour violations than company-owned outlets. Both Krueger and Ji and Weil point to the incentives facing franchisees as a contributing factor to low job quality, particularly the fact that, as residual claimants, franchisees are more motivated to minimize labor costs and cut corners on legal compliance than are the salaried managers who supervise company-owned establishments.

Empirical support for the relevance of these agency issues in the franchising context is provided by Lafontaine and Slade (1997), who show that the importance of the franchisee’s effort is positively related to residual claimancy in franchise contracts. However, the existence of externalities in franchised chains, deriving especially from the franchisor’s brand name, means that even the incentives of residual claimant franchisees are not fully aligned with franchisor interests. For example, franchisees might still free-ride on the franchisor’s brand name, putting low levels of effort into the business or otherwise acting opportunistically counter to the franchisor’s interests, while benefitting from the spillover effects of the efforts of other franchisees and the franchisor. Franchisors therefore invest in monitoring of franchisees (through “secret shoppers,” digital surveillance, and the like) and what are known as “enforcement rents” to internalize these externalities. An enforcement rent is a premium over the franchisee’s next-best alternative or “outside option.” Franchisees paid this premium have incentives to eschew slacking off because if they do not exert the desired effort level they can be terminated, losing access to the premium. Kaufmann and Lafontaine (1994) calculate that McDonald’s

⁴ Because franchisees pay a royalty that is usually a percentage of gross sales to the franchisor, they are not quite full residual claimants. However, since royalty rates are quite low, typically between 4 and 11 percent, the incentives of residual claimancy are almost complete.

⁵ While the most common principal-agent models used in franchising focus on conflicts of interest over effort levels, other principal-agent models emphasize choice under uncertainty instead. For example, the risk and incentives model of Prendergast (2002) predicts that under conditions of high volatility and uncertainty, principals do not know which tasks should be undertaken or how, so they delegate authority to their agents, who receive pay in the form of output-based incentives rather than a fixed salary. In contrast, under lower levels of uncertainty, principals do know what tasks should be undertaken and how. In these circumstances, principals will tend to prescribe actions and monitor agent behavior for compliance—meaning, treat the agent as an employee. Lafontaine and Bhattacharya (1995) make a related argument specifically about franchising: franchise contracts delegate authority to entrepreneurial, risk-taking local franchisees who have a comparative advantage in access to information on local market conditions. However, as Callaci (2019) and Callaci (2021b) argue, the presence of a large number of vertical restraints is inconsistent with franchising as the kind of principal-agent relationship modeled by the Prendergast and Lafontaine and Bhattacharya models, where residual claimant agents are granted a wide range of discretion. Franchise contracts well described by those models would delegate decision-making authority to local agents and empower them to make important decisions relying on their entrepreneurial skill and discretion. Such contracts would leave important decisions up to franchisees rather than prescribe them through vertical restraints. Heavily prescriptive contracts, with intensive monitoring of franchisees, are more consistent with mitigating conflicts of interest over effort levels than the delegation of entrepreneurial authority to local agents. In an empirical analysis of franchise contracts, Callaci (2021b) finds that remote digital surveillance does tend to cluster together with extensive use of vertical restraints.

does in fact pay enforcement rents to its franchisees. Rather than extract the full value of the franchise in the form of royalties and fees, it leaves money on the table to induce effort.

Enforcement rents, monitoring, and residual claimancy align franchisee incentives with franchisor interests. Once incentives are aligned, the franchisor gets higher profits from the franchisee's increased effort, and the franchisee, rather than working at their reservation wage (just enough more than their outside option to get them to agree to work) at their reservation effort level, gets a higher income in exchange for their increased effort. There is clearly the potential for franchising to be mutually beneficial for franchisors and franchisees, and to be more socially efficient than alternatives.

However, there are two problems with drawing this conclusion. First, as will be explored in much more detail below, the mutually beneficial quality of residual claimant franchise contracts for franchisors and franchisees does not extend to wage contracts with the workers who are employed at franchised establishments. Second, franchise contracts go beyond merely motivating franchisees with residual claimancy, enforcement rents, and monitoring. Certain vertical restraints also supercharge the incentives of residual claimancy by reducing the value of the outside option that franchisees bring to their bargaining with franchisors, artificially decreasing franchisee bargaining power. The same claims of efficiency and mutual benefit cannot be made for cases where one party has the ability to alter the bargaining position of the other.

IV. Data and Model

Under the Federal Trade Commission's Franchise Rule, franchisors must provide prospective franchisees with a "Franchise Disclosure Document" (FDD) providing certain information about the franchisor and its business, along with a copy of the uniform franchise contract. While the Federal Trade Commission does not impose a filing requirement, and so does not collect copies of these documents, several states do require all franchisors doing business in that state to file a copy of their FDD. Wisconsin is one of these. I collected all 1,029 FDDs filed in the state of Wisconsin in 2017. (While filed in Wisconsin, these are uniform franchise contracts and each disclosure document contains data covering the entire United States. Any departures for specific states, due to differences in state laws and regulations, are attached as riders to the official FDD). Coding information on a variety of vertical restraints and other franchisor characteristics, I create a data set from a sample of 530 of these contracts. Rather than take a random sample, I elect instead to exclude all franchise chains with fewer than 80 outlets nationwide. The purpose is to leave out fly-by-night, marginal operators and small chains, creating a sample containing only the established chains that have reached substantial size. Tables 1 and 2 display the incidence of common vertical restraints across all two-digit North American Industry Classification System (NAICS) industries in the data set, along with the average weekly wages in each industry for the year 2016, the year in which these contracts were prepared. Table 1 displays vertical restraints that reduce the franchisee's bargaining position. Table 2 displays vertical restraints that reduce franchisee discretion over their operations. Since Accommodation and Food Services is by far the largest two-digit NAICS industry, and because there is quite a bit of heterogeneity between the hotel and food services industries, Table 3 breaks down Accommodation and Food Services into its six-digit, detailed NAICS industry components. Finally, Appendix 2 presents a list of all franchisors in the data set.

A. *Vertical Restraints I—Disempowering Franchisees*

Analyzing common vertical restraints in franchise contracts with the help of a simple principal-agent model, this section demonstrates how vertical restraints in franchise contracts induce extraordinary levels of effort from the franchisee—even higher levels than the franchisee actually bargained for. The model is presented verbally here in the body of the article, and more formally in Appendix 1. According to standard principal-agent models of the workplace, the franchisee sets their effort level as a function of (1) their income from franchising, which rises with their effort level; (2) the disutility or personal cost of exerting effort, which also rises with effort; (3) the likelihood of their getting caught slacking, which falls with their effort levels and rises with the franchisor's information about their effort; and (4) the value of the outside option that they bring to the bargain. The outside option is a function of things like the value of the franchisee's assets outside the franchise relationship, the franchisee's expected income outside the franchise relationship, and the probability of the franchisee finding income-generating activity outside the franchise relationship. The more valuable these components, the stronger the franchisee's bargaining position. The franchisee sets their effort level according to how much the value of keeping the franchise license exceeds the value of their outside option, weighted by the probability of getting caught slacking and losing access to the franchise license (Bowles 1985; Shapiro and Stiglitz 1984).

If franchisors can influence the franchisee's outside option, then franchisors can induce franchisees to work even harder, raising output and franchisor profits. The initial source of the franchisor's power over franchisees is its product market power, derived from its trademark and trade name. Market power in product markets gives the franchisor a type of vertical power over franchisees known as "short-side" power: the power to control access to scarce resources of which quantities are limited (Bowles 2004, 344-349; Bowles and Gintis 2007). The franchisor's ability to restrict access to its brand name gives it power through the ability to confer an enforcement rent on the franchisees with whom it transacts, since the outside option for the franchisee is exclusion from the brand and being forced to compete with the franchisor's established chain as an independent business.

Franchisees have attested to the substantial power of the brand name. As Richard Riggs, a Dunkin' Donuts franchisee, testified before Congress in April 1976, explaining why he signed such a restrictive franchise contract, "We had counsel at the time but we had not very much choice. We had limited funds. I had the choice of going with a franchisor or opening up Riggs Donut Shop on the corner and competing with the franchisor."⁶ Franchisor power over franchisees is evidenced by the fact that franchise contracts are written by franchisors and offered to franchisees on a take-it-or-leave-it basis (Hadfield 1990).

Franchisors also require franchisees to sign contracts containing vertical restraints that lower the value of their outside option, raising the value of this enforcement rent. For example, franchisees are required to make investments in relationship-specific sunk assets (oddly shaped buildings, proprietary signage and equipment, their own industry-specific human capital) that have value inside the franchise relationship, but little value outside it, raising the cost of losing the affiliation with the franchisee. According to Dnes (1993), franchisors *create* most of this asset-specificity through trademarking

⁶ *Franchising Termination Practices Reform Act: Hearing Before the House Subcommittee on Consumer Protection and Finance, 94th Congress 93 (1976).*

fixtures and equipment, and through restrictive covenants in franchise contracts. As Representative Abner Mikva said in 1976:

Once the agreement is entered into, the franchisee is totally dependent on the products, services or tradename supplied by the franchisor. Loss of the right to use the franchisor's tradename or distribute the franchisor's product or service results in economic ruin for the franchisee. It is a relationship that more closely resembles one between a master and his indentured servant than between economically equal contracting parties.⁷

⁷ *Franchising Termination Practices Reform Act: Hearing Before the House Subcommittee on Consumer Protection and Finance, 94th Congress 53 (1976).*

Table 1. Incidence of Franchisee-Disempowering Vertical Restraints by Two-Digit NAICS Industry

	Accommodation & Food Service	Retail Trade	Administrative & Waste Services	Other Services	Construction	Professional & Technical Services	Arts, Entertainment & Recreation	Health Care & Social Assistance	Real Estate & Rental & Leasing	Educational Services	Manufacturing	Finance & Insurance	Wholesale Trade	All industries
Avg Length of Non-Compete (months)	16.2	20.6	21.0	22.9	23.1	20.9	19.7	23.2	10.4	24.0	21.8	18.0	9.6	19.0
Mandatory Arbitration	45%	53%	58%	77%	59%	77%	86%	66%	50%	59%	91%	50%	60%	58%
Forum Restriction	88%	93%	96%	98%	88%	97%	100%	100%	81%	88%	100%	67%	60%	91%
Right of First Refusal	79%	82%	89%	89%	85%	83%	93%	86%	92%	82%	100%	83%	100%	85%
Right to Purchase After Term	53%	47%	44%	66%	32%	37%	62%	52%	31%	35%	82%	50%	20%	49%
Franchisee Obligation to Operate	32%	37%	36%	34%	50%	33%	17%	34%	42%	35%	45%	83%	20%	35%
Personal Guarantee	96%	93%	91%	98%	91%	90%	97%	90%	96%	94%	73%	50%	100%	93%
Spousal Guarantee	37%	42%	31%	55%	29%	27%	41%	48%	50%	24%	9%	33%	20%	38%
Independent Bank Account Access	84%	77%	93%	93%	82%	67%	86%	86%	38%	76%	100%	83%	40%	81%
Independent Data Access	84%	88%	71%	80%	76%	77%	86%	72%	62%	71%	82%	50%	40%	79%
Avg Weekly Wage (2016 Dollars)	\$ 385	\$ 583	\$ 731	\$ 691	\$ 1,128	\$ 1,749	\$ 708	\$ 922	\$ 1,057	\$ 938	\$ 1,248	\$ 1,946	\$ 1,418	
N	187	57	55	44	34	30	29	29	26	17	11	6	5	530

Sources: Data on vertical restraints are from 2017 Franchise Disclosure Documents in the author's possession.

Average Weekly Wage Data are from the Quarterly Census of Employment and Wages, private employers, all establishment sizes, national annual averages.

<https://www.bls.gov/cew/data.htm>.

Table 2. Incidence of Franchisee Discretion-Removing Vertical Restraints by Two-Digit NAICS Industry

	Accommodation & Food Service	Retail Trade	Administrative & Waste Services	Other Services	Construction	Professional & Technical Services	Arts, Entertainment & Recreation	Health Care & Social Assistance	Real Estate & Rental & Leasing	Education Services	Manufacturing	Finance & Insurance	Wholesale Trade	All industries
Site Approval	98%	84%	56%	91%	68%	37%	86%	79%	85%	71%	82%	83%	20%	82%
Avg Percent of Supplies from Restricted Sources	63%	63%	36%	37%	34%	38%	35%	31%	14%	16%	37%	81%	57%	47%
Product Approval	90%	82%	95%	95%	94%	97%	97%	90%	73%	100%	91%	100%	80%	91%
Mandatory Hours	75%	71%	55%	77%	32%	20%	76%	55%	62%	82%	64%	33%	40%	64%
Right to Set Max or Min Prices	59%	38%	35%	43%	38%	27%	62%	31%	19%	41%	9%	17%	40%	44%
Unilateral changes to operations manual	78%	73%	65%	74%	53%	77%	69%	76%	92%	76%	73%	50%	20%	73%
No-Poaching Agreement	57%	43%	55%	68%	59%	60%	62%	59%	35%	47%	82%	33%	20%	55%
Wage Levels														
Avg Weekly Wage (2016 Dollars)	\$ 385	\$ 583	\$ 731	\$ 691	\$ 1,128	\$ 1,749	\$ 708	\$ 922	\$ 1,057	\$ 938	\$ 1,248	\$ 1,946	\$ 1,418	
N	187	57	55	44	34	30	29	29	26	17	11	6	5	530

Sources: Data on vertical restraints are from 2017 Franchise Disclosure Documents in the author’s possession.

Average Weekly Wage Data are from the Quarterly Census of Employment and Wages, private employers, all establishment sizes, national annual averages. <https://www.bls.gov/cew/data.htm>.

Certain vertical restraints, moreover, increase franchisee sunk investments. In 1988, franchisee lawyer Barry Kellman testified to Congress that “bargaining power changes over time to the greater advantage of the franchisor” due to sunk, firm-specific investments the franchisees make over time and the costs the franchisors contractually impose for leaving the relationship, such as non-compete agreements and restrictions on sales and transfers.⁸ Franchisee lawyer Peter Singler added:

I ask one question when a new client comes into my office, and that is, if you weren't already in this system, would you do it all over again? The answer, without exception, has been “Absolutely not.” And it is usually followed with a statement, “But because of non-competition covenants, because of restrictions on sourcing, because of restrictions on transferability—on my ability to sell my business—I can't get out, and so I've got to make the best of it.”⁹

Recall that the outside option is a function of the franchisee's income and assets should they leave the franchise contract, and their probability of finding re-employment upon exiting. Table 1 contains data on the incidence of vertical restraints that reduce the outside option of franchisees. These include the following:

- Covenants not to compete: Virtually all franchise contracts require franchisees to sign covenants not to compete with the franchisor for a period of time after the franchise contract ends. Such covenants raise the expected duration of time before the franchisee can earn income outside the franchise relationship, and reduce the value of their human capital by temporarily prohibiting continued employment in the industry in which he or she has developed skills. The average duration of the noncompete agreement among contracts in the sample is nineteen months.
- Mandatory arbitration and forum clauses: Franchisors frequently require franchisees to agree to mandatory arbitration clauses, under which franchisees sign away rights they have under the law to a jury trial, class action litigation, and the like, as well as forum clauses, under which franchisees agree that any litigation must take place in the geographical jurisdiction of the franchisor's choosing. The former blocks the franchisee from access to the legal system to settle disputes, while the latter dramatically raises the cost of litigation to the franchisee. These clauses limit the ability of the franchisee to recover damages that could form the assets to start a new business. Fifty-eight percent of franchise contracts in the sample contain a mandatory arbitration clause, and ninety-one percent contain a forum selection clause.
- Right of first refusal: Most franchisors require franchisees to give them a right of first refusal in any sale of the franchisee's business. The ability of the franchisor to swoop in at any time depresses the resale value of the franchise, and thus the franchisee's wealth should it exit the franchise relationship. Eighty-five percent of contracts contain this clause.
- Right to purchase: Franchisors also often give themselves a right to purchase the franchisee's assets at expiration of the contract, restricting the universe of potential buyers

⁸ *Unfair Franchise Practices: Hearing Before the House Subcommittee on Antitrust, Impact of Deregulation, and Privatization*, 100th Congress 44 (1988).

⁹ *Franchising Relationship: Hearing Before the House Subcommittee on Commercial and Administrative Law*, 106th Congress 100 (1999).

and similarly reducing the franchisee's outside option. Forty-nine percent of contracts contain this clause.

- Personal obligation to operate: Many franchisees require that franchisees personally operate their franchised outlets. This prevents franchisees from working outside the franchise relationship and keeps them dependent on income from franchising. Thirty-five percent of contracts require a personal obligation to operate.
- Personal and spousal guarantees: Franchisors frequently require franchisees to give the franchisor recourse to their personal assets in legal disputes. Some even require the franchisee's spouse to sign such a personal guarantee as well. This raises the franchisee's cost of leaving the franchise relationship early or misbehaving during the relationship, as their entire personal assets are put at risk by doing so. Ninety-three percent of contracts contain a personal guarantee, and thirty-eight percent a spousal guarantee.
- Independent bank account access: Eighty-one percent of franchise contracts require the franchisee to give the franchisor the ability to withdraw funds directly from the franchisee's bank account. This lowers the value the franchisee can take out prior to exiting the contract, tilting the status quo of any ensuing litigation in favor of the franchisor.
- Independent data access: Giving the franchisor remote, independent access to franchisee data increases the effectiveness of franchisor monitoring, increasing the probability of the franchisee being terminated should they shirk. Other things being equal, this raises franchisee effort levels. Seventy-nine percent of franchise contracts require franchisees to give franchisors independent access to their computers and data.

Dnes (1993) argues that the requirement that franchisees reduce the value of their own outside options in franchise contracts through sunk investments is yet another sign of franchising's social efficiency, as it acts as a screening and signaling device. According to Dnes, franchisees who are prepared to supply high effort levels will self-select into franchise contracts rather than accept alternative contracts; their willingness to bind their future selves in this way signals their high productivity to franchisors. Moreover, because franchisees are residual claimants, these contracts are in a sense fair: franchisees get nearly the entire benefit of the extra effort these onerous contract terms extract from them. However, as Felstead (1993) points out in his study of franchising, franchise contracts cannot be said to increase technical efficiency. The extra output extracted from franchisees is not a genuine productivity increase, since output has not increased *per unit input*. Rather, output has increased because one input, the franchisee's effort, has been squeezed into supplying additional levels of that input.

Moreover, claims about the fairness and social efficiency of vertical restraints are in conflict with what we know about real world economic decision-making from psychology and behavioral economics. Even if franchisees fully understand the contracts they sign, endowment effects cause real economic agents like franchisees to be loss-averse: they weigh losses more heavily than gains relative to the status quo at any point in time (Benartzi and Thaler 1995; Kahneman and Tversky 1979; Novemsky and Kahneman 2005; Thaler 1980; Tversky and Kahneman 1991). Thus, the franchisee is in effect a different economic agent before and after signing the franchise contract. Empirical work finds evidence of loss-aversion in the possession of coffee mugs, college basketball tickets, gift certificates, and even the number of pizza toppings—all considerably lower-stakes investments than purchasing a franchise (Carmon and Ariely 2000; Kahneman, Knetsch, and Thaler 1990; Sen and Johnson 1997;

Levin et al. 2002). What is more, there is strong evidence that endowment effects are adaptive: valuation of an object increases with the duration of one's ownership (Hoch and Loewenstein 1991; Strahilevitz and Loewenstein 1998). Once franchisees start making sunk investments, they overweigh the cost of losing them. As franchisees accumulate sunk investments over time, the bargaining power of the franchisor increases. Finally, even if these psychology and behavioral factors were not at play, post-Keynesian investment theory has long made the case that since resale markets are not perfect, and investments are industry-, firm-, and use-specific, investments, once made, commit the investor to a particular course of action (Crotty 1992). Staying in a franchise relationship is one course of action an economic agent might commit itself to through sunk and irreversible investments.

In addition to loss aversion and endowment effects, much depends on the shape of the franchisee's utility function with respect to the benefits of additional income and the costs or disutility of additional effort. In fact, franchise contracts have the potential to extract effort beyond the level the franchisee agreed at the time they signed the contract. For example, suppose franchisees are not maximizers but rather "satisficers," targeting a given level of income with only small utility gains beyond that point (Simon 1956). The conflict between satisficing franchisees, who bear the costs of the extra effort needed to increase sales, and maximizing franchisors, whose profits consist of a percentage of franchisee sales at no marginal cost to themselves, has long been a central one in franchising. For example, in Birkeland's (2002, 112-113) ethnography, franchisors are routinely frustrated by franchisee attitudes expressed in statements like, "The franchisor is always getting at me to increase my sales, but for what? I'm doing OK the way things are now." If franchisees are satisficers, these vertical restraints can induce them to work harder after signing than they would have agreed to before entering the franchise relationship.

B. Vertical Restraints II: Disempowering Workers

This section turns from the franchisor-franchisee relationship to the second principal-agent conflict in franchising: that between franchisees, who along with franchisors profit from worker effort, and the workers themselves. Like franchisees, workers set their effort levels as a function of their income from the job, their personal cost of effort, the probability of detection if they shirk, and their outside option should they be caught shirking and get themselves fired. Importantly, as will be explained in more detail below, workers are paid a wage and are not residual claimants on the output that results from their effort.

After imposing one set of vertical restraints that induce extraordinary effort levels from franchisees, franchisors impose a second set that determines where franchisees must direct that effort. The "Disempowering Workers" section in Tables 1 and 2 detail some of these. As lawyer and franchisee advocate Harold Brown testified in 1970, operating under extensive vertical restraints has a severe limiting effect on franchisee discretion:

The franchiser [sic] controls the site, commissary purchases, purchases from other vendors, method of operations, labor practices, quality control, merchandising, and even recordkeeping. This control is buttressed by the contractual requirement that the franchisee must obey the commands of the operating manual as expounded by the

franchiser's supervisor, on pain of losing the franchise if he disobeys them, and under constant threat of termination.¹⁰

Each vertical restraint takes discretion away from the franchisee and focuses their effort on what franchisors leave to franchisee control to make their profit margins: labor management and labor discipline.

Vertical restraints are especially prevalent in the low-wage industry of fast food. Looking to Table 3 and the subsample of franchise contracts in the limited-service restaurant industry, on average seventy-eight percent of franchisee purchases must be acquired from sources of supply restricted by the franchisor. Ninety-five percent of contracts restrict franchisees to selling only franchisor-approved products. Ninety-two percent set mandatory hours of operation. Fifty-six percent give the franchisor the right to set maximum or minimum prices. Finally, as a kind of catch-all, seventy-six percent give franchisors the unilateral right to change the operations manual, which dictates the minutiae of unit operations from how to flip the burgers to the precise manner employees greet customers.

¹⁰ *The Impact of Franchising on Small Business: Hearing Before the House Subcommittee on Urban and Rural Economic Development*, 91st Congress 3 (1970).

Table 3. Incidence of Vertical Restraints in Accommodation & Food Services Franchise Contracts by Detailed NAICS Industry

	Ltd Service Restaurants	Snack and Non-Alcoholic Beverage Bars	Hotels & Motels	Full Service Restaurants	Recreational & Vacation Camps	All Accommodation & Food Services Industries	All industries
Franchisee-Disempowering Vertical Restraints							
Avg Length of Non-Compete (months)	20.3	21.3	0.0	20.4	0.0	16.2	19.0
Mandatory Arbitration	55%	58%	18%	41%	0%	45%	58%
Forum Restriction	90%	95%	69%	97%	100%	88%	91%
Right of First Refusal	92%	100%	18%	97%	100%	79%	85%
Right to Purchase After Term	59%	67%	10%	76%	0%	53%	49%
Franchisee Obligation to Operate	49%	25%	5%	31%	0%	32%	35%
Personal Guarantee	94%	98%	100%	97%	0%	96%	93%
Spousal Guarantee	33%	38%	46%	38%	0%	37%	38%
Independent Bank Account Access	90%	95%	56%	93%	0%	84%	81%
Independent Data Access	83%	93%	74%	93%	0%	84%	79%
Franchisee Discretion-Removing Vertical Restraints							
Site Approval Requirement	100%	95%	97%	100%	100%	98%	82%
Avg Percent of Supplies from Restricted Sources	78%	72%	24%	67%	0%	63%	47%
Product Approval	95%	98%	69%	100%	0%	90%	91%
Mandatory Hours	92%	70%	46%	76%	0%	75%	64%
Right to Set Max or Min Prices	56%	58%	74%	52%	0%	59%	44%
Unilateral changes to operations manual	78%	88%	74%	76%	100%	78%	73%
No-Poaching Agreement	69%	70%	0%	83%	0%	57%	55%
Industry Average Wage Levels							
Avg Weekly Wage (2016 Dollars)	291	314	566	390	484	385	
N	78	40	39	29	1	187	530

Sources: Data on vertical restraints are from 2017 Franchise Disclosure Documents in the author's possession.

Average Weekly Wage Data are from the 2016 Quarterly Census of Employment and Wages, private employers, all establishment sizes, national annual averages. <https://www.bls.gov/cew/data.htm>.

According to Lafontaine and Sivadasan (2009, 119), fast-food industry insiders report that “labor schedule changes and flexibility in hours per week per worker are among the most important margins that managers have at their disposal to keep production costs down,” highlighting the importance of labor costs to profitability and the lack of ability to alter other variables affecting profitability in the industry most associated with franchising. Supplier and price restrictions are especially consequential here, since they take away franchisees’ ability to control their own non-labor costs and restrict their ability to pass on wage increases to customers in the form of higher prices. For example, after one McDonald’s franchisee complained about the effect of price caps on her profits, McDonald’s

responded by telling her to “just pay your employees less” (Depillis 2014). Callaci (2019) in a series of regressions using the same data set as this article, finds a consistent empirical relationship between the imposition of a broad range of vertical restraints in franchise contracts and industries characterized by high-turnover, low-wage, and youthful workforces—the kind of workers likely to have low bargaining power.

What is more, some franchisors impose a vertical restraint that directly influences wages and working conditions at their franchisees’ restaurants. Sixty-nine percent of fast-food franchisors in the sample impose no-poaching clauses, which forbid franchisees from hiring workers away from each other. Ashenfelter and Krueger (2018) find evidence that the incidence of these clauses is associated with low-wage, high-turnover industries, and argue that their purpose is to increase franchisee monopsony power over production workers.¹¹

C. Franchising as Power-Biased Organizational Change

The franchising literature, preoccupied with the efficiency implications of franchise contracts for the owner-manager principal-agent problem, rarely looks further into the second principal-agent relationship in franchising: between managers and workers. However, the second level is fundamental because franchisees are a special kind of agent. Franchisees do not directly produce output, as is implicitly assumed in most principal-agent models. Rather, they monitor the workers that do. As Felstead (1993) has argued, residual claimancy does not just motivate franchisees to exert high effort levels themselves; it also motivates them to extract high effort levels from their waged employees. Vertical restraints that remove franchisee discretion to raise prices, choose different suppliers, etc., bias franchisees toward the labor management strategy of intensified monitoring and effort extraction over other feasible alternatives, such as offering enforcement rents in the form of higher wages, or investing in worker productivity through training and upskilling.

In a principal-agent model, Skott and Guy (2007) show that because the size of the enforcement rent offered to workers—the wage premium above their outside option—depends on the employer’s ability to detect their effort levels. Therefore, technological changes that increase managers’ ability to monitor workers (like GPS devices in long-haul trucks) decrease worker power, lowering enforcement rents and raising effort levels. Such “power-biased technical change,” they show, raises profits by improving the information employers have about employee effort levels, even if the new technology is less technically efficient than existing technologies. The negative effect on profits of lower technical efficiency in such cases can, under many reasonable assumptions about the shape of the production function, be more than made up for by the decrease in workers’ power and the accompanying changes in effort and wages.

¹¹ In contrast to this article, Ashenfelter and Krueger focus on the effect of no-poach agreements on wages through the monopsony channel, in which the supply of workers to the firm is a function of the wage (relative to workers’ outside options). The upward-sloping supply curve facing employers then creates a wedge between workers’ wages and their marginal product (Burdett and Mortensen 1998; Robinson [1936] 1969; Manning 2003; Schubert, Stansbury, and Taska 2020). To keep the focus on the two-level principal-agent conflicts in franchising, this article focuses instead on the efficiency wage (or labor discipline) channel (Bowles 1985; Shapiro and Stiglitz 1984). In the latter, rather than the supply of workers, the emphasis is on the supply of effort from each worker, also a function of wages relative to outside options. Since effort and labor supply are both functions of the wage relative to the workers’ outside option, no-poach agreements affect wages through both channels.

Vertical restraints in franchise contracts function as a kind of power-biased *organizational* innovation within Skott and Guy's framework. By structuring the incentives facing franchisees, vertical restraints set the terms not only of the franchisor-franchisee principal-agent problem, but also the principal-agent problem one level down, at the level of franchisees and production workers. By inducing franchisee-managers to closely monitor and extract effort from production workers, franchising as an organizational innovation increases employer power over workers just as surely as a new surveillance technology. In a sense, vertical restraints transform franchisees into human surveillance cameras.

What is more, recall that franchisors directly monitor franchisees to ensure compliance with vertical restraints. Most franchisors require franchisees to give them remote real-time access to franchisee data through the point-of-sale system connected to franchisee cash registers (see Tables 1 and 2). This gives the franchisor high-quality information about the minutiae of establishment operations. Levy and Barocas (2018) coined the term "refractive surveillance" to describe instances where firms surveil one group of people to gain information about a second group that they really want to surveil, by gathering data on customers, for example, in order to monitor and evaluate workers. However, in franchise relationships, franchisors must monitor production workers *through* franchisees if they want to avoid triggering joint employment liability.

While directly supervising workers would risk joint employment findings by labor agencies, franchisors are free to directly monitor franchisees and can indirectly monitor workers in the process. In the case of McDonald's, for example, the operations manual prescribes how each workers' job should be done so precisely that maximum order times (of sixty seconds) and "total experience" times (of three minutes, thirty seconds) are spelled out. Since franchisee payroll and point-of-sale systems are integrated with McDonald's own, McDonald's has the ability to powerfully influence worker discipline by making "suggestions" to franchisees that may, strictly speaking, only pertain to issues of product quality prescribed through vertical restraints (Rogers 2020).

In short, vertical restraints allow franchisors to determine wages and working conditions without directly prescribing wage levels or hiring and firing workers. By outsourcing the function of labor discipline to franchisees while incentivizing franchisees to exert high levels of effort at that single task, vertical restraints allow franchisors to control labor costs and ensure worker discipline at franchised establishments. However, because franchisors do not directly set the wages or supervise the workers, they avoid the legal responsibilities of employment.

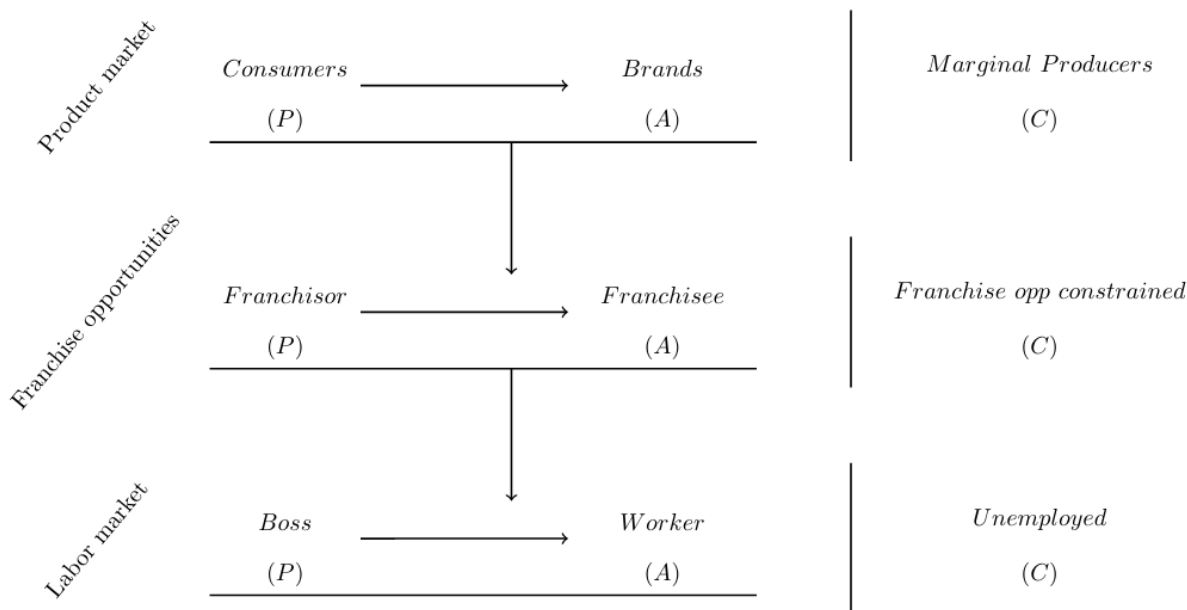
V. Trickle-Down Power: From Product Markets, to Franchise Opportunities, to Labor Markets

Schwartz (2020) argues that owners of intellectual property rights like trademarks sit atop the economy, earning monopoly rents from the product market while capturing additional profits from the labor market through vertical dis-integration strategies, including franchising and monopsonistic power over upstream suppliers. With regard to franchising, Schwartz argues, as this article does, that the business model "decapitates" the small business class, and turns small business owners into "ferocious advocates for labor repression" (Schwartz 2020, 16). The economic model presented in this article illustrates how that process works in detail. Product market power, linked to trademarked brand names, cascades downward to the market for franchise opportunities, and ultimately to the market for labor. Companies leverage that power to impose vertical restraints on franchisees that limit wages of workers at franchise establishments.

Figure 1 uses the notion of “short-side power,” the type of power that principals have over agents to whom they offer enforcement rents, and visually depicts how this three-part relationship between principals and agents works. Principals on the “short side” of the market, the side where the desired number of transactions is least, have power over their agents on the “long side” because they can restrict access to scarce resources. This means they can offer agents enforcement rents. Adapting Bowles’ (2006, 359) model of linked non-clearing markets to the franchising context, at each level of the diagram, demand for scarce resources results in queues of “quantity-constrained” individuals (would-be franchisees who cannot secure a contract with their preferred brand, unemployed workers willing to work at the going wage but unable to find jobs) who would like to contract at the going price but are unable to do so. At the same time, the presence of quantity-constrained individuals, who are unable to secure contracts, limits the bargaining position of long side agents.

Figure 1. Short-Side Power

P = short side principals, A = long side agents, C = quantity constrained



Short-side principals deploy enforcement rents to exercise power over the agents with whom they contract. In Figure 1, trademarked brands receive rents from the product market. Entrepreneurs without consumer-favored brand names are consigned to the status of marginal producers at the fringes of the product market. Down a level, in the market for franchise opportunities, franchisors, who are the brands on the long side at the higher level, exercise power over franchisees by their ability to control access to the brand. Unlike dispersed consumers, who are unable to credibly collectively withdraw rents to influence franchisor behavior, franchisors, as sole brand owners, are able to unilaterally deny franchisees access to product market rents and offer enforcement rents. Some of the franchisees in this second market may even be those excluded, or quantity-constrained, from the higher-level product market. (Recall the franchisee Richard Riggs, quoted above, who wanted his own doughnut shop but was forced to accept a franchise instead because of his inability to compete with

the Dunkin' Donuts brand under his own brand name.) As detailed above, vertical restraints in franchise contracts influence the franchisee's outside option and raise the value of the enforcement rent even further, allowing the franchisor to extract more effective effort for a given level of rent-sharing.

Finally, as principals, franchisees are the bosses in the labor market, one level down from the market for franchise opportunities. They have power over workers in the labor market, through their ability to control access to scarce jobs and impose costs on workers by firing them. Labor law, focused narrowly on employee status defined according to common-law notions of control rather than social scientific theories of power, confines itself to the bottom level only. The working conditions at the bottom, however, are determined several levels up, by franchisor corporations leveraging product market power to influence wage and working conditions at franchised establishments through vertical restraints.

While this article studies the impact of changes in antitrust law on workers, it departs from most recent literature on antitrust and workers by showing the effects on wages and working conditions through principal-agent labor discipline models rather than monopsony models (Ashenfelter and Krueger 2018; Azar, Marinescu, and Steinbaum 2020; Naidu, Posner, and Weyl 2018; Marinescu and Posner 2020). While monopsony models focus on the rents employers receive by paying workers below their marginal products, this article shifts the emphasis to the employers' ability to reduce the rents it offers workers to incentivize their effort. Both cases, however, represent a transfer from workers to employers and a reduction in wages.¹² In that respect, the analysis here follows Currie, Farsi, and MacLeod (2005), who find an effect of hospital mergers on worker effort but not on the sticky wages of unionized nurses.

VI. Conclusion

After negative publicity, investigations by several state attorneys general and pressure from US senators, several franchise chains announced an end to so-called no-poaching agreements in 2018. While eliminating these agreements removes a particularly blatant mechanism to restrain wages in franchise contracts, a closer look at vertical restraints in franchise contracts shows that franchisors' influence over labor costs and working conditions at franchised establishments goes far beyond no-poaching agreements. Through a simple economic model applied to a set of common contractual provisions in franchise agreements, this article shows that franchisors are, in a sense, co-employers who intimately shape employee working conditions—despite not being the payroll employer of those workers. Vertical restraints in franchise contracts function in part to reduce the bargaining position of

¹² While I do not discuss the effect of vertical restraints on whether workers are paid below their marginal product, marginal product is a normative concept of limited ethical value, since virtually no one is paid precisely their “just deserts” in the form of their exact marginal contribution to output. Rather, as Folbre (2016) argues, rents—payments above the bare minimum it would take a worker to accept a job, or a franchisee to accept a franchise contract—are ubiquitous throughout the economy. Weil's (2014) discussion of the fissured workplace argues that fissuring processes cause the loss of firm-specific and union rents that workers typically receive from the internal wage-setting process within firms. In their study of wages before and after outsourcing events, Goldschmidt and Schmieder (2017) show that outsourced workers do not immediately face wage declines, but rather suffer relative pay decline over time, due to being excluded from the annual raises that their former co-workers continued to receive. This suggests the harms from outsourcing flow from the end intra-firm rent-sharing, in addition to whatever monopsony effects are also operational.

both franchisees and workers, allowing franchisors to extract more labor effort from production workers, reducing unit labor costs, and raising profits for the franchisors.

At first glance, franchising appears to be an efficiency-enhancing business model because it aligns franchisee incentives with franchisors. Franchisees are incentivized to work hard because they keep the profits after the royalties are paid to the franchisor. Since franchisees share in the profits, they also get the benefit of their own hard work alongside the work of their employees. Franchising appears at this stage to be both fair and efficient. However, a close look at franchise contracts reveals that franchisors go beyond merely aligning incentives. They also make investments in bargaining power to reduce the bargaining position of franchisees, who raise their effort levels beyond what aligning incentives through profit sharing achieves on its own. By reducing what franchisees can earn outside the franchise relationship relative to within it, franchisors can induce franchisees to work even harder than they would have agreed to based on the value of the franchise alone prior to entering the contract. In this sense, franchisors extract not just high effort from franchisees, but also more effort than the franchisees bargained for. Rather than enhance efficiency by achieving more output per unit input, franchise contracts coerce extra input from the franchisee effort input.

Franchise contracts do more than extract extra effort from franchisees. The contracts also channel that extra effort in certain directions favored by the franchisor. Importantly for the efficiency implications of franchise contracts, franchisees typically do not directly produce output. Rather, they manage the workers who do. These workers are paid in wages, not profit shares, and they do not share in the proceeds of any additional effort they put into their jobs. Vertical restraints focus the attention and effort of franchisees on the control of labor costs. The more variables that are taken out of the franchisee's decision set, the more they must focus on labor cost as the variable they can control. Many franchisees operate under contracts where their prices and most of their nonlabor input costs are determined by the franchisor. The wage bill and extraction of worker effort become one of the few variables under their control to maximize their profits. Thus, franchise contracts loaded with vertical restraints squeeze effort from franchisees at the task of squeezing effort from production workers. While franchise contracts increase franchisor profits in efficiency-enhancing ways through aligning franchisee incentives with franchisors by achieving more output per unit input, these contracts also increase profits in nonefficient ways by squeezing additional (uncompensated) effort from the labor input.

Franchising in this context functions as a type of organizational surveillance and as a vehicle for labor discipline by franchisors, in which franchise contracts induce franchisees to surveil production workers and extract high levels of effort from them, reducing the investments in monitoring and/or wage premiums that franchisors would otherwise have to make to attract and motivate production workers. Yet because franchisors are not the legal employers of production workers, franchisors escape legal responsibility for their terms and conditions of employment.

The Department of Labor, the National Labor Relations Board, and the courts rely on formalistic legal definitions of “employer,” “employee,” and “joint employer” to determine who is protected by labor laws and who is responsible for wages and working conditions as an employer. Even the most expansive tests, such as the “ABC” test enshrined in California’s Assembly Bill 5,¹³ do not rely on

¹³ California Assembly Bill 5, 2019-2020 Legislature, 2019-2020 Session (Cal. 2019).

social scientific evidence on the extent to which vertical market power or vertical restraints allow powerful firms to set the terms of wages and working conditions offered by legally separate firms in their production networks. Perhaps it is time for courts and agencies to consider that social scientific evidence.¹⁴

REFERENCES

- Azar, José, Ioana Marinescu, and Marshall Steinbaum. 2020. "Concentration in US Labor Markets: Evidence from Online Vacancy Data." 66 *Labour Economics* 1018. <https://doi.org/10.1016/j.labeco.2020.101886>.
- Benartzi, Shlomo, and Richard H. Thaler. 1995. "Myopic Loss Aversion and the Equity Premium Puzzle." 110 *The Quarterly Journal of Economics* 73. <https://doi.org/10.2307/2118511>.
- Bender, John T. 2015. "Barking Up the Wrong Tree: The NLRB's Joint-Employer Standard and the Case for Preserving the Formalities of Business Format Franchising." 35 *Franchise Law Journal* 209.
- Birkeland, Peter M. 2002. *Franchising Dreams: The Lure of Entrepreneurship in America*. University of Chicago Press.
- Blair, Roger D., and Francine Lafontaine. 2010. *The Economics of Franchising*. Cambridge University Press.
- Bowles, Samuel. 1985. "The Production Process in a Competitive Economy: Walrasian, Neo-Hobbesian, and Marxian Models." 75 *American Economic Review* 16.
- Bowles, Samuel. 2004. *Microeconomics: Behavior, Institutions, and Evolution*. Princeton University Press.
- Bowles, Samuel, and Herbert Gintis. 2007. "Power." Working Paper 2007-03. University of Massachusetts, Amherst. https://scholarworks.umass.edu/econ_workingpaper/37.
- Burdett, Kenneth, and Dale T. Mortensen. 1998. "Wage Differentials, Employer Size, and Unemployment." 39 *International Economic Review* 257. <https://doi.org/10.2307/2527292>.
- Callaci, Brian. 2018. "Franchising as Power-Biased Organizational Change." Washington Center for Equitable Growth Working Paper Series, December 2018.
- Callaci, Brian. 2019. "Why Do Firms Impose Vertical Restraints? Evidence from Franchise Contracts." Political Economy Research Institute Working Paper 489.
- Callaci, Brian. 2021a. "Control Without Responsibility: The Legal Creation of Franchising, 1960–1980." 22 *Enterprise & Society* 156. <https://doi.org/10.1017/eso.2019.58>.

¹⁴ See Hafiz (2021) for another use of social scientific methods to determine the allocation of labor rights.

- Callaci, Brian. 2021b. "Puppet Entrepreneurship: Technology and Control in Franchised Industries." Data & Society Research Institute Report, January 2021. <https://datasociety.net/library/puppet-entrepreneurship>.
- Carmon, Ziv, and Dan Ariely. 2000. "Focusing on the Foregone: How Value Can Appear So Different to Buyers and Sellers." 27 *Journal of Consumer Research* 360. <https://doi.org/10.1086/317590>.
- Coase, Ronald H. 1937. "The Nature of the Firm." 4 *Economica* 386.
- Crotty, James R. 1992. "Neoclassical and Keynesian Approaches to the Theory of Investment." 14 *Journal of Post Keynesian Economics* 483. <https://doi.org/10.1080/01603477.1992.11489912>.
- Currie, Janet, Mehdi Farse, and W. Bentley MacLeod. 2005. "Cut to the Bone? Hospital Takeovers and Nurse Employment Contracts." 58 *Industrial and Labor Relations Review* 471. <https://doi.org/10.1177/001979390505800309>.
- DePillis, Lydia. 2014. "McDonald's Franchisee Says the Company Told Her 'Just Pay Your Employees Less.'" *Washington Post*, August 4, 2014. <https://www.washingtonpost.com/news/storyline/wp/2014/08/04/first-person-kathryn-slater-carter-the-franchise-owner-taking-on-mcdonalds>.
- Dnes, Antony W. 1993. "A Case-Study Analysis of Franchise Contracts." 22 *Journal of Legal Studies* 367. <https://doi.org/10.1086/468169>.
- Elmore, Andrew, and Kati Griffith. Forthcoming. "Franchisor Power as Employment Control." *California Law Review*.
- Felstead, Alan. 1993. *The Corporate Paradox: Power and Control in the Business Franchise*. Routledge.
- Fisk, Catherine L., and Deborah C. Malamud. 2009. "The NLRB in Administrative Law Exile: Problems with Its Structure and Function and Suggestions for Reform." 58 *Duke Law Journal* 2013.
- Folbre, Nancy. 2016. "Just Deserts? Earning Inequality and Bargaining Power in the U.S. Economy." Washington Center for Equitable Growth Working Paper Series, October 2016.
- Garden, Charlotte. 2015. "Toward Politically Stable NLRB Lawmaking: Rulemaking vs. Adjudication." 64 *Emory Law Journal* 1469.
- Goldschmidt, Deborah, and Johannes F. Schmieder. 2017. "The Rise of Domestic Outsourcing and the Evolution of the German Wage Structure." 132 *Quarterly Journal of Economics* 1165. <https://doi.org/10.1093/qje/qjx008>.
- Griffith, Kati. 2019. "An Empirical Study of Fast-Food Franchising Contracts: Towards a New 'Intermediary' Theory of Joint Employment." 94 *Washington Law Review* 171.
- Hadfield, Gillian. 1990. "Problematic Relations: Franchising and the Law of Incomplete Contracts." 42 *Stanford Law Review* 927. <https://doi.org/10.2307/1228908>.

Hafiz, Hiba. 2020. "Labor's Antitrust Paradox." 87 *University of Chicago Law Review* 381.

Hafiz, Hiba. 2021. "The Brand Defense." Boston College Law School Legal Studies Research Paper No. 548.

Hoch, Stephen, and George Loewenstein. 1991. "Time-Inconsistent Preferences and Consumer Self-Control." 17 *Journal of Consumer Research* 492. <https://doi.org/10.1086/208573>.

International Franchise Association. 1973. *Official Transcript: Sixth Annual Legal and Government Affairs Symposium*. International Franchise Association.

Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." 47 *Econometrica* 263. <https://doi.org/10.2307/1914185>.

Kahneman, Daniel, Jack Knetsch, and Richard Thaler. 1990. "Experimental Tests of the Endowment Effect and the Coase Theorem." 98 *Journal of Political Economy* 1325. <https://doi.org/10.1086/261737>.

Kaufmann, Patrick J., and Francine Lafontaine. 1994. "Costs of Control: The Source of Economic Rents for McDonald's Franchisees." 37 *Journal of Law & Economics* 417. <https://doi.org/10.1086/467319>.

Ji, MinWoong, and David Weil. 2015. "The Impact of Franchising on Labor Standards Compliance." 68 *ILR Review* 977. <https://doi.org/10.1177/0019793915586384>.

Krueger, Alan B. 1991. "Ownership, Agency and Wages: An Examination of Franchising in the Fast Food Industry." 106 *Quarterly Journal of Economics* 65. <https://doi.org/10.2307/2937907>.

Krueger, Alan B., and Orley Ashenfelter. 2018. "Theory and Evidence on Employer Collusion in the Franchise Sector." NBER Working Paper No. 24831. <https://www.nber.org/papers/w24831>.

Lafontaine, Francine, and Sugato Bhattacharya. 1995. "The Role of Risk in Franchising." 2 *Journal of Corporate Finance* 39. [https://doi.org/10.1016/0929-1199\(95\)00004-R](https://doi.org/10.1016/0929-1199(95)00004-R).

Lafontaine, Francine, and Jagadeesh Sivadasan. 2009. "Do Labor Market Rigidities Have Microeconomic Effects? Evidence from Within the Firm." 1 *American Economic Journal: Applied Economics* 88. <https://doi.org/10.1257/app.1.2.88>.

Lafontaine, Francine, and Margaret E. Slade. 1997. "Retail Contracting: Theory and Practice." 41 *Journal of Industrial Economics* 1. <https://doi.org/10.1111/1467-6451.00032>.

Levin, Irwin, Judy Schreiber, Marco Lauriola, and Gary Gaeth. 2002. "A Tale of Two Pizzas: Building Up from a Basic Product Versus Scaling Down from a Fully-Loaded Product." 13 *Marketing Letters* 335. <https://doi.org/10.1023/A:1020370516638>.

Levy, Karen, and Solon Barocas. 2018. "Refractive Surveillance: Monitoring Customers to Manage Workers." 13 *International Journal of Communication* 1166.

Linder, Marc. 1990. "The Joint Employer Doctrine: Clarifying Joint Legislative-Judicial Confusion." 13 *Workers Compensation Law Review* 453.

Manning, Alan. 2003. *Monopsony in Motion: Imperfect Competition in Labor Markets*. Princeton University Press.

Marglin, Stephen A. 1974. "What Do Bosses Do? The Origins and Function of Hierarchy in Capitalist Production." 6 *Review of Radical Political Economics* 60.
<https://doi.org/10.1177/048661347400600206>.

Marinescu, Ioana, and Eric A. Posner. 2020. "Has Antitrust Law Failed Workers?" 105 *Cornell Law Review* 1343.

Mathewson, G. Frank, and Ralph A. Winter. 1985. "The Economics of Franchise Contracts." 28 *Journal of Law & Economics* 503. <https://doi.org/10.1086/467099>.

Naidu, Suresh, Eric A. Posner, and Glen Weyl. 2018. "Antitrust Remedies for Labor Market Power." 132 *Harvard Law Review* 536.

Naidu, Suresh, and Noam Yuchtman. 2013. "Coercive Contract Enforcement: Law and the Labor Market in Nineteenth Century Industrial Britain." 103 *American Economic Review* 107.
<https://doi.org/10.1257/aer.103.1.107>.

Norton, Seth W. 1988. "Franchising, Brand Name Capital, and the Entrepreneurial Capacity Problem." 9 *Strategic Management Journal* 105. <https://doi.org/10.1002/smj.4250090711>.

Novemsky, Nathan, and Daniel Kahneman. 2005. "The Boundaries of Loss Aversion." 42 *Journal of Marketing Research* 119. <https://doi.org/10.1509/jmkr.42.2.119.62292>.

Paul, Sanjukta. 2020. "Antitrust as Allocator of Coordination Rights." 67 *UCLA Law Review* 378.

Prendergast, Canice. 2002. "The Tenuous Tradeoff Between Risk and Incentives." 110 *Journal of Political Economy* 1071. <https://doi.org/10.1086/341874>.

Robinson, Joan. (1936) 1969. *The Economics of Imperfect Competition*. Palgrave.

Rogers, Brishen. 2020. "The Law and Political Economy of Workplace Technological Change." 55 *Harvard Civil Rights-Civil Liberties Law Review* 531.

Rubin, Paul H. 1978. "The Theory of the Firm and the Structure of the Franchise Contract." 21 *Journal of Law & Economics* 223. <https://doi.org/10.1086/466918>.

Schubert, Gregor, Anna Stansbury, and Bledi Taska. 2020. "Monopsony and Outside Options." Working Paper.
https://scholar.harvard.edu/files/stansbury/files/monopsony_and_outside_options_schubert_stansbury_taska.pdf.

Schwartz, Herman M. (2020). "Intellectual Property, Technocrats and the Labour Share of Production." *Competition & Change*. <https://doi.org/10.1177/1024529420968221>.

Sen, Sankar, and Eric Johnson. 1997. "Mere-Possession Effects Without Possession in Consumer Choice." 24 *Journal of Consumer Research* 105. <https://doi.org/10.1086/209497>.

Shapiro, Carl, and Joseph E. Stiglitz. 1984. "Equilibrium Unemployment as a Worker Discipline Device." 74 *American Economic Review* 433.

Simon, Herbert. 1956. "Rational Choice and the Structure of the Environment." 63 *Psychological Review* 129. <https://doi.org/10.1037/h0042769>.

Skott, Peter, and Frederick Guy. 2007. "A Model of Power-Biased Technological Change." 95 *Economics Letters* 124. <https://doi.org/10.1016/j.econlet.2006.09.023>.

Sokol, D. Daniel. 2014. "The Transformation of Vertical Restraints: Per Se Illegality, the Rule of Reason, and Per Se Legality." 79 *Antitrust Law Journal* 1003.

Steinfeld, Robert J. 1991. *The Invention of Free Labor: The Employment Relation in English and American Law and Culture, 1350-1870*. University of North Carolina Press.

Strahilevitz, Michal A., and George Loewenstein. 1998. "The Effect of Ownership History on the Valuation of Objects." 25 *Journal of Consumer Research* 276. <https://doi.org/10.1086/209539>.

Thaler, Richard. 1980. "Toward a Positive Theory of Consumer Choice." 1 *Journal of Economic Behavior and Organization* 36. [https://doi.org/10.1016/0167-2681\(80\)90051-7](https://doi.org/10.1016/0167-2681(80)90051-7).

Tversky, Amos, and Daniel Kahneman. 1991. "Loss Aversion in Riskless Choice: A Reference-Dependent Model." 106 *Quarterly Journal of Economics* 1039. <https://doi.org/10.2307/2937956>.

US Census Bureau. 2012. *Economic Census: Core Business Statistics Series: Franchise Status for Selected Industries and States*. Retrieved from: <https://www.census.gov/data/datasets/2012/econ/census/2012-core-reports.html>.

Weil, David. 2014. *The Fissured Workplace: How Work Became So Bad for So Many and What Can Be Done to Improve It*. Harvard University Press.

Wilmers, Nathan. 2018. "Wage Stagnation and Buyer Power: How Buyer-Supplier Relations Affect U.S. Workers' Wages, 1978 to 2014." 83 *American Sociological Review* 213. <https://doi.org/10.1177/0003122418762441>.

Appendix 1: Formal Model

Franchising is a two-level principal-agent problem. In the first level, franchisors face franchisees to whom they have outsourced labor management and discipline, and from whom they wish to extract effort. Franchisors structure the incentives of franchisees with vertical restraints so that franchisee income is a function of the franchisee's operating costs and the effort levels of the production workers that the franchisee employs. The model here adapts the "efficiency wage" principal-agent models developed by Bowles (1985) and Shapiro and Stiglitz (1984) to the franchising context.

A. Level One: Franchisor-Franchisee

At the first-level principal-agent problem, franchisor profits are represented by the equation:

$$\pi = s[y(ne(m, w, s; h)) - n(m + w)] \quad (1)$$

In this model, s is the royalty rate, representing the franchisor's share of profits ($1 - s$ is therefore the share left to franchisees).¹⁵ Revenues, y , are a function of the number of franchisees, n , and the effort of each franchisee, e . The model assumes identical franchisees. Effort is in turn a function of the level of franchisor monitoring of franchisees, m , operating costs (including wages), w , the franchisor's profit share, s and the franchisee's outside option, which the franchisee cannot influence and therefore takes as exogenous, h . $e_m > 0$ (increased monitoring increases franchisee effort), $e_w < 0$ (higher costs lower franchisee returns to effort) and $e_s < 0$ (franchisees have weaker incentives to exert effort when the franchisor's profit share is high). The cost side of the profit equation contains the number of outlets times the monitoring costs m and operating costs w .

Franchisors vary n , m , w , and s to maximize profits. Franchisor first order conditions are given by:

$$y' = \frac{m+w}{e} \quad (2.1)$$

$$\frac{e}{m+w} = e_m = e_w \quad (2.2)$$

$$\frac{e}{sy} = e_s \quad (2.3)$$

(2.1) states that the marginal product of franchisee effort equals the unit cost of extracting that effort. (2.2) states that the marginal effect of variations in the level of monitoring and operating costs equals the average level of effort obtained per dollar of expenditures. (2.3) states that the marginal impact on effort of varying the franchisor's profit share equals the average level of effort per dollar obtained in revenue. Profitability is increased when monitoring costs or operating costs fall. Because franchisors and franchisees share the profits resulting from franchisee effort, franchisors benefit from low franchise-level operating costs, including low wages. Franchisor profitability's relationship to the profit

¹⁵ In practice, most franchisors charge a royalty on revenues rather than profits, because profits are considered too easy for franchisees to manipulate. For analytical convenience, I have set up a profit-sharing rather than revenue-sharing model. In practice the profit-sharing model remains apt because franchisors and franchisees split the surplus from franchisee unit operations in a revenue sharing contract.

share parameter is ambiguous: a higher franchisor profit share directly benefits franchisors in terms of a greater share of profits, but at the cost of decreasing franchisee effort, which lowers the revenues available for sharing between franchisors and franchisees.

Franchisees, meanwhile, determine their effort levels by maximizing the objective function U , which is known to franchisors. Franchisors cannot directly observe effort levels, however.

$$U = (1 - t(e))v(e) + t(e)h(a, \bar{y}, \lambda) \quad (3)$$

In this equation, $t(e)$ represents the termination function, capturing the effect of effort on the probability of the franchisee being terminated for lack of effort and reverting to his or her outside option. Greater effort reduces the likelihood of termination, so $t' < 0$. The function $v(e)$ describes the value of the franchise license to the franchisee.¹⁶ $v(e)$ is increasing and concave, $v' > 0$, $v'' < 0$, for two reasons. The value of the franchise to the franchisee is the income it allows them to enjoy. The value of the franchise is increasing in effort, but the franchisee experiences a declining marginal utility of income and wealth derived from the franchised business it has built up. Second, effort carries a disutility, and disutility increases at an accelerating rate at higher levels of effort. Finally, $h(a, \bar{y}, \lambda)$ represents the franchisee's outside option, which is a function of the value of the franchisee's assets outside the franchise relationship, a , the franchisee's expected income outside the franchise relationship, \bar{y} , and the probability of finding income-generating activity outside the franchise relationship, λ . Franchisees vary effort to maximize utility, taking their outside option as exogenous, giving the following first order condition:

$$v_e = t_e \frac{h-v}{1-t} \quad (4)$$

That is, starting at a high level of effort, franchisees decrease effort until the marginal utility of effort (reflecting both increased income from effort and disutility of effort) just equals the marginal effect of decreasing effort on the expected value of the outside option as weighted by the probability of termination. One way franchisors can raise profits is by internalizing externalities through monitoring and enforcement rents, and aligning incentives with franchisors through residual claimancy. This raises profits through improvements in efficiency.

As is shown in the body of the article, however, franchisors go beyond these efficiency-enhancing exercises of power, however. From equations (3) and (4) above, we see that franchisors can increase franchisee effort by decreasing the franchisee outside option, $h(a, \bar{y}, \lambda)$. By a reasonable assumption, the franchisee outside option is increasing in franchisee assets a and expected income \bar{y} outside the franchise relationship, and also increasing in the probability of finding income-generating economy activity outside the franchise relationship λ . Interventions that reduce the outside option shift the franchisee's effort function inward, which, through the franchisor's first order conditions (2.1) - (2.3), increases franchisor profits.

¹⁶ A more explicit function for v is:

$$v = v\left(\frac{1-s}{n}\pi(e, m, w, s), d(e)\right) \quad (4)$$

Franchisee income, $\frac{1-s}{n}\pi$ is the franchisee's share of profits, and d is the franchisee's disutility of effort.

In general, sunk investments mean that v increases over time, shifting the v function and raising the value of v for all levels of e . This in turn raises the cost to the franchisee of losing the franchise— $(b-v) = (v-b)$ —increasing franchisor power. More specifically, loss aversion and adaption to franchise ownership would enter the model through changes to the franchisee's valuation of the franchise license, v . Loss aversion means there is a slope discontinuity in v (as a function of ownership of the franchise, x , rather than effort, e) at the status quo, which forms the franchisee's reference point, r . The function is upward sloping throughout but concave to the right of r , and convex to the left. Prior to owning the franchise, the reference point is zero. The franchisee receives a positive value, $v(x)$ if it receives a franchise, and a neutral value, $v(0) = 0$, if not. However, after receiving the franchise, possession is the status quo and the function v shifts to the right. If the franchisee fully adapts to the status quo, $r = x$. The franchisee is now neutral towards keeping the franchise $v(x-r) = v(0) = 0$, but experiences the removal of the franchise as a loss $v(0-r) = v(-r) = v(-x)$. Short of the extreme of full adaptation, the value of owning the franchise is a monotonic, increasing function of the extent to which the franchisee has adapted to possession, r . As adaption increases with time, the loss of the franchise x is experienced as more of a loss, raising the cost of losing the franchise. The franchisor's enforcement rent thus increases with the duration of the franchisee's ownership of the franchise.

Vertical restraints, meanwhile, increase franchisor power over franchisees through three channels. Franchisors lower the value of the franchisee's assets (a) and income \bar{y} and income outside the franchise relationship through the mandatory arbitration, choice of forum, right of first refusal, right to purchase, obligation to operate, personal guarantee, spousal guarantee, and independent bank account access clauses, leaving the franchisee with lower-valued assets outside the franchise relationship. The non-compete clause raises the expected duration of time before the franchise can earn income again, $\frac{1}{\lambda}$, and reduces the value of the franchisee's human capital a by temporarily prohibiting continued employment in the industry in which he or she has developed skills. Finally, the franchisor's remote, independent access to franchisee data increases the effectiveness of franchisor monitoring, raising the sensitivity of the termination function $t(e)$ to franchisee effort. Increases in monitoring effectiveness reduce the size of the enforcement rent necessary to induce a given level of effort from franchisees. By reducing the franchisee's outside option, franchisors can induce franchisees to work harder, raising output and franchisor profits. The extra output is not a genuine productivity increase, because output has not increased per unit input. Rather, the franchisee effort input has been squeezed into producing additional units of that input.

Under large numbers of vertical restraints that remove franchisee discretion over suppliers, prices, hours, and the like, moreover, franchisee income becomes increasingly a function of a single choice variable under their own control: the wage levels and effort of the workers they supervise. This brings us to the second-level principal-agent problem in franchising. After the franchisee-franchisee level discussed above, we have to consider the franchisee-worker level.

B. Level Two: Franchisee-Worker

The franchisee's income function looks very similar to the franchisor's profit function in equation (1). The key difference is that the franchisee-worker contract is not a profit-sharing agreement, but a wage contract, so there is no profit share parameter. Thus the franchisee-worker principal-agent model is simply the efficiency wage model developed by Bowles (1985) and Shapiro and Stiglitz (1984):

$$I = (1 - s)Y(n^l e^l(m^l, \bar{w}^l; h^l)) - n^l(m^l + \bar{w}^l) \quad (5)$$

In this model, I is the franchisee's income, and $(1-s)$ is the franchisee's share of revenues. Y is the revenues of the establishment the franchisee operates, a function of the number of workers the franchisee has hired, n^l , and the effort of each worker, e^l . Worker effort is a function of the level of franchisee monitoring of workers, m^l , worker wages, \bar{w}^l , and the worker's outside option, h^l . All workers are assumed identical. Franchisees vary n^l , m^l , and \bar{w}^l , to maximize I . Franchisee first order conditions are given by:

$$Y' = \frac{m^l + \bar{w}^l}{e} \quad (6.1)$$

$$\frac{e^l}{m^l + \bar{w}^l} = e_m^l = e_m^l \quad (6.2)$$

(6.1) states that the marginal product of worker effort equals the unit cost of effort. (6.2) states that the marginal effect of variations in the level of monitoring and operating costs equals the average level of worker effort per dollar of expenditures.

Workers, meanwhile, determine their effort levels by maximizing the objective function U^l , which is just a reproduction of the franchisee's objective function in equation (3) with superscripts indicating that this is the worker's objective function.

$$U^l = (1 - t^l(e^l))v^l(e^l) + t^l(e^l)h^l(a^l, \bar{y}^l, \lambda^l) \quad (7)$$

Similar to the franchisee's objective function in the first-level principal-agent problem, the partial derivative of worker effort is positive with respect to both wages and monitoring. Higher wages mean a higher enforcement rent given the worker's outside option, and higher levels of monitoring raise effort levels by reducing the ability of the worker to shirk without detection. All first and second partial derivatives are the same as the franchisee's objective function in equation (3). Unlike the franchisee's objective function, however, franchisee income is not a profit share but a fixed wage and does not vary with effort. Finally, $h^l(a^l, \bar{y}^l, \lambda^l)$ represents the worker's outside option. Workers vary effort to maximize utility, taking their outside option as exogenous, giving the following first order condition:

$$v_e^l = t_e^l \frac{h^l - v^l}{1 - t^l} \quad (8)$$

That is, starting at a high level of effort, workers decrease effort until the marginal utility of effort (reflecting both increased income from effort and disutility of effort) just equals the marginal effect of decreasing effort on the expected value of the outside option as weighted by the probability of termination.

Higher worker effort raises output, which raises the profits shared between franchisors and franchisees. In principle, worker effort could be increased through 1) raising the enforcement rent by raising wages, 2) increasing the sensitivity of the termination function to effort through improved monitoring, or 3) lowering the worker's outside option. We have seen that, at least in the case of McDonald's, the franchisor discourages raising wages. By imposing vertical restraints that remove franchisee discretion over variables that contribute to profitability like site selection, suppliers, prices, hours of operation, and products, franchisors focus franchisees on labor monitoring and discipline.

This improves monitoring and increases the sensitivity of the termination function, lowering the enforcement rent and therefore worker wages. Vertical restraints that increase the franchisee's incentives to surveil workers function in this model just like information technology in the Skott and Guy (2007) model of power-biased technological change—by increasing the sensitivity of the termination function. Finally, by restricting the ability of workers to find alternative employment through the no-poaching vertical restraint, franchisors directly lower the outside option of workers they claim not to employ. Reducing the value of the workers' outside option increases worker effort per unit of wages. (It also increases labor supply to the firm, but that affects wages through the monopsony rather than the labor discipline/efficiency wage channel modeled here.)

Finally, recall that workers, unlike franchisees, are not residual claimants. Therefore, when franchisors lower the cost of monitoring by incentivizing franchisees, through high-powered residual claimancy incentives and vertical restraints, to exert high effort levels at monitoring, the extra effort from wage workers is uncompensated, as the rent the worker would have received vanishes. Franchisors and franchisees both benefit from intensified production worker effort, while production workers alone bear the costs of their effort. Once again, there is no technical efficiency increase. Wage workers are merely being squeezed into supplying additional inputs of effort.

Appendix 2: List of Franchisees

Franchise	Industry
Handyman Matters	Construction
Kitchen Tune Up	Construction
Mr. Handyman	Construction
Mr. Sandless	Construction
Pistor (Miracle Method Surface Refinishing)	Construction
Synergistic International (Glass Doctor)	Construction
Window World	Construction
Mister Sparky	Construction
AdvantaClean Standard	Construction
ABM Line Service	Construction
Aire Serv	Construction
American Leak	Construction
Ben Franklin's	Construction
Ducts	Construction
Mr. Rooter	Construction
One Hour Air	Construction
Rooter Man	Construction
Roto Rooter	Construction
Sears Air Duct	Construction
ACFN	Construction
Culligan	Construction
Filta	Construction
101 Mobility	Construction
Watermills	Construction
CertaPro Painters	Construction
College Pro Painters	Construction
Five Star Painting	Construction
Fresh Cost	Construction
Screen Mobile	Construction

Sears Handyman	Construction
Shelf Genie	Construction
Budget Blinds	Construction
California Closets	Construction
Jet Black Seal Cost	Construction
Dealer Specialties	Manufacturing
Embroid Me	Manufacturing
Natural Awakenings	Manufacturing
Allegra Network	Manufacturing
Alpha Graphics	Manufacturing
Image 360	Manufacturing
Minuteman Press	Manufacturing
Speed Pro	Manufacturing
Fast Signs	Manufacturing
Signarama	Manufacturing
Signs Now	Manufacturing
1-800-Radiator	Wholesale Trade
Leading Edge Manufacturing	Wholesale Trade
Aunt Millie's	Wholesale Trade
Bimbo Foods	Wholesale Trade
Earth Grains	Wholesale Trade
JD Byrider	Retail Trade
Big O Tires	Retail Trade
Bridgestone	Retail Trade
Tire Pros	Retail Trade
Winzer	Retail Trade
Relax the Back	Retail Trade
Aaron's	Retail Trade
Slumberland	Retail Trade
Abbey Carpet	Retail Trade
Floor Coverings	Retail Trade
Floors to Go	Retail Trade

Fast Frame	Retail Trade
Franchise Concepts (Deck the Walls)	Retail Trade
Aerus	Retail Trade
Batteries Plus	Retail Trade
Interstate Batteries	Retail Trade
Wireless Zone	Retail Trade
Zagg	Retail Trade
reBath	Retail Trade
Rocky Mountain Chocolate	Retail Trade
Dream Dinners	Retail Trade
Amerisource Bergen	Retail Trade
HealthMart	Retail Trade
MediCap	Retail Trade
Merle Norman	Retail Trade
Complete Nutrition	Retail Trade
GNC	Retail Trade
More Muscle	Retail Trade
Miracle Ear	Retail Trade
Zounds	Retail Trade
7-Eleven	Retail Trade
Circle K	Retail Trade
Super America	Retail Trade
Flip Flop	Retail Trade
Good Feet	Retail Trade
Pandora	Retail Trade
Fleet Feet	Retail Trade
Pro Image	Retail Trade
Hobby Town	Retail Trade
Learning Express	Retail Trade
1-800-Flowers	Retail Trade
Flowerama	Retail Trade
Halloween Express	Retail Trade

Clothes Mentor	Retail Trade
Just Between Friends	Retail Trade
Kid to Kid	Retail Trade
Once Upon A Child	Retail Trade
Plato's Closet	Retail Trade
Play it Again	Retail Trade
Pet Supplies Plus	Retail Trade
Wild Birds	Retail Trade
Crown Trophy	Retail Trade
Fresh Healthy Vending	Retail Trade
Dental Fix	Retail Trade
Mac Tools	Retail Trade
SnapOn Tools	Retail Trade
Two Men	Retail Trade
Coffee News	Finance & Insurance
Ameriprise	Finance & Insurance
Charles Schwab	Finance & Insurance
Brightway Insurance	Finance & Insurance
Fiesta Insurance	Finance & Insurance
Frontier Adjusters	Finance & Insurance
Go Minis	Real Estate & Rental & Leasing
Better Homes	Real Estate & Rental & Leasing
Berkshire Hathaway Home Services	Real Estate & Rental & Leasing
Century 21	Real Estate & Rental & Leasing
Coldwell Banker	Real Estate & Rental & Leasing
Era Franchise	Real Estate & Rental & Leasing
HomeSmart	Real Estate & Rental & Leasing
HomeVestors	Real Estate & Rental & Leasing
Newpoint	Real Estate & Rental & Leasing
Real Living	Real Estate & Rental & Leasing
Realty Executives	Real Estate & Rental & Leasing
ReMax	Real Estate & Rental & Leasing

Sotheby's	Real Estate & Rental & Leasing
Sperry Van Ness	Real Estate & Rental & Leasing
United Country	Real Estate & Rental & Leasing
Weichert Real Estate	Real Estate & Rental & Leasing
Property Damage Appraisers	Real Estate & Rental & Leasing
Avis	Real Estate & Rental & Leasing
Budget	Real Estate & Rental & Leasing
Dollar	Real Estate & Rental & Leasing
Hertz	Real Estate & Rental & Leasing
Paccar	Real Estate & Rental & Leasing
Payless	Real Estate & Rental & Leasing
Rent-A-Wreck	Real Estate & Rental & Leasing
Thrifty	Real Estate & Rental & Leasing
True Value Rentals	Real Estate & Rental & Leasing
H&R Block	Professional & Technical Services
Jackson Hewitt	Professional & Technical Services
Liberty Tax	Professional & Technical Services
Siempre Tax	Professional & Technical Services
Amerispec	Professional & Technical Services
Home Team Inspections	Professional & Technical Services
House Master	Professional & Technical Services
Inspect It 1 st	Professional & Technical Services
National Property Inspections	Professional & Technical Services
World Inspection	Professional & Technical Services
Decorating Den	Professional & Technical Services
CMIT Solutions	Professional & Technical Services
Computer Troubleshooters	Professional & Technical Services
Action Coach	Professional & Technical Services
BNI	Professional & Technical Services
Dale Carnegie	Professional & Technical Services
Entrepreneur's Choice	Professional & Technical Services
Expense Reduction Analysts	Professional & Technical Services

Focal Point Business Coach	Professional & Technical Services
Leadership Management	Professional & Technical Services
TAB Boards	Professional & Technical Services
Transworld Business Advisors	Professional & Technical Services
Murphy Financial	Professional & Technical Services
Adventures in Advertising	Professional & Technical Services
National Internet	Professional & Technical Services
Discovery Map	Professional & Technical Services
Money Mailer	Professional & Technical Services
Tap Snap	Professional & Technical Services
TSS Photography	Professional & Technical Services
SCA Appraisal	Professional & Technical Services
Global Recruiters	Professional & Technical Services
Management Recruiters	Professional & Technical Services
College Nannies	Professional & Technical Services
Express Services	Professional & Technical Services
Interim Healthcare	Professional & Technical Services
Labor Finders	Professional & Technical Services
Spherion	Professional & Technical Services
PakMail Centers	Professional & Technical Services
Postal Annex	Professional & Technical Services
Postnet	Professional & Technical Services
Unishippers	Professional & Technical Services
UPS Store	Professional & Technical Services
Worldwide Express	Professional & Technical Services
Caring Transitions	Professional & Technical Services
American Express	Professional & Technical Services
Cruise One	Professional & Technical Services
Cruise Planners	Professional & Technical Services
Results Tavel	Professional & Technical Services
Travel Leaders	Professional & Technical Services
Signal 88	Administrative & Waste Services

Pop-A-Lock	Administrative & Waste Services
Critter Control	Administrative & Waste Services
Mosquito One	Administrative & Waste Services
Mosquito Squad	Administrative & Waste Services
Coverall	Administrative & Waste Services
Duraclean	Administrative & Waste Services
JaniKing	Administrative & Waste Services
JanPro	Administrative & Waste Services
Maid Brigade	Administrative & Waste Services
Maid Pro	Administrative & Waste Services
Maids International	Administrative & Waste Services
Mint Condition	Administrative & Waste Services
Molly Maid	Administrative & Waste Services
Office Pride	Administrative & Waste Services
Pro One	Administrative & Waste Services
Servpro	Administrative & Waste Services
The Clean Authority	Administrative & Waste Services
Fish Window	Administrative & Waste Services
For Franchising	Administrative & Waste Services
Grounds Guys	Administrative & Waste Services
Lawn Doctor	Administrative & Waste Services
Scotts Lawn	Administrative & Waste Services
Spring Green	Administrative & Waste Services
US Lawns	Administrative & Waste Services
Chem Dry	Administrative & Waste Services
Oxi Fresh	Administrative & Waste Services
Searts Carpet	Administrative & Waste Services
Stanley Steamer	Administrative & Waste Services
Nhance	Administrative & Waste Services
Décor Group	Administrative & Waste Services
1-800 Got Junk	Administrative & Waste Services
Disaster Kleenup	Administrative & Waste Services

Green Home Solutions	Administrative & Waste Services
Pau Davis Restoration	Administrative & Waste Services
Rainbow Restoration	Administrative & Waste Services
Eye Level	Education Services
Arthur Murray	Educational Services
Dance Works	Educational Services
Pinot's Palette	Educational Services
Club Z	Educational Services
Huntington Learning Center	Educational Services
Kumon	Educational Services
Mathnasium	Educational Services
Sylvan Education	Educational Services
Tutor Doctor	Educational Services
Engineering for Kids	Educational Services
Painting With a Twist	Educational Services
School of Rock	Educational Services
Young Rembrandt's	Educational Services
My Gym	Educational Services
Stroller Strides	Educational Services
Mad Scientist Group	Educational Services
Smile Source	Health Care & Social Assistance
Healthsource	Health Care & Social Assistance
Joint Corp	Health Care & Social Assistance
Maximized Living	Health Care & Social Assistance
Pearl Vision	Health Care & Social Assistance
Vision Source	Health Care & Social Assistance
Vision Trends	Health Care & Social Assistance
Fyzical	Health Care & Social Assistance
AFC Health	Health Care & Social Assistance
Any Test	Health Care & Social Assistance
Arc Point	Health Care & Social Assistance
Body and Brain	Health Care & Social Assistance

ActiKare	Health Care & Social Assistance
Assisting Hands	Health Care & Social Assistance
Bright Star	Health Care & Social Assistance
Comfort Seekers	Health Care & Social Assistance
ComforCare	Health Care & Social Assistance
First Light	Health Care & Social Assistance
Home Care Assistants	Health Care & Social Assistance
Home Helper	Health Care & Social Assistance
Home Instead	Health Care & Social Assistance
Home Watch	Health Care & Social Assistance
Living Assistance	Health Care & Social Assistance
Right at Home	Health Care & Social Assistance
Senior Helpers	Health Care & Social Assistance
Synergy Homecare	Health Care & Social Assistance
Care Patrol	Health Care & Social Assistance
Goddard School	Health Care & Social Assistance
Kiddie Academy	Health Care & Social Assistance
Pump it Up	Arts, Entertainment, & Recreation
Anytime Fitness	Arts, Entertainment, & Recreation
Crunch	Arts, Entertainment, & Recreation
Curves	Arts, Entertainment, & Recreation
Fit Body Boot Camp	Arts, Entertainment, & Recreation
Fitness Together	Arts, Entertainment, & Recreation
Gold's Gym	Arts, Entertainment, & Recreation
iLoveKickBoxing	Arts, Entertainment, & Recreation
Jazzercise	Arts, Entertainment, & Recreation
Little Gym	Arts, Entertainment, & Recreation
Nine Round	Arts, Entertainment, & Recreation
Paris Speed School	Arts, Entertainment, & Recreation
Planet Fitness	Arts, Entertainment, & Recreation
Pure Barre	Arts, Entertainment, & Recreation
Retro Fitness	Arts, Entertainment, & Recreation

SkyZone	Arts, Entertainment, & Recreation
Snap Fitness	Arts, Entertainment, & Recreation
TBC	Arts, Entertainment, & Recreation
The Bar Method	Arts, Entertainment, & Recreation
Tiger Martial Arts	Arts, Entertainment, & Recreation
UFC Gym	Arts, Entertainment, & Recreation
Ultimate Fitness	Arts, Entertainment, & Recreation
Workout Anytime	Arts, Entertainment, & Recreation
World Gym	Arts, Entertainment, & Recreation
xPress	Arts, Entertainment, & Recreation
Amazing Athletes	Arts, Entertainment, & Recreation
i9 Sports	Arts, Entertainment, & Recreation
Skyhawks	Arts, Entertainment, & Recreation
United Soccer Leagues	Arts, Entertainment, & Recreation
AmericInn	Accommodation & Food Services
Ascend Hotels	Accommodation & Food Services
Baymont Inn	Accommodation & Food Services
Candlewood Suites	Accommodation & Food Services
Clarion Hotels	Accommodation & Food Services
Comfort Inn	Accommodation & Food Services
Country Inn	Accommodation & Food Services
Days Inn	Accommodation & Food Services
Doubletree Hotel	Accommodation & Food Services
Econo Lodge	Accommodation & Food Services
Embassy Suites	Accommodation & Food Services
Four Points	Accommodation & Food Services
Hampton Inn	Accommodation & Food Services
Hawthorne Hotels	Accommodation & Food Services
Hilton Garden Inn	Accommodation & Food Services
Hilton Hotels	Accommodation & Food Services
Holiday Inn	Accommodation & Food Services
Homewood Suites	Accommodation & Food Services

Hospitality International	Accommodation & Food Services
Howard Johnson's	Accommodation & Food Services
Hyatt Place	Accommodation & Food Services
Knights Inn	Accommodation & Food Services
La Quinta Inn	Accommodation & Food Services
Microtel	Accommodation & Food Services
Motel 6	Accommodation & Food Services
Quality Inn	Accommodation & Food Services
Radisson	Accommodation & Food Services
Ramada	Accommodation & Food Services
Red Roof Inn	Accommodation & Food Services
Rodeway Inn	Accommodation & Food Services
Sleep Inn	Accommodation & Food Services
Staybridge	Accommodation & Food Services
Studio 6	Accommodation & Food Services
Super 8	Accommodation & Food Services
The Sheraton	Accommodation & Food Services
Travelodge	Accommodation & Food Services
Value Place	Accommodation & Food Services
Westin	Accommodation & Food Services
Wingate	Accommodation & Food Services
Kampgrounds of America	Accommodation & Food Services
Applebee's	Accommodation & Food Services
Bar Louie	Accommodation & Food Services
Beef O'Brady	Accommodation & Food Services
Buffalo Wild Wings	Accommodation & Food Services
Chili's	Accommodation & Food Services
Denny's	Accommodation & Food Services
Famous Dave's	Accommodation & Food Services
Fuddruckers	Accommodation & Food Services
Golden Corral	Accommodation & Food Services
Hooters	Accommodation & Food Services

Huddle House	Accommodation & Food Services
iHop	Accommodation & Food Services
Johnny Rockets	Accommodation & Food Services
Mellow Mushroom	Accommodation & Food Services
Melting Pot	Accommodation & Food Services
Noodles and Co	Accommodation & Food Services
Old Chicago	Accommodation & Food Services
Perkins	Accommodation & Food Services
Pizza Hut	Accommodation & Food Services
Pizza Ranch	Accommodation & Food Services
Pizzeria Uno	Accommodation & Food Services
Ponderosa	Accommodation & Food Services
Rositi's	Accommodation & Food Services
Ruth's Chris	Accommodation & Food Services
Shoney's	Accommodation & Food Services
Texas Roadhouse	Accommodation & Food Services
TGI Friday's	Accommodation & Food Services
Tilted Kilt	Accommodation & Food Services
Village Inn	Accommodation & Food Services
A & W	Accommodation & Food Services
Arby's	Accommodation & Food Services
Baja Fresh	Accommodation & Food Services
Blaze Pizza	Accommodation & Food Services
Blimpie	Accommodation & Food Services
Bojangles	Accommodation & Food Services
Burger King	Accommodation & Food Services
Capriotti's	Accommodation & Food Services
Captain D's	Accommodation & Food Services
Carl's Jr.	Accommodation & Food Services
Champ's Chicken	Accommodation & Food Services
Charley's	Accommodation & Food Services
Checkers	Accommodation & Food Services

Chester's	Accommodation & Food Services
Chick-Fil-A	Accommodation & Food Services
Church's Chicken	Accommodation & Food Services
Cici's Pizza	Accommodation & Food Services
Corner Baker	Accommodation & Food Services
Cosi	Accommodation & Food Services
Cousin's Subs	Accommodation & Food Services
Culver's	Accommodation & Food Services
Dairy Queen	Accommodation & Food Services
Dickey's	Accommodation & Food Services
Domino's	Accommodation & Food Services
Donato's	Accommodation & Food Services
Einstein Brothers	Accommodation & Food Services
Erbert & Gerbert	Accommodation & Food Services
Fazoli's	Accommodation & Food Services
Firehouse Subs	Accommodation & Food Services
Five Guys	Accommodation & Food Services
Freddy's Frozen Custard	Accommodation & Food Services
Freshii	Accommodation & Food Services
Fuzzy's Taco	Accommodation & Food Services
Godfather's Pizza	Accommodation & Food Services
Great Harvest	Accommodation & Food Services
Hardee's	Accommodation & Food Services
Hissho Sushu	Accommodation & Food Services
Honey Baked Ham	Accommodation & Food Services
Jason's Deli	Accommodation & Food Services
Jersey Mike's	Accommodation & Food Services
Jet Pizza	Accommodation & Food Services
Jimmy John's	Accommodation & Food Services
KFC	Accommodation & Food Services
Lee's Chicken	Accommodation & Food Services
Little Caesar's	Accommodation & Food Services

Long John Silver's	Accommodation & Food Services
Marco's Pizza	Accommodation & Food Services
McAlister's Deli	Accommodation & Food Services
McDonald's	Accommodation & Food Services
Moe's Southwest	Accommodation & Food Services
Nathan's Famous	Accommodation & Food Services
Newk's	Accommodation & Food Services
Panda Express	Accommodation & Food Services
Panera	Accommodation & Food Services
Papa John's	Accommodation & Food Services
Papa Murphy's	Accommodation & Food Services
Penn Station Subs	Accommodation & Food Services
Pita Pit	Accommodation & Food Services
Popeye's	Accommodation & Food Services
Potbelly's	Accommodation & Food Services
Qdoba	Accommodation & Food Services
Quizno's	Accommodation & Food Services
Salad Works	Accommodation & Food Services
Sbarro	Accommodation & Food Services
Schlotsky's	Accommodation & Food Services
Smash Burger	Accommodation & Food Services
Sonic	Accommodation & Food Services
Steak & Shake	Accommodation & Food Services
Subway	Accommodation & Food Services
Taco Bell	Accommodation & Food Services
Taco John	Accommodation & Food Services
Villa Pizza	Accommodation & Food Services
Wayback Burgers	Accommodation & Food Services
Wendy's	Accommodation & Food Services
Which Wich?	Accommodation & Food Services
Wingstop	Accommodation & Food Services
Zaxby's	Accommodation & Food Services

Zoup	Accommodation & Food Services
Ace Sushi	Accommodation & Food Services
Advanced Fresh Concepts	Accommodation & Food Services
Auntie Anne's	Accommodation & Food Services
Baskin Robbins	Accommodation & Food Services
Ben & Jerry's	Accommodation & Food Services
Biggby Coffee	Accommodation & Food Services
Caribou Coffee	Accommodation & Food Services
Carvel	Accommodation & Food Services
Cinnabon	Accommodation & Food Services
Cold Stone Creamery	Accommodation & Food Services
Dippin' Dots	Accommodation & Food Services
Doc Popcorn	Accommodation & Food Services
Dunkin' Donuts	Accommodation & Food Services
Dunn Brothers Coffee	Accommodation & Food Services
Edible Arrangements	Accommodation & Food Services
Gigi Cupcakes	Accommodation & Food Services
Great American Cookies	Accommodation & Food Services
Häagen Dazs	Accommodation & Food Services
Jamba Juice	Accommodation & Food Services
Kilwin's Chocolates	Accommodation & Food Services
Kona Ice	Accommodation & Food Services
Krispy Kreme	Accommodation & Food Services
Marble Slab	Accommodation & Food Services
Maui Wowie	Accommodation & Food Services
Menchie's	Accommodation & Food Services
Nergize	Accommodation & Food Services
Nestle Toll House	Accommodation & Food Services
Nothing Bundt	Accommodation & Food Services
Orange Leaf	Accommodation & Food Services
Pinkberry	Accommodation & Food Services
Planet Smoothie	Accommodation & Food Services

Robek's	Accommodation & Food Services
Scooter's Coffee	Accommodation & Food Services
Smoothie King	Accommodation & Food Services
Surf City	Accommodation & Food Services
Sweet Frog	Accommodation & Food Services
TCBY/Mrs. Field's	Accommodation & Food Services
Tim Horton's	Accommodation & Food Services
Tropical Smoothie	Accommodation & Food Services
Wetzel's Pretzels	Accommodation & Food Services
Christian Brothers Automotive	Other Services
Tuffy's Auto	Other Services
Meineke	Other Services
Midas	Other Services
Spee Dee	Other Services
Aamco	Other Services
Mr. Fix It	Other Services
Car Star	Other Services
Maaco	Other Services
Novus	Other Services
Grease Monkey	Other Services
Jiffy Lube	Other Services
Valvoline	Other Services
Line X	Other Services
Michelin	Other Services
Cell Phone Repair	Other Services
U Break I Fix	Other Services
Hoodz	Other Services
Furniture Medic	Other Services
Jewelry Repair	Other Services
Sport Clips	Other Services
Fantastic Sam's	Other Services
Great Clips	Other Services

Phenix Salon	Other Services
Sola	Other Services
Super Cuts	Other Services
da Vi Nails	Other Services
Regal Nails	Other Services
Elements Massage	Other Services
European Wax Center	Other Services
Hand & Stone	Other Services
Massage Envy	Other Services
Massage Green	Other Services
Massage Heights	Other Services
Palm Beach Tan	Other Services
Planet Beach	Other Services
Seva	Other Services
Suntan City	Other Services
Certified Dry Cleaning and Restoration Network	Other Services
Fibrenew	Other Services
Martinizing	Other Services
Camp Bow Wow	Other Services
Fetch Pet Crew	Other Services
Tailored Living	Other Services